#### **Backward Class Youth Relief Committee's**

## Bhiwapur Mahavidyalaya, Bhiwapur

Dist - Nagpur, Maharashtra 441201

## Criteria-2

## **Teaching- Learning and Evaluation**

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website.

**Academic Session 2018-19** 



# Programme Outcomes Course Outcomes

Academic session 2018-2019

Bachelor of Arts, Bachelor of Commerce & Bachelor of Science

### Bhiwapur Mahavidyalaya, Bhiwapur Course Outcomes and Programme Outcomes Index

### **Bachelor of Arts**

	Bachelor of Arts				
	Subject	Sr. No.	Semester	Course	Session
	English	1	First	B. A.	
	Marathi	2			
	Political Science	3			
	Economics	4			
	English Literature	5			
	Sociology	6	1		
	History	7		<b>N</b>	
	Marathi Literature	8			
M	Ambedkar Thought	9		1 /	1
7	English	10	Second		
	Marathi	<b>1919</b>	131		
1	Political Science	12	Ne		1
	Economics	13	)	/ /	7/
1	English Literature	14		5	. //
, 1	Sociology	15		K	+//
1	History	16		10	2018-2019
1	Marathi Literature	17		H	11
٤	Ambedkar Thought	18	(5)	(6)	
	English	19	Third		
	Marathi	20	नसो ग ंक्ष		
	Political Science	21		2	$\sim 11$
	Economics	- 22		71	<b>≠</b> \\
	English Literature	23			. \ \
	Sociology	24			~\
	History	25			4
/	Marathi Literature	26			
1	Ambedkar Thought	27	_ ′	1	7
	English	28	Fourth		/
	Marathi	29			
	Political Science	30			
	Economics	31			
	English Literature	32			
		33			
		34			
	Marathi Literature	35			
		36			
			Fifth		
			-		
	Marathi Political Science Economics English Literature Sociology History	30 31 32 33 34 35	<b>*</b>		

	41	English Literature		
	42	Sociology		
	43	History		
	44	Marathi Literature		
	45	Ambedkar Thought		
Sixth	46	English		
	47	Marathi		
	48	Political Science		
	49	Economics		
	50	English Literature		
	51	Sociology		
	52	History		
4	53	Marathi Literature		
	54	Ambedkar Thought		
Bachelor of Commerce				

Session	Course	Semester	Sr. No.	Subject
1//	B. Com.	First	1	English
$\times$ / /	15		2	Marathi
//	10	- 7	3	Financial Accounting- I
N-	105	60	4	Business Organization
KII	_	(Pa	5	Company Law
'			6	Business Economics- I
		Second	7	English
*//	H	त्यो उ	8	Marathi
'	(14	1711	9	Statistics and Business Mathematics
~		-0	10	Business Management
1		13	11	Secretarial Practice
	1//	. 07	12	Business Economics-II
		Third	13	English
			14	Marathi
2018-2019			15	Financial Accounting- II
	~~	K	16	<b>Business Communication</b>
				and Management
			17	Business Law
			18	Monetary Economics-I
		Fourth	19	English
			20	Marathi
			21	Financial Accounting-III
			22	Skill Development
			23	Income Tax
			24	Monetary Economics-II

Fifth	25	Financial Accounting-IV
	26	Cost Accounting
	27	Management Process
	28	Indian Economics-I
	29	Computerized Accounting
	30	Auditing
Sixth	31	Financial Accounting-V
	32	Management Accounting
	33	Advanced Statistics
	34	Indirect Economics-II
	35	Human Resource
4		Management
 1	36	Industrial Law

Bachelor of Science (Physics, Chemistry, Mathematics, Zoology and Botany)

~		G 37	9.11
/ - 4		Sr. No.	Subject
B.Sc.	First	1	English
10	7	2	Marathi
I	(C-205	3	Chemistry I & II
	T.	4	Physics I & II
	10	5	Mathematics I & II
		6	Zoology I & II
		7	Botany I & II
dH.	Second	8	English
		9	Marathi
	~	10	Chemistry I & II
	13	11	Physics I & II
	. 07	12	Mathematics I & II
-/		13	Zoology I & II
1		14	Botany I & II
*	Third	15	Chemistry I & II
		16	Physics I & II
		17	Mathematics I & II
		18	Zoology I & II
		19	Botany I & II
	Fourth	20	Chemistry I & II
		21	Physics I & II
		22	Mathematics I & II
		23	Zoology I & II
		24	Botany I & II
	Fifth	25	Chemistry I & II
	B.Sc.	B.Sc. First Second Third Fourth	B.Sc. First 1 2 3 4 5 6 7 Second 8 9 10 11 12 13 14 Third 15 16 17 18 19 Fourth 20 21 22 23 24

			26	Physics I & II
			27	Mathematics I & II
			28	Zoology I & II
			29	Botany I & II
		Sixth	30	Chemistry I & II
			31	Physics I & II
			32	Mathematics I & II
			33	Zoology I & II
			34	Botany I & II

### **Bachelor of Arts**

# Department of English Semester – I Course Objectives and Course Outcomes Compulsory English

#### **ProgrammeOutcomes**

- CO1. Comprehend the use of language and grammar in the given context.
- CO2. Demonstrate advanced critical thinking skills.
- CO3. Communicate in a variety of contexts and genres.
- CO4. Equipped with Listening, Speaking, Reading and Writing skills.
- CO5. Imbibe the nuances of analyzing a text and reproduce with proper interpretations.

#### **ProgrammeSpecificOutcomes(PSOs)**

- PSO1. A vailing job opportunities in translation, transformation and media.
- PSO2. Developing a critical attitude about literary studies.
- PSO3. Imbuing literaryre search attitude.

#### **Course Objectives**

- To understand the inter relationship between works of literature and society.
- To explain the nature of language and literature.
- To obtain the skill of appreciation for literary works.
- To imbue the skills of essay writing.
- To be able to illustrate the nature of literary forms like one-act-play, travelogues, and short story.

#### **Course Outcomes**

- Understood the inter relationship between works of literature and society.
- Explained the nature of language and literature.
- Obtained the skill of appreciation for literary works.
- Imbued the skills of essay writing.
- Succeeded in illustrating the nature of literary forms likeone-act-play, travelogues, and short story.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi

#### साहित्यरंग.भाग-1

#### Unit I:

प्रकरण—१.उदिष्ठ— लीळाचरित्रातील मराठी भाषेची जाणीव विद्यार्थ्यांना करुण देणे.

साध्य— विद्यार्थ्यांना लीळाचरित्रातील गद्य मराठी भाषेची ओळख झाली.

**प्रकरण—२.उदुष्ठ—**शिवकालीप मराठी गद्य भाषाशैली व आज्ञापत्रातील अमात्याची लेखनशैलीची ओळख करणे.

**साध्य**—आज्ञापत्रातील मराठी गद्य भाषाशैली, अमात्याच्या लेखनशैली वरून छत्रपतीच्या स्वराज्य रक्षणाची जाणीव विद्यार्थ्यांना झाली.

प्रकरण—३.उदिष्ठ— महात्मा फुले यांनी भारतीय शेतकऱ्यांच्या उत्थानासाठी सांगीतलेले उपाय.

साध्य—शेतकऱ्यांची प्रगती व्हावी म्हणून विद्यार्थ्यांनी म. फुल्यांनी शेतीबध्दल सुचविलेले उपाय समजून घेतले.

प्रकरण-४.उदिष्ठ-साने गुरुजींनी सांगीतलेली संस्कृती विषयी विद्यार्थ्यांना बोध करणे.

साध्य-सकळ संस्कृतीचा पाया प्रेम असून प्रेमावर संस्कृती आधारलेली असल्याचे विद्यार्थ्यांनी आत्मसात केले.

प्रकरण—५.उद्ष्टि—शंभर दिडशे वर्षापूर्वी समाजात स्त्रियांना सासूरवास कसा सहन करावा लागायचा याची जाणीव विद्यार्थ्यांना करणे.

साध्य-लक्ष्मीबाई टिळकांना झालेल्या सासूरवासाचे चित्रणामुळे विद्यार्थ्यांना सासूरवासाबध्दल जाणीव झाली.

#### **Unit II:**

कविता— १.उद्दिष्ठ—संत ज्ञानेश्वरांनी हरिपाबातून सांगीतलेल्या नामस्मरणाचे महत्व पटवून देणे.

**साध्य**—हरिच्या नामस्मरणाने संसारातील अनेक प्रकारच्या दु:खातून व संकटातून मुक्ती मिळते याची जाणीव विद्यार्थ्याना झाली.

कविता—२. उद्दिष्ठ—हंस—नल संवादातून तेराव्या शतकातील पंडिती काव्यशैलीची ओळख विद्यार्थ्यांना करुन देणे.

साध्य—नल—दमयंती आख्यान काव्याची रघुनाथ पंडितांनी रचलेली आख्यान काव्याची ओळख विद्यार्थ्यांना झाली किवता—३.उद्षिठ—घन:श्याम सुंदरा या भूपाळीतून शाहिरी काव्य व प्रात:समयीचे रम्य वातावणाची जाणीव करुन

साध्य—शाहीर होणाजी बाळा यांचे शाहिरी काव्यातूनव प्रभात समईचे रम्य वातावरणाची जाणीव विद्यार्थ्यांना झाली. किवता—४.उद्षिट—स्फूर्ती कवितेतून केशवसुतांनी समाजातील रुढी, अन्याय, अत्याचाराला नाहीसे करण्याकरिता केलेल्या बंडाची विद्यार्थ्यांना जाणीव करणे.

साध्य—कवितेतून समाजातील अन्याय, अत्याचार कविच्या काव्य लेखनामुळे व समाजाला काव्यातून उद्बोधन केल्याने झाली हे विद्यार्थ्यांना कळून आले.

किवता—५.उद्षिट—खेडयातील रात्र किवतेतून बालकिवंनी रेखाटलेल्या रात्रीचे भयानक चित्रणाची ओळख करुन देणे. साध्य—पन्नास वर्षापूर्वी व आजही अतिशय दुर्गम भागातील खेडयातील परिस्थितीचे व रात्र कशी भयाकूल असते याची खात्री विद्यार्थ्यांना पटली.

#### **Unit III:**

प्रकरण— १.उद्ष्ठ— व्यावहारिक मराठीची आवश्यकता जीवन व्यवहारासाठी का आहे याची यथार्थता विद्यार्थ्यांना पटविणे.

साध्य—जीवन व्यवहारात व्यावहारिक मराठीची उपयुक्तता असल्याचे विद्यार्थ्यांना कळले तसेच अनेक व्यवहार क्षेत्रात व्यावहारिक मराठीची उपयुक्तता असल्याचे स्पष्ट झाले.

प्रकरण— २.उद्ष्ठि—भाषिक संवाद व्यवहाराच्या मूलतत्वांची ओळख व माहिती विद्यार्थ्यांना करुन देणे. साध्य—भाषा हे संवादाचे माध्यम असून लेखन, वाचन , श्रवण व भाषण यातून भाषेचा संवाद व्यवहार चालतो हे कळले सोबतच विविध मुलतत्वाची ओळख विद्यार्थ्यांना झाली.

#### Department of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

- To understand the basic concept and ideological orientations of Political Science discipline.
- To understand the processes and dynamics of Indian government and Politics.
- To understand the contribution of the main traditions of Indian Political Thought.
- To understand the contribution of the main traditions of Western Political Thinkers to Political Thought.

#### **Course Outcomes**

- Understoodthe basic concepts and ideological orientations of the Political Science discipline.
- Understood the processes and dynamics of Indian government and politics
- Came to know the contribution of the main traditions of Indian Political Thought.
- Understood the contribution of the main traditions of Western Political thinkers to political thought.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

#### Unit - I

- Objective To develop preliminary knowledge of Economic concepts for the understanding of Economics Nature, Definition, and Method of Economics Analysis.
- Outcome Students learned preliminary knowledge of Economic concepts and definitions.

#### Unit - II

- Objective To provide an orderly and objective way of thinking about Economic Demand & Supply Theory.
- Outcome- The students learned about the knowledge of Demand and Supply.

#### Unit - III

- Objective- To gain knowledge about Consumer Behavior Utility Analysis.
- Outcome- The Students gained the knowledge of Consumer Behavior and Utility Analysis

#### Unit – IV

- Objective –To explain core Economics- various factors of production.
- Outcome Students learnt about the production function.

# Department of English Course Objectives and Course Outcomes English Literature

#### **Program Outcomes**

- CO1. Comprehend the use of language and grammar in the given context.
- CO2. Demonstrate advanced critical thinking skills.
- CO3. Communicatein a variety of contexts and genres.
- CO4. Equipped with Listening, Speaking, Reading and Writing skills.
- CO5. Imbibe the nuances of analyzing a text and reproduce with proper interpretations.

#### Programme specific Outcomes (PSOs)

- PSO1. A vailing job opportunities in translation, transformation and media.
- PSO2. Developingacriticalattitudeaboutliterarystudies
- PSO3. Instilling literary research attitude.

#### **Course Objectives**

- To understand the inter relationship between works of literature and society.
- To explain the nature of language and literature.
- To obtain the skill of appreciation for literary works.
- To imbue the skills of essay writing.
- To be able to illustrate the nature of literary forms likeone-act-play, travelogue, and short story.

#### **Course Outcomes**

- Understood the inter relationship between works of literature and society.
- Explained the nature of language and literature.
- Obtained the skill of appreciation for literary works.
- Imbued the skills of essay writing.
- Succeeded in illustrating the nature of literary forms like one-act-play, travelogue, and short story.

#### Department of Sociology Course Objectives and Course Outcomes

#### Introduction

#### **Unit - I Understanding Sociology**

Objective - To make students know in detail about Understanding Sociology.

Outcome - Students understood the concept of Understanding Sociology.

#### **Unit – II** Basic Concepts in Sociology

**Objective -** To Make Students Aware of Basic Concepts in Sociology.

Outcome -Students understood the concept of Basic Concepts in Sociology.

#### **Unit - III Socialization**

Objective - To Make Students Aware of Socialization.

Outcome - Students understood the concept of Socialization.

#### Unit – IV Social Structure

**Objective -** To make the students know in detail about Social Structure.

**Outcome -** Student understood the concept of Social Structure.

#### **Department of History**

#### **Course Objectives and Course Outcomes**

After successful completion of three-year Degree Programme in History a student should be able to know;

#### **Programme Outcomes**

- > PO1: History has an unprecedented significance in human life.
- ➤ PO2: The study of history preserves culture.
- ➤ PO3: The study of history leads to Socio-Political awareness.
- ➤ PO4: Learn about world events.
- ➤ PO5: The study of History is important for competitive examination.
- PO6: Conversational skills come and understand the importance of human society.

#### **Course Objectives**

- To know the importance of culture gives you the ability to make decisions in yourself.
- To gain the ability to make decisions while living life.
- To gain employment opportunities through competitive examinations.
- To acquire moral values, devotional movement and Sufi sect.

#### **Course Outcomes**

- Knew the importance of culture gives you the ability to make decisions in yourself
- Gained the ability to make decisions while living life
- Received employment opportunities through competitive examinations.
- Acquired moral values, devotional movement and Sufi sect.

#### **Department of Marathi**

#### **Course Objectives and Course Outcomes**

#### **Marathi Literature**

#### Unit I:

#### तहान (कादंबरी)—

**उद्ष्ठ**—पाण्याच्या भीषण समस्येमुळे ग्रामीण जीवनातल्या मानवी भाव—भावनांचे आविष्करण करणे. **साध्य**—ग्रामीण भागात पाणी टंचाईच्या दिवसात जनतेला कशा हालअपेष्ठा सहन कराव्या लागतात याची सत्यता विद्यार्थ्यांना समजली.

#### **Unit II:**

साहित्यप्रकार-कथा व कविता-

**उद्घि**—कथा व कविता या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना देणे. साध्य—कथा व कविता हे साहित्यप्रकार कसे भिन्न आहेत याबध्दल विद्यार्थ्यांना कळून आले.

#### Semester-II Course Objectives and Course Outcomes Compulsory English

#### **Course Objectives**

- To study lessons based on the themes of humor, emotional bonding, ethics and values.
- To motivate themselves even in adverse situations by reading successful people's life sketches.
- To prioritize life's needs over wants.
- To apply grammar lessons to spoken English.
- Grasp the nuances of learning a foreign language.

#### **Course Outcomes**

- Studied lessons based on the themes of humor, emotional bonding, ethics and values.
- Motivated themselves even in adverse situations through reading their lives.
- Applied grammar lessons to spoken English.

#### Course Objectives and Course Outcomes Compulsory Marathi (साहित्यरंग.भाग-1)

#### Unit I:

प्रकरण— ६.उद्ष्ठि—इरावती कर्व्याचे व्यक्तिचित्रणाची ओळख पाठाच्या आधारे करुन देणे.

साध्य—पु.ल. देशपांडे यांनी इरावती कर्व्याचे ज्ञान, लेखन व संशोधन याबष्टल दिलेल्या माहितीमूळे विद्यार्थ्यांना कर्वेची ओळख पटली व माहिती मिळाली.

प्रकरण— ७.उद्ष्टि—संस्कार पाठातून नायकाच्या मनावर झालेल्या संस्काराचे चित्रन करुन विद्यार्थ्याच्या मनावर योग्य संस्काराची रूजवणूक करणे.

साध्य—हिंदू मुस्लिम असा जातीभेद असूनही वा.कृ. चोरघडे यांना शालेय जीवनापासून सलमा हीने योग्य असे संस्कार दिले याची विद्यार्थ्यांना जाणिव झाली.

प्रकरण— ८.उदिष्ठ—ग्रेस पाठातून वेगळया व्यक्तिमत्वाची ओळख विद्यार्थ्यांना करुन देणे.

साध्य—ग्रेस या दुर्बोध व आगळ्या वेगळया व्यक्तिचित्रणाची मधुकर केचे यांनी करुन दिलेली ओळख विद्यार्थ्यांना माहिती झाली.

प्रकरण—९.उद्ष्ठि—जात चोरीच्या आपत्तीमुळे कोणते संकटे येतात याची जाणीव विद्यार्थ्यांना करुन देणे.

**साध्य**—बाबुराव बागुल यांनी आपली अस्पृश्य महार ही जात लपविल्यामुळे त्यांना आलेला अनूभवाचे वर्णन विद्यार्थ्यांना समजून आले.

प्रकरण—१०.उद्ष्ठ—पुर्णिया या बिहार राज्यातील मागसलेल्या जिल्हयातील लोकांच्या दुःखी कष्टी जीवनाची माहिती विद्यार्थ्यांना देणे.

साध्य—अनिल अवचट यांनी पूर्णियामधून रेखाटलेले स्यांचे बदिस्त जीवन, शाळा, नोकऱ्यांचा प्रश्न, राजकीय परिस्थिती, मजूरांचे हलाकीचे जीवन, उपासमारी इ.ची माहिती विद्यार्थ्यांना मिळाली.

#### **Unit II:**

कविता— ६.उद्ष्टि—मुक्त पक्षी या कवितेतू पिंजऱ्यातील पक्षी स्वातंत्र का नाकारतो याची माहिती देणे

**साध्य**—गुलामीची सवय जडल्यामुळे पक्षी पिंज्न्यातून मुक्त केल्यावरही स्वातंत्र नाकारतो याची ज्ञान विद्यार्थ्यांना प्राप्त झाले.

कविता—७.उद्ष्ठि— जीवन मरणाबध्दल बहिणाबाईनी केलेल्या चिंतनाची सार्थकता पटवून देण.

साध्य—जन्ममृत्यु विषयी कवयित्रीने कवितेत प्रगट केलेले विचार मानवी जीवनाची सार्थकता पटवृन देतात याची विद्यार्थ्यांना खात्री पटली.

कविता—८.उद्ष्ठि—राष्ट्रसंतांना गरीबाच्या झोपडीमधील सुखाची माहिती विद्यार्थ्यांना देणे साध्य—महालातील सुखापेक्षा लहानशा झोपडीतील सुख हे महान असल्याची प्रचिती कवितेच्या भावार्थावरुन विद्यार्थ्यांना आली.

कविता—९.उद्ष्ठि—माणसाच्या मनातील मोठेपना नाहिसा होण्याची कविची इश्वराकडे केलेली मागणीचे ज्ञान विद्याथ्याना देणे.

साध्य—कविने आपल्या जीभेवरचा लोभ जळू देण्यासाठी व मी पणाचे साम्राज्य नाहीसे होण्याची कविची भावना विद्यार्थ्यांना समजली.

कविता—१०.उद्ष्ठि—कुसुमाग्रजांच्या कवितेतून मानवी सामर्थ्य निसर्गावर कसे मात करते याची ओळख विद्यार्थ्यांना करून देणं.

साध्य—कवितेतील नायकाचा गंगा नदीच्या पुरामुळे संसार उघ्वस्त होऊनही सराच्या आर्शिवादाची थाप मागणारा नायक प्रतिकूल परिस्थितीवर मात करुन संसार उभा करतो याची विद्यार्थ्यांना प्रेरणा मिळाली.

#### Unit III:

प्रकरण— ३.उद्ष्ठि—पत्रलेखनाचे स्वरुप, पत्राचे प्रकार, पत्रलेखाचे घटक, वैशिष्टये व पत्राचा नमूना विद्यार्थ्याना समजावन देणे.

साध्य—विद्यार्थ्यांना पत्राचे स्रुप कसे असते ,घटक कोणते, खजगी पत्रे व कार्यालयीन पत्रे कशी लिहावीत याचे कौशल्य व ज्ञान प्राप्त झाले.

प्रकरण— ४.उद्ष्ठि—सारांशलेखन कसे करावे व सारांश लेखन करतांना कोणती काळजी घ्यावी व सारांशलेखनाचे फायदे याविषयी विद्यार्थ्यांना माहिती देणे.

साध्य—विद्यार्थ्याना सारांशलेखन करण्याची माहिती मिळाली तसेच दिलेल्या सारांशाचे एक तृतियांश लेखन करण्याचे कौशल्य प्राप्त होऊन सारांशलेखनाचे फायदे समजले.

## **Department of Political Science Course Objectives and Course Outcomes**

#### **Course objectives**

- To understand the processes and dynamics of the Indian government and politics.
- To understand the contribution of the main traditions of Indian Political

Thought.

 To understand the contribution of the main traditions of Western Political Thinkers to Political Thought.

#### **Course Outcomes**

- Familiarized with the basic concepts and ideological orientations of the Political Science discipline.
- Exposed to the processes and dynamics of Indian government and politics.
- Made to understand the contribution of the main traditions of Indian Political Thought.
- Made to understand the contribution of the main traditions of Western Political thinkers to Political thought.

# Department of Economics Micro Economics Theory -II Course Objectives and Course Outcomes

Unit – I: Cost and Revenue Analysis Cost of Production:

**Objective-** To explain the Kinds of Cost and Revenue Analysis Cost of Production

Outcome – Explained theknowledge of Cost and Revenue Analysis.

Unit – II: Market Structure and Perfect Competition Market

**Objective-** To explain major types of market Structure and Identify Characteristics of Perfect Competition.

**Outcome** —Received assignments from the students those are coherent, organized, concise, grammatically correct and well-presented.

Unit – III: Monopoly and Imperfect Competition Market

**Objective-** To identify and discuss the key concepts of Monopoly and Imperfect Competition Market.

**Outcome** —Identified economic theory in the Monopoly and Imperfect Competition Unit – IV: Factors Pricing and Statistics for Economics Factors Pricing:

**Objective-** To explain the contribution of Factors of production.

**Outcome** – Students learned about the factor of production.

#### **English Literature**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To make the students familiar with literary texts in a given historical, geographical,
   and cultural context.
- To apply critical theories to the reading of multiple genres of literature.
- To make the students able to identify critical ideas and themes.

 To make the students able to write analytically with the help of language competencies.

#### **Course Outcomes**

- Students will be familiar with literary texts in a given historical, geographical, and cultural context
- Students should be able to apply critical theories to the reading of multiple genres
   of literature
- Students should be able to identify and analyze the critical ideas and themes
- Students should be able to write analytically with the help of language competencies
- Students should be able to imbibe, ethical, moral, and cultural values

#### Department of Sociology Course Objectives and Course Outcomes

#### **Themes and Perspectives**

#### **Unit - I** Culture and Society

Objective - To Make the students know in detail about culture and society

Outcome - Students understood the concept of culture and society.

#### Unit - II Social Deviation and Social Control

Objective – To make the students aware of social deviation and social control.

Outcome – Students understood the concept of social deviation and social control.

#### **Unit - III Social Stratification and Social Mobility**

**Objective -** To Make Students know in detail about Social Stratification and Social Mobility.

**Outcome** – Students understood in detail about SocialStratification and Social Mobility.

#### Department of History Course Objectives and Course Outcomes

#### **History of India** (1526 - 1761)

#### **Course Objectives**

- Tounderstand how the Mughal power was established in India.
- To learn information about Sher Shah Suri and the Mughal administration.
- To get information about Chhatrapati Shivaji and Mughal relationship war took place.
- To understand the Panipat Third War and the arrival of the British.

#### **Course Outcomes**

- Understood how the Mughal power was established in India.
- Learned information about Sher Shah Suri and the Mughal administration.
- Student got information about Chhatrapati Shivaji and Mughal relationship war took place.
- Understood the Panipat Third War and the arrival of the British.

#### Department of Marathi Marathi Literature Course Objectives and Course Outcomes

#### Unit I:

### अश्रुंचीझाली फुले- नाटक-

**उद्गिन**-अश्रूंची झाली फुले या नाटकातून मानवी जिवनातील कौटुंबिक,सामाजिक व षैक्षणिक क्षेत्रातील संघर्षप्रवण परिस्थितीविषयी विद्यार्थाना बोध करणे

**साध्य**-वसंत कानेटकरांनी नाटकाच्या कथानकातून व रेखाटलेल्या पात्रांतून मानवी जीवन कसे संघर्शिषत आहे याची माहिती विद्यार्थांना मिळाली.

#### Unit II:

#### साहित्यप्रकार-कादंबरी, चरित्र,आत्मचरित्र.

उद्रिष्ठ-कादंबरी, चरित्र,आत्मचरित्र.या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना देणे. साध्य-कादंबरी, चरित्र,आत्मचरित्र.या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना झाती.

#### Department of English Compulsory English

#### **Course Objectives and Course Outcomes**

**Unit I: Objective**-Making students aware of the importance of Honesty.

**Outcome-**Students tried to examine and applied through the various activities carried out in the class.

**Unit II: Objective-** Making students realize the beauties of nature and sublime.

**Outcome-**Students tried to apply the values of nature and the sublime.

**Unit III: Objective-** Making students understand the social evils of society and the values of Humanity.

**Outcome-**Students were exposed to the social evils of society through discussion.

Unit IV: Objective-Grammatically correct usage of Narration and Punctuation.

**Outcome-**Students solved the examples of Narration and Punctuation.

**Unit V: Objective-**To create the ability to use English for the purpose of communication.

Outcome-Students attempted to use English for the purpose of communication in the Class.

#### **Department of Marathi**

#### Course Objectives and Course Outcomes Compulsory Marathi साहित्य संवाद,भाग,२

#### Unit I:

प्रकरण -१.उद्दिष्ठ-तेराट्या षतकातील दृष्टांतपाठातील गद्य भाषावैली, श्रीचक्रधरस्वामीचे चरित्र, महानुभाव पंथा विषयी माहिती देणे

साध्य-दृष्टांतपाठातील गद्य भाषाषैली, श्रीच्रकधरस्वामीचे चरित्र, महानूभाव पंथाचे समाजाला दिलेले योगदान विद्यार्थाना समजून आले.

प्रकरण -२.उद्दिष्ठ-स्त्री पुरुष तुलना या पाठातून ताराबाई षिंद्रे हीने पारतंत्र्यांच्या काळात स्त्रियांच्या निषेबी येणाऱ्या दुर्गूणांची जाणीव वरुन देणे.

**साध्य-**सर्व प्रकारचे दुर्गुण श्त्रियांतच असतात या पुरुषांच्या पूर्वग्रहदूषित विचारांची विद्यार्थाना माहिती प्राप्त झाली.

**प्रकरण -३.उद्दिष्ठ-**यषस्वी वक्ता होण्यासाठी प्र.के.अत्रे यांनी सांगीतलेला अनूभव विद्यार्थाना सांगणे.

साध्य-विद्यार्थ्यांनी यषस्वी वक्ता होण्यासाठी अन्यांच्या अनुभवाचा बोध घेतला.

प्रकरण -४.उद्दिष्ठ-पंढरपूर व विठ्ठलाचे दर्षनाची माहिती विद्यार्थाना करून देणे.

**साध्य** -पंढरपूर व पांडुरंगाचे संपूर्ण वर्णन तेथील भैगोलिक परिस्थितीची माहिती विद्यार्थाना प्राप्त झाली.

प्रकरण—५.डिट्रिंड—राष्ट्रसंताच्या मते शिक्षक हाच राष्ट्राचा भाग्यविधाता असल्याची खात्री विद्यार्थ्यांना करून देणे. साध्य-षिक्षकाचे विद्यार्थी, समाजाप्रती केलेल्या संपूर्ण कार्याची व षैक्षाणिक कार्याची जाणीव विद्यार्थ्यांना कळली.

#### Unit II:

**कविता-१.उद्दिष्ठ**-संत नामदेवांनी श्रीविठ्ठलाचे वर्णन, विठ्ठलभवित्तचे व नामस्मरणाचे महात्म्य विद्यार्थाना सांगणे

**साध्य**-अभंगााच्या निंपनातून विठ्ठलाच्या अनंत तावण्याची षोभा, विठ्ठलभवितचे व नामस्मरणाचे महात्म्य विद्यार्थाना कळते.

कविता-२.उद्षिष्ठ-मारोपंतानी सत्संगतीचा वर्णन केलेला महिमा सांगणे.

**साध्य-**सत्संगतीत समाजजिवनाला उद्बोधन करण्याचे सामर्थ्य आहे याची विद्यार्थ्यांना माहिती मिळाली.

**कविता-३.उद्दिन्ट-**भला जन्म हा तुला लाभला यातून राम जोषीनी सांगीतलेल्या मानवी जीवनाचे सार्थकृत्व पटविणे.

साध्य-उपदेषपर लावणीतून मानवी जीवनाची सार्थकता विद्यार्थाना पटली.

कविता-४.उद्दिष्ठ-षेतकरी-कष्टकऱ्यांची जीवनगाथा व परीरिथतीचे वर्णन करणे.

साध्य-विद्यार्थी ग्रामीण भागातला असून षेतकऱ्यांच्या परीस्थितीची जाणीव झाली.

कविता- ५.उद्दिष्ठ-कवी अनिलांच्या विराणीतून कवी मनाच्या उदासीनतेचे दर्षन घडविणे.

**साध्य-**कविला लाभलेल्या दु:खामुळे कविच्या मनाला उदासिनता प्राप्त झाली याची विद्यार्थाना प्रविती आली.

#### Unit III:

प्रकरण - १.उद्दिष्ठ-इतिवृत्त लेखन, प्रकार,पध्दती व लेखनाची काळजी याविषयी विद्यार्थ्यांना माहिती देणे

**साध्य** -इतिवृत्त म्हणजे सभेची नोंद्र, प्रकार पध्दती व लेखन करतांना घ्यावयाची काळजी याची विद्यार्थ्यांना माहिती मिळाली.

**प्रकरण - २.उद्घ्रिन**-प्रसारमाध्यमे आणि वृत्तलेखन याविषयी विद्यार्थांना माहितीचे विष्लेषण करणे

**साध्य**-दृक श्राट्य प्रसारमाध्यमांच्याट्दारे बातमी, बातमीचे लेखनव वृत्तपत्रीय लेखन कसे केले जाते याची माहिती विद्यार्थ्यांना झाली.

## Department of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

- To explain the vital contemporary emerging issues of center-state relations, political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts, etc.
- To understand the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs.
- To understand the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions
- To understand the basic concept and issues concerning human rights and challenges.

#### **Course Outcomes**

- Familiarized with the vital contemporary emerging issues of center-state relations, political parties, the emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts, etc.
- Analyzed the strengths and weakness of Indian political processes, both in terms
  of their effectiveness in responding to public policy needs and retaining
  constitutional protections.
- Understood the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions.
- Acquainted with a basic understanding of concepts and issues concerning the Right to Information Act, Human Rights, and Challenges.

#### **Department of Economic**

#### **Course Objectives and Course Outcomes**

#### **Unit – I Introduction to Macro Economics**

**Objective** – To discuss the Introduction of Macro Economics.

**Outcomes** – Students understand the concept of Macro Economics.

Unit – II **National Income** 

**Objective** – To explain the concept of National income.

**Outcome** – Students understood the various concept of National income.

Unit – III Money and Value of Money

**Objective** – To evaluate the value of money and theories of the Value of Money.

Outcome – Students learned the theories of Value of Money.

Unit – IV Output and Employment

**Objective** – To introduce the theory of Employment.

Outcome- Students learnt thetheory of Employment.

#### **Department of English**

#### **Course Objectives and Course Outcomes**

#### **English Literature**

#### Unit I:

**Objective-** Making students aware of the importance of dreams, Rules, Thoughts and Club Life.

**Outcome-**Students attempted to preserve the importance of dreams, Rules and Thoughts.

#### Unit II:

Objective- Making students realize aesthetic satisfaction.

Outcome-Students realized aesthetic satisfaction.

#### **Unit III:**

**Objective-** Making students understand the Novel, the Essay, and the Short story.

**Outcome-** Students understood the Novel, the Essay, and the Short Story.

#### **Unit IV:**

**Objective-**Making students understand the Literary Terms.

Outcome-Students understood the Literary Terms and their usage.

#### Department of Marathi Course Objectives and Course Outcomes Marathi Literature

#### Unit I:

#### तुकारामाचे अभंग-

**उद्दिन्ठ-**संत तुकारामाच्या निवडक षंभर अभंगाच्या आधारे संत तुकारामाचे जीवन कार्य,काव्येषैती व तत्कालीन सामाजिक परिस्थितीची जाणीव विद्यार्थ्यांना करून देणे.

**साध्य-**संत तुकरामांनी अभंगाच्या माध्यमातून समाजसुधारणेसाठी केलेल्या उद्बोधनाचे मर्म विद्यार्थ्यांना समजून आले.

#### Unit II:

**उद्गिल**-काव्यषास्त्र पश्चिय यातून काव्याची लक्षणे व काव्याच्या प्रयोजन काय याची माहिती विद्यार्थ्यांना देणे

**साध्य-**काव्याची लक्षण व काव्याची प्रयोजने कोणती याचे ज्ञान व माहिती विद्यार्थांना प्राप्त ज्ञाली

#### **Department of Sociology**

#### Course Objectives and Course Outcomes Foundations of Social Thought

Unit - I Emergence of Sociology as a Discipline

**Objective** - To Make the students know in detail about the emergence of sociology as a discipline.

**Outcome** - Students understood the concept of the emergence of sociology as a discipline

Unit - II Founders of Sociology I

**Objective** - Students understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer,)

Outcome - Students understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer)

Unit – III Founders of Sociology II

**Objective** - Students understood the concept of Founders of Sociology-II (Charles of Horton Cooley, Emile Durkheim)

Outcome - Students understood the concept of Founders of Sociology-II(Charles of Horton Cooley, Emile Durkheim)

Unit - IV Founders of Sociology III

**Objective** - Students understood the concept of Founders of Sociology-III ( Karl Marx, Max Weber)

Outcome -Students understood the concept of Founders of Sociology-II( Karl Marx, Max Weber)

#### **Department of History**

#### Course Objectives and Course Outcomes History of India (1764 - 1884)

#### **Course Objectives**

- To study Battle of Buxar and English policy.
- To understand Kayamdhara Methods, Ryotwari, and Lord Wellesley.
- To understand the uprising of 1857 (independent war) results.
- To understand how did nationalism emerge in India?

#### **Course Outcomes**

- Studied the Battle of Buxar and how the British implemented their policy in India
- Gained information about working methods, Kaymdhara, ryotwari and Mahalwari and Lord Wellesley deployment forces.
- The uprising of 1857 (independent war) result was known
- Learned how nationalism emerged in India

#### Department of Marathi Course Objectives and Course Outcomes Marathi Literature

#### Unit I

**उदिष्ठ-**कुसुमाग्रजाट्या रसयात्रा कविता संग्रहाच्या आधारे विविध प्रकारच्या कवितांची ओळख व माहिती विद्यार्थ्यांना देणे

**साध्य**-कुसुमाञ्जांच्या कवितासंग्रहातून सामाजिक कविता,राजकीय, राष्ट्रीय कविता, प्रेम कविता,निसर्ग कविता व तत्वज्ञानपर कवितांची माहिती विद्यार्थांना झाली

#### **Unit II:**

**उद्घ्न-**काव्यषास्त्र परिचय यातून काव्यकारण व षब्दषवती याविषयी विद्यार्थ्यांना माहिती देणे. **साध्य-**विद्यार्थ्यांना काव्य निर्मितीचे कारण व षब्दाच्या अभिदा, व्यंजना व लक्षणा या षब्दषवतीची माहिती प्राप्त झाली.

#### Semester-IV

#### Department of English Course Objectives and Course Outcomes Compulsory English

**Unit I: Objective-**Making students aware of the importance of faith and friendship **Outcome-**Students understood the value of friendship.

Unit II: Objective- Making students realize about discipline and struggle.

**Outcome-**Students tried to apply the discipline and struggle in their lives.

**Unit III: Objective-** Making students understand the presence of the mind.

Outcome- Students were put through various activities to get the feel ofit.

Unit IV: Objective-Grammatically correct usage of Tense and Voice.

Outcome-Students tried to solve the examples of Tense and Voice.

**Unit V: Objective-**To create the ability to use English for the purpose of communication.

**Outcome-**Students attempted to use English for the purpose of communication in the Class.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi साहित्यरंग.भाग.2

#### Unit I:

प्रकरण - ६.उदिष्ठ-मराठी माघ महिण्यातील मायावीपणाचे वर्णन विद्यार्थाना करून देणे.

साध्य-मराठी माघ महिण्यातील निसर्गातील विविध बदलाचा विद्यार्थाना अनुभव आला.

**प्रकरण - ७,उदिष्ठ-**तपस्वीव्यक्ती कसा असतो याचे चित्रण विद्यार्थाना करून देणे.

**साध्य-**पु.भा. भावे यांनी तपस्वीचे केलेले व्यवतीचित्रण ऐकून विद्यार्थ्यांना तपस्वी कसा असतो याची जाणिव झाली.

प्रकरण - ८.उद्दिष्ठ-संताचे विचार आत्मसात करून मानसिक परिवर्तन घडून राण्याची आवष्यकता

**साध्य-**संताचे विचार आत्मसात केल्याने परीवर्तनाची नवी पहाट उगवत असल्याची जाणीव विद्यार्थ्यांना झाली

**प्रकरण -९.उद्दिष्ठ-**लपलेला तारा यातून अवकाषातील विविध ताऱ्यांची माहिती विद्यार्थांना करून देणे

**साध्य-**ग्रहमालेतील विविध ग्रह व तारे तसेच डायसनचा गोळा याची माहिती विद्यार्थांना झाली. **प्रकरण -१०,उद्गिड**-समाजपरिवर्तनातून सामाजिक समता प्रस्थापीत करण्याचे डॉ. आंबेडकरांचे विचार विद्यार्थांना सांगणे.

साध्य-डॉ. आंबेडकरांनी सांगीतलेल्या सामाजिक समतेच्या विचाराचा बोध विद्यार्थ्यांनी घेतला.

#### Unit II:

कविता- ६.उद्दिष्ठ-जनसामान्यांचे अनुभव कसे असतात याची कवितेतून माहिती देणे.

साध्य-कविच्या संघर्षप्रवण प्रवृत्तीचा अनुभव एका नव्या संघर्षात या कवितेतून विद्यार्थाना आला.

कविता -७.उद्घे -- स्मरण या कवितूतून जीवनाचे अंतिम सत्य सांगणे.

साध्य-सुरेष भटांनी मृत्यु हेच जीवनाचे अंतीम सत्य असल्याची जाणीव विद्यार्थांना झाली.

कविता- ८.उदिष्ठ-मानवी मनाचा निसर्गाषी असलेला संबंध उलघडणे.

**साध्य**-निसर्गाषी असलेले अतूट नाते व त्याच्याषी मानवी मनाचा साधलेला संवाद व्यवत झाल्याची विद्यार्थाना माहिती मिळाली.

**कविता - ९.उद्गिन्ठ-**मानवी जीवनाच्या विविध टप्यावर वंचितांच्या वाटयाला आलेल्या दुःखाची साक्ष पटविणे.

**साध्य-**मानवी जीवनाच्या विविध टप्यावर वंचितांच्या वाटयाला आलेल्या दुःखाची विद्यार्थांना साक्ष पटली

**कविता- १०.उद्घ्रिन्ठ-**आदिवासिंच्या न्यायासाठी कविने मागीतलेल्या मागणीचा विद्यार्थांना मार्ग सांगणे. **साध्य-**आदिवासिंच्या न्याय व हवकासाठी कविने मागीतलेल्या मागणीचा विद्यार्थ्यांनी मार्ग समजून घेतला

#### **Unit III:**

प्रकरण— ३.उदिष्ठ—भाषांतर या शास्त्र व कलेची जाणीव विद्यार्थ्यांना करणे.

साध्य-एका भाषेचे दुसऱ्या भाषेत भाषांतर करण्याची कला विद्यार्थ्यांना अवगत झाली.

प्रकरण— ४.उदिष्ठ—मुलाखत लेखनाचे स्वरूप स्पष्ट करणे.

साध्य—व्यक्तिमत्वाचे दर्शन घडविणे हा मुलखतीचा मुख्य उद्देश असतो हे विद्यार्थ्यांना कळले.

# Department Of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

- To explain the vital contemporary emerging issues of center-state relations with political parties, the emergence of the new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- To understand the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs.
- To understand the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions.
- To understand the basic concept and issues concerning human rights and challenges.

#### **Course Outcomes**

- Familiarized with the vital contemporary emerging issues of center-state relations, political parties, the emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- Analyzed the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs and retaining constitutional protections.
- Understood the political issues in context of wider debates about democratic life in
   India and the capacity of political institutions.
- Acquainted with a basic understanding of concepts and issues concerning Right to Information Act, Human Rights and Challenges.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

#### Unit -I: Commercial and Central Bank Commercial Banks:

Objective – To explain the function of the Commercial and Central Bank and why it is importance.

Outcome – Students learned the function of the Commercial and Central Bank and why it is important.

#### Unit –II: RBI and Innovation in Banking Reserve Bank of India:

Objective - Introduce RBI and innovation in Banking Sector.

Outcome – Students learnt about the structure of RBI and its function.

#### **Unit -III: Financial Market Money Market:**

Objective – To define Financial Market.

Outcome – Students understood the function of Financial Market.

#### **Unit –IV: Health Economics and Statistics for Economics Health Economics:**

Objective – To explain the importance of Health Economics and Statistics.

Outcome – Students understood the knowledge of Health Economics and Statistics

#### **Department of English**

#### **Course Objectives and Course Outcomes**

#### **English Literature**

Unit I: Objective-Making students conscious of the various issues of Indian society.

Outcome-Students attempted to understand the various issues of Indian society

Unit II: Objective- Making students realize revolution and its effects.

Outcome-Students realized equality, revolution, and their effects.

Unit III: Objective- Making students understand the biography, autobiography and Criticism.

Outcome- Students understood the biography, autobiography and Criticism.

Unit IV: Objective- Making students understand the Literary Terms.

Outcome- Students understood the Literary Terms and their usage.

#### **Department of Sociology**

## Course Objectives and Course Outcomes Indian Sociological Tradition

#### **Unit - I** Theoretical Roots of Caste in India

**Objective** - To make the students aware of the Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

**Outcome -** Student understood the concept of Founders of Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

#### **Unit - II Social Change from Indian Perspective**

**Objective -** To make the students aware of Social Change from Indian Perspective (M.N. Shriniwas, D.P.Mukharjee)

**Outcome -** Student understood the concept of Social Change from Indian Perspective (M.N. Shriniwas, D.P.Mukharjee)

#### **Unit - III Indian Society and Contemporary Change**

**Objective -** To make the students aware of Indian Society and Contemporary Change (R.K. Mukharjee, S.C. Dube)

**Outcome -** Student understood the concept of Indian Society and Contemporary Change (R.K. Mukharjee, S.C. Dube)

#### Unit - IV Gender and Society in India

**Objective** - To Make Students Aware of Gender and Society in India (Tarabai Shinde, Jyotiba Fule and Savitribai Fule)

**Outcome -** Student understood the concept of Gender and Society in India (Tarabai Shinde, Jyotiba Fule and Savitribai Fule)

#### Department of History Course Objectives and Course Outcomes

#### History of India (1885 -1947)

#### **Course Objectives**

- To study How the National Congress was formed.
- To understand what was the role of Jahal and Mawal.
- To study non-cooperation and civil disobedience movements.
- To learn the Indian Independence Mountaineering Scheme.

#### **Course Outcomes**

- Learned about the establishment of the National Congress.
- Understood the role of Jahal and Mawal.
- Information was received about the non-cooperation and civil disobedience movements.
- Gained detailed knowledge of how India became independent.

#### Department of Marathi Course Objectives and Outcomes Marathi Literature

#### Unit I:

उद्ष्ठ— कुसुमाग्रजाच्या रसयात्रा कविता संग्रहाच्या आधारे विविध प्रकारच्या कवितांची ओळख व माहिती विद्यार्थ्यांना देणे.

साध्य—कुसुमाग्रजांच्या कवितासंग्रहातून सामाजिक कविता,राजकीय, राष्ट्रीय कविता, प्रेम कविता,निसर्ग कविता व तत्वज्ञानपर कवितांची माहिती विद्यार्थ्यांना झाली.

#### Unit II:

उद्ष्ठि—काव्यशास्त्र परिचय यातून काव्यकारण व शब्दशक्ती याविषयी विद्यार्थ्यांना माहिती देणे.

साध्य— विद्यार्थ्यांना काव्य निर्मितीचे कारण व शब्दाच्या अभिदा, व्यंजना व लक्षणा या शब्दशक्तीची माहिती प्राप्त झाली.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi

#### Unit I:

प्रकरण —१.उद्ष्यि—लीळाचरित्रातून गोविंदप्रभूचे व्यक्तीमत्व व विवाहपध्दतीची माहिती विद्यार्थ्यांना देणे.

**साध्य**—वीव्हावो स्वीकारू या लीळेतून गोविंदप्रभूचे चरित्र, विवाहाची पध्दती व प्राचीन काळातील खाद्यापदार्थाची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण - २.उदिष्ठ-आगरकरांचा सुधारक काढण्याचा कोणता हेतु होता याची जाणीव करुन देणे.

**साध्य**—अज्ञानी भारतीय समाजव्यवस्थेला सज्ञान करण्याच्या हेतून आगरकरांनी सुधारक वृत्तपत्र काढला याचीजाणीवविद्यार्थ्यांना झाली.

प्रकरण —३.उद्दिष्ठ—युगाला आकार देणारे आम्ही काळपुरुष आहोत याची विद्यार्थ्यांना साक्ष पटविणे.

साध्य—विद्यार्थ्यांनी विनोबा भावेनी सांगीतलेल्या सृष्टीच्या दानाचे महत्व ओळखून महत्व लक्ष्यात घेतले.

प्रकरण -४.उदिष्ठ-महाभारतातील मयसभेचे वर्णन व माहिती विद्यार्थ्यांना करुन देणे.

साध्य —खांडव वन तेथील भौगोलिक परिस्थिती व पांडवांची मयसभा याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण —५.उदिष्ठ—किङलेली माणसं या कथेतुन माणसाच्या श्रुद्र विचाराचे दर्शन विद्यार्थ्यांना करुन देणे.

साध्य-मानवी जीवनाचे दु:ख व विचाराची क्षुद्रता यांची अनुभूती विद्यार्थ्यांना आली

प्रकरण — ६.उद्घि — चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करुन देणे.

साध्य-महाभारतातील द्रौपदीच्या मनातील गूढ वगुंतागुंतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्रापत झाली.

**प्रकरण — ७.उद्घर**—पक्षीगान पाठातून पक्ष्यांच्या सौंदर्याचे दर्शन घडविणे..

साध्य-पक्षीगान मधून विविधक्षी, पक्ष्यांची घरटी, त्यांची पिल्ले यांची माहिती व ओळख विद्यार्थ्यांना झाली.

प्रकरण — ८.उदिष्ठ—अन्वरशा फकीर या मुस्लीम व्यक्तीमत्वाची ओळख विद्यार्थ्यांना करून देणे.

साध्य—लहान मुले, स्त्रीया, माणसे व आजुबाजूच्या गावातील जनतेसाठी उपयुक्त असे अन्वरशा फकीराचे व्यक्तिमत्व असल्याचे विद्यार्थ्यांना कळून आले.

प्रकरण - ९.उदिष्ठ- दाभोळकराच्या अंधश्रध्दा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करून देणे.

साध्य—वैज्ञानिक दृथ्य्टकोण व शास्त्रीय विचार पध्दतीने अंधश्रध्दा निर्मूलन करण्याचे घ्येय दाभोळकरांचे होतेयाची माहिती विद्यार्थ्यांना झाली.

**प्रकरण —१०.उदिष्ठ**—महिला ग्रामपंचायतीच्या निवडणुकीचे चित्रण विद्यार्थ्यांना सांगणे.

साध्य-ग्रामीण भागातील ग्रामपंचायत मधील निवडणुकीची माहिती व परिस्थितीची जाणीवविद्यार्थ्यांना आली.

#### Unit II:

कविता— १.उदिष्ठ—संत तुकारामांनी अभंगााच्या आधारे समाजजीवनाचे वर्णन केलेले चित्रण विद्यार्थ्यांना सांगणे.

साध्य—अभंगााच्या आधारे तत्कालीन सामाजिक परिस्थितीची जाणीव विद्यार्थ्यांना झाली.

कविता —२.उद्दिष्ठ—श्शाहिर प्रभाकरांनी केलेले पंढरीवर्णन वर्णन करणे व महत्व प्रतिपादन करणे.

साध्य—विठ्ठल, रुक्मिणी, व पंढरपूर नगरी, भिमातट याची विद्यार्थ्यांना माहिती मिळाली.

कविता— ३.उदुष्ठ—चाफा या कवितेतून शृध्द प्रेमाचे भाववर्णन करणे.

साध्य—साधे प्रेम व आंतरिक शुध्द प्रेमाची सार्थकता विद्यार्थ्यांना पटली.

कविता— ४.उद्दिष्ठ—ध्येय आणि परिस्थितीया दोन्हींही ओढल्या जाणाऱ्या जीवाची ओढताण वर्णन करणे.

साध्य—कळा ज्या लागल्या जीवा यातून ज्याचे दु:ख त्यालाच सहन करावे लागते याची जाणीव विद्यार्थ्यांना झाली.

कविता— ५.उदुष्ठ—समाधान कवितृतुन नायकाच्या वाटयाला आलेल्या कष्टपद जीवनाचे दर्शन घडविणे.

**साध्य**—कविला त्याच्या पत्निचा प्रेमळ सहवास व निसर्गरम्य परिसरामुळे जीवन सुसहय वाटते याची साक्ष विद्यार्थ्यांना पटली.

कविता— ६.उदिष्ठ—ही निळी पांढरी कवितेतील शरद ऋत्तील दुपारचे वर्णन करुन देणे.

साध्य—इंदिरा संतानी केलेलीशरद ऋतुतील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

**कविता —७.उदिष्ठ**—दोन ज्योती यातून कविने वर्णन केलेल्या दोन ज्योतीचा उलघडा करणे .

**साध्य**—एक दुःखाची ज्योत लाल असते व दुसरी दुःखाची ज्योत काळी असून तीचे दुःख कायम टिकणारे असते याची जाणीव विद्यार्थ्यांना झाली.

कविता— ८.उदुष्ठ—पाऊस कवितेत्न स्त्री मनाच्या विविध भावावस्था विद्यार्थ्यांना उलघडून दाखविणे .

साध्य—ग्रेस कवीने रेखाटलेले स्त्री वेदनेचे स्वरुप व स्त्री मनाच्या भावना याविषयीविद्यार्थ्यांना माहिती मिळाली.

कविता— ९.उदिष्ठ—प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रन करुन जाणीव करून देणे.

**साध्य**—मानवी समाजरचनेत माणूसपण विसरत चालला असून पीडितांना न्याय मिळत नसल्याची साक्ष विद्यार्थ्यांना पटली.

कविता— १०.उद्ष्ठ— टाहारा कवितेतून आदिवासी समाजाला कसा पुढारी हवा याची माहिती विद्यार्थ्यांना देणे. साध्य—कवितेत वर्णन केलेला आदिवासिंचा पुढारी कविला हवा असल्याची जाणीव विद्यार्थ्यांना झाली.

#### **Unit III:**

प्रकरण — १.उदिष्ठ—संपादन प्रक्रिया, प्रेरणा व स्वरुप याविषयीची माहिती विद्यार्थ्यांना देणे.

**साध्य** — ग्रंथाचे संपादन कसे करावे, संपादनाच्या प्रेरणा कोणत्या, व ग्रंथाचे स्वरुप कसे असते याचे ज्ञान विद्यार्थ्यांना प्राप्त झाले.

प्रकरण — २.उदुष्ठ—कार्यालयीन लेखनव्यवहाराविषयी विद्यार्थ्यांना माहिती देणे.

साध्य—कार्यालयीन लेखव्यवहारात टिप्पणी, पध्दती व अप्पणीचे प्रकार याची माहिती विद्यार्थ्यांना प्राप्त झाली.

**प्रकरण** — ३.**उद्ष्ठ**—ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे.

साध्य— ग्रंथपरीक्षण करताना परिक्षणाची पहीली पायरी ग्रंथवाचन होय त्यानंतर इतर बाबींक्डे लक्ष्य द्यावे याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण — ४.उदिष्ठ—इंटरनेट आणि मराठी भाषा व साहित्य याची माहिती विद्यार्थ्यांना करुन देणे.

साध्य— संगणक संवाद,मराठी संकेतस्थळे, इंटरनेटवरील मराठी दैनिके, व मायबोली या संकेतस्थळावरील लेख, कविता, व इतर मराठी साहित्याची माहिती विद्यार्थ्यांना झाली.

### **Department of Political Science**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To understand the difference between scholarly and popular publications in Comparative Politics.
- To understand the issues of International and Domestic Politics and Public Policy.
- To analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- To discuss the major theories and concepts of political science and its subfields.
- To relate the basics of International Relations and the new trends in the realm of International Relations.

#### **Course Outcomes**

- Understood the analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the Indian model.
- Exposed the issues of International and Domestic Politics and Public Policy
- Analyzed contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- Presented the major theories and concepts of political science and its subfields.
- Made aware of the basics of International Relations and the new trends in the realm of international relations.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

Unit – I Nature of Indian Economy

Objective – To introduce the basic Knowledge of the Indian Economy

Outcome -Students learnt about the Knowledge of the Indian Economy.

Unit – II Agriculture

Objective –To explain the importance of the Agriculture Sector the in Indian Economy.

Outcome -Students learnt about the Importance of the Agriculture Sector the in Indian Economy.

Unit – III - Industry

Objective – To explain the Importance and Role of Industries in Economic Development

Outcome -Students learnt about the Knowledge of Industries in the Economic Development.

Unit – IV- Employment and Poverty

Objective- To develop preliminary knowledge of Employment and Poverty

Outcome -Students learnt about the preliminary knowledge of Employment and Poverty.

#### **Department of English**

#### **Course Objectives and Course Outcomes**

#### **English Literature**

**Objective**: To enable students to analyse literary text.

**Outcome:** Students showed their ability to analyze literary text.

**Objective**: To enable students to interpret literary texts.

**Outcome:** Students showed their ability to interpret the literary text.

**Objective**: To enable students to understand significant developments in the history of English and Indian literature.

**Outcome**: Students became aware of significant developments in the history of English and Indian literature

**Objective**: To enable students to apply theoretical approaches to the critical reading of literary texts.

**Outcome**: Students tried to apply theoretical approaches to the critical reading of literary texts.

#### **Department of Sociology**

#### **Course Objectives and Course Outcomes**

#### **Indian Society: The Structural Issues**

Unit - I Indian Society, Structure and Inequality

Objective - To know in detail about Indian Society, Structure and Inequality

Outcome - Student understood the concept of Indian Society, Structure and Inequality

Unit - II Family in Contemporary India

Objective - To make the students aware of Family in Contemporary India.

Outcome -Student understood the concept of Family in Contemporary India

Unit - III Tribal Issues and Problems in India

Objective - To make the students aware of Tribal Issues and Problems in India.

Outcome – Students understood the concept of Tribal Issues and Problems in India.

Unit - IV Rural Community in India

Objective - To make the students know in details about Rural Community in India.

Outcome - Student understood the concept of Rural Community in India

## **Department of History**

#### **Course Objectives and Course Outcomes**

#### Modern World (1789-1920)

#### **Course Objectives**

- To understand What were the causes and consequences of the French Revolution?
- To study how imperialism came into being.
- To study World War- I Treaty of Vasai.
- To understand United Nation and its performance.

#### **Course Outcomes**

- Understoodthe French Revolution the first revolution in the world.
- Studied, what are the reasons for imperialism?.
- Understood World War -I the Treaty of Vasai.
- Learned about the United Nations and its achievements and

Failures.

#### **Department of Marathi**

#### **Course Objectives and Courre Outcomes**

#### Marathi Literature

#### Unit I:

प्रकरण — ६.उद्ष्ठि—चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करुन देणे. साध्य—महाभारतातील द्रौपदीच्या मनातील गूढ वगुंतागुंतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्रापत झाली. प्रकरण — ७.उदिष्ठ—पक्षीगान पाठातन पक्ष्यांच्या सौंदर्याचे दर्शन घडविणे..

साध्य-पक्षीगान मधून विविधक्षी, पक्ष्यांची घरटी, त्यांची पिल्ले यांची माहिती व ओळख विद्यार्थ्यांना झाली.

प्रकरण — ८.उदिष्ठ—अन्वरशा फकीर या मुस्लीम व्यक्तीमत्वाची ओळख विद्यार्थ्यांना करून देणे.

साध्य—लहान मुले, स्त्रीया, माणसे व आजुबाजूच्या गावातील जनतेसाठी उपयुक्त असे अन्वरशा फकीराचे व्यक्तिमत्व असल्याचे विद्यार्थ्यांना कळून आले.

प्रकरण —९.उदिष्ठ— दाभोळकराच्या अंधश्रध्दा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करुन देणे.

**साध्य**—वैज्ञानिक दृथ्टकोण व शास्त्रीय विचार पध्दतीने अंधश्रध्दा निर्मूलन करण्याचे घ्येय दाभोळकरांचे होतेयाची माहिती विद्यार्थ्यांना झाली.

**प्रकरण —१०.उदुष्ठ**—महिला ग्रामपंचायतीच्या निवडनुकीचे चित्रण विद्यार्थ्यांना सांगणे.

साध्य—ग्रामीण भागातील ग्रामपंचायत मधील निवडणूकीची माहिती व परिस्थितीची जाणीवविद्यार्थ्यांना आली

#### **Unit II:**

कविता— ६.उद्ष्ठि—ही निळी पांढरी कवितेतील शरद ऋतूतील दुपारचे वर्णन करुन देणे.

साध्य—इंदिरा संतानी केलेलीशरद ऋतुतील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

कविता —७.उदुष्ठ—दोन ज्योती यातून कविने वर्णन केलेल्या दोन ज्योतीचा उलघडा करणे

साध्य—एक दु:खाची ज्योत लाल असते व दुसरी दु:खाची ज्योत काळी असून तीचे दु:ख कायम टिकणारे असते याची जाणीव विद्यार्थ्यांना झाली.

कविता— ८.उदुष्ठ—पाऊस कवितेत्न स्त्री मनाच्या विविध भावावस्था विद्यार्थ्यांना उलघडुन दाखविणे

साध्य—ग्रेस कवीने रेखाटलेले स्त्री वेदनेचे स्वरुप व स्त्री मनाच्या भावना याविषयीविद्यार्थ्यांना माहिती मिळाली.

कविता— ९.उद्ष्टि—प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रन करुन जाणीव करून देणे.

**साध्य**—मानवी समाजरचनेत माणूसपण विसरत चालला असून पीडितांना न्याय मिळत नसल्याची साक्ष विद्यार्थ्यांना पटली.

कविता— १०.उद्ष्य— टाहारा कवितेतून आदिवासी समाजाला कसा पुढारी हवा याची माहिती विद्यार्थ्यांना देणे. साध्य—कवितेत वर्णन केलेला आदिवासिंचा पुढारी कविला हवा असल्याची जाणीव विद्यार्थ्यांना झाली.

#### **Unit III:**

प्रकरण — ३.**उद्घ्य**—ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे.

साध्य— ग्रंथपरीक्षण करताना परिक्षणाची पहीली पायरी ग्रंथवाचन होय त्यानंतर इतर बाबींक्डे लक्ष्य द्यावे याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण — ४.उद्ष्टि—इंटरनेट आणि मराठी भाषा व साहित्य याची माहिती विद्यार्थ्यांना करुन देणे.

**साध्य**— संगणक संवाद,मराठी संकेतस्थळे, इंटरनेटवरील मराठी दैनिके, व मायबोली या संकेतस्थळावरील लेख, कविता, व इतर मराठी साहित्याची माहिती विद्यार्थ्यांना झाली

#### Department of Marathi Course Objectives and Outcomes Compulsory Marathi

#### Unit I:

प्रकरण — ६.उद्ष्ठि—चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करुन देणे.

साध्य— महाभारतातील द्रौपदीच्या मनातील गूढ वगुंतागुंतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्रापत झाली.

प्रकरण — ७.उद्िष्ठ—पक्षीगान पाठातून पक्ष्यांच्या सौंदर्याचे दर्शन घडविणे..

साध्य—पक्षीगान मधून विविधक्षी, पक्ष्यांची घरटी, त्यांची पिल्ले यांची माहिती व ओळख विद्यार्थ्यांना झाली.

प्रकरण — ८.उदि्ष्ठ—अन्वरशा फकीर या मुस्लीम व्यक्तीमत्वाची ओळख विद्यार्थ्यांना करून देणे.

साध्य—लहान मुले, स्त्रीया, माणसे व आजुबाजूच्या गावातील जनतेसाठी उपयुक्त असे अन्वरशा फकीराचे व्यक्तिमत्व असल्याचे विद्यार्थ्यांना कळून आले.

प्रकरण -९.उदिष्ठ- दाभोळकराच्या अंधश्रध्दा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करुन देणे.

साध्य—वैज्ञानिक दृथ्टकोण व शास्त्रीय विचार पध्दतीने अंधश्रध्दा निर्मूलन करण्याचे घ्येय दाभोळकरांचे होते याची माहिती विद्यार्थ्यांना झाली.

प्रकरण —१०.उदिष्ठ—महिला ग्रामपंचायतीच्या निवडनूकीचे चित्रण विद्यार्थ्यांना सांगणे.

साध्य— ग्रामीण भागातील ग्रामपंचायत मधील निवडणूकीची माहिती व परिस्थितीची जाणीव विद्यार्थ्यांना आली.

#### **Unit II:**

कविता— ६.उदिष्ठ—ही निळी पांढरी कवितेतील शरद ऋतूतील दुपारचे वर्णन करुन देणे.

साध्य—इंदिरा संतानी केलेलीशरद ऋतुतील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

कविता —७.उदिष्ठ—दोन ज्योती यातून कविने वर्णन केलेल्या दोन ज्योतीचा उलघडा करणे .

साध्य—एक दु:खाची ज्योत लाल असते व दुसरी दु:खाची ज्योत काळी असून तीचे दु:ख कायम टिकणारे असते याची जाणीव विद्यार्थ्यांना झाली.

कविता— ८.उद्ष्ट—पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थ्यांना उलघडून दाखिवणे .

साध्य—ग्रेस कवीने रेखाटलेले स्त्री वेदनेचे स्वरुप व स्त्री मनाच्या भावना याविषयीविद्यार्थ्यांना माहिती मिळाली.

कविता— ९.उदिष्ठ—प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रन करुन जाणीव करून देणे.

साध्य—मानवी समाजरचनेत माणूसपण विसरत चालला असून पीडितांना न्याय मिळत नसल्याची साक्ष विद्यार्थ्यांना पटली.

कविता— १०, उद्ष्ट— टाहारा कवितेतून आदिवासी समाजाला कसा पुढारी हवा याची माहिती विद्यार्थ्यांना देणे साध्य—कवितेत वर्णन केलेला आदिवासिंचा पुढारी कविला हवा असल्याची जाणीव विद्यार्थ्यांना झाली.

#### **Unit III:**

प्रकरण — ३.उद्घ — ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे.

साध्य— ग्रंथपरीक्षण करताना परिक्षणाची पहीली पायरी ग्रंथवाचन होय त्यानंतर इतर बाबींक्डे लक्ष्य द्यावे याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण — ४.उद्ष्ठ—इंटरनेट आणि मराठी भाषा व साहित्य याची माहिती विद्यार्थ्यांना करुन देणे.

साध्य— संगणक संवाद,मराठी संकेतस्थळे, इंटरनेटवरील मराठी दैनिके, व मायबोली या संकेतस्थळावरील लेख, कविता, व इतर मराठी साहित्याची माहिती विद्यार्थ्यांना झाली

#### Department of English Course Objectives and Course Outcomes Compulsory English

**Objective**: To enable students to read fluently with proper pronunciation and comprehend the prose.

Outcome: Students read fluently with proper pronunciation and comprehended the prose

Objective: to make students enable to understand and enjoy one act play

**Outcome**: Students understood and enjoyed one-act- play.

**Objective:** To enable students to understand the poets and their prescribed poetry.

**Outcome-** Students understood the theme of the poems and had knowledge about the prescribed poets.

**Objective**: To enable students to have knowledge of applied skills like composing an Email, Curriculum vitae, paragraph with the help of given hints/points.

**Outcome**: Students had knowledge of applied skills like composing an Email, Curriculum vitae, paragraph with the help of given hints/points.

**Objective**: To enrich conversational skills of students **Outcome**: Conversational skill of students improved.

#### Department of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

- To understand the difference between scholarly and popular publications in Comparative Politics.
- To understand the issues of International and Domestic Politics and Publicpolicy.
- To analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- To discuss the major theories and concepts of political science and its subfields.
- To relate the basics of International Relations and the new trends in the realm of International Relations.

#### **Course Outcomes**

- Understood the analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the Indian model
- Understood the issues of International and Domestic Politics and Public
   Policy
- Analyzed contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- Presented with the major theories and concepts of political science and its sub fields.
- Made aware of the basics of International Relations and the new trends in the realm of international relations.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

Unit -I: Economic Development and Growth

- Objective- To develop the ability to explain the core economic Sector of Economic Development and Growth.
- Outcome Students learnt and accepted the Knowledge of Economic Development and Growth.

Unit –II: Planning and Policy

- Objective To introduce the theory of Planning and Policy.
- Outcome Students learnt the theory of Planning and Policy

Unit -III: Public Finance

- Objective- To develop preliminary knowledge of Public Finance.
- Outcome Students learnt preliminary knowledge of Public Finance.

Unit -IV: International Trade

- Objective- To explain the theory of International Trade.
- Outcome –Students learnt about the theory of International Trade.

# Department of Sociology Course Objectives and Course Outcomes Current Social Problems in India

#### Unit - I Education in Contemporary

Objective - To make the students in detail about Education in Contemporary India.

Outcome - Students understood the concept of Education in Contemporary India.

#### Unit - II Displacement and Rehabilitation

Objective – To make the students aware of Displacement and Rehabilitation.

Outcome – Students understood the concept of Displacement and Rehabilitation.

Unit - III Intolerance, Riot Crime

Objective - To make students know in detail about Intolerance, Riot Crime.

Outcome - Students understood the concept of Intolerance, Riot Crime.

#### Unit IV Corruption

Objective - To make students aware of Corruption.

Outcome -Students understood the concept of Corruption.

# Department of History Course Objectives and Course Outcomes B. A. III (VI –Sem.) Modern World (1920 -1960)

#### **Course Objectives**

- To Study what were Russia's five-year plans?
- To understand Hitler Mussolini's foreign policy.
- To understand the Causes of World War II.
- To study the United Nations the and performance of Suez Canal.

#### **Course Outcomes**

- Learned about Russia's Five-Year Plan
- Learned about Hitler Mussolini's foreign policy in detail.
- Learned the reasons for the Second World War.
- Received information about the United Nations.
- Understood the performance of the Suez Canal, NATO SEATO, Warsaw Pact.

# Department of Marathi Course Objectives and Outcomes

#### Marathi Literature

#### Unit I:

गरूडझेप— भरत आंधळे

उद्ष्ठ गरूड झेप मधील लेखकानी नोकरीसाठी ध्येयबेडा प्रवास कसा केला याची माहिती देऊन विद्यार्थ्यांना प्रेरीत करणे.

साध्य— भरत आंधळेच्या शैक्षणिक प्रगतीचा व स्पर्धा परीक्षेच्या कार्याचा आढावा घेऊन विद्यार्थ्यांनी गरुडझेप आत्मकथनातन पेरणा घेतली.

प्राचीन मराठी वाडु.मयाचा इतिहास— ल.रा. नशिराबादकर.

उद्ष्ठ— प्राचीन मराठी वाड्.मयाचा इतिहासाच्या आधार संतसाहित्य, पंडिती साहित्य,शाहिरी साहित्य, बखर वाड्. मय या साहित्याची माहिती विद्यार्थ्यांना देणे

साध्य— संतसाहित्य, पंडिती साहित्य,शाहिरी साहित्य, बखर वाड्.मय या साहित्याची माहिती विद्यार्थ्यांना झाली भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. कळकर्णी

उदिष्ठ— भाषाविज्ञानाचा परिचय विद्यार्थ्यांना करून देणे.

साध्य- मराठी मुळाक्षरे, स्वन व स्वनांतरे यांची माहिती विद्यार्थ्यांना झाली

### **Bachelor of Commerce**

#### Semester -I Course Objectives and Course Outcomes Compulsory English

#### **Course Objectives**

- To understand the meaning of start-up through the prescribed Life Sketches of Start-up founders.
- To understand financial and business acumen through basic research skillsfor business.
- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.

- To take up tasks and not to worry about the end result for the larger benefit of Human-kind.
- To understand that tranquil temperament is the most potent weapon one can have against diversity.
- To understand grammar and apply it in their writing skills.

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- Understood financial and business acumen through basic research skills for business.
- Understood and value inclusivity in human nature.
- Understood prioritize the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.
- Understood tasks and not to worry about the end result for the larger benefit of Human kind.
- Understood that tranquil temperament is the most potent weapon one can have against diversity.
- Understood grammar and apply it in their writing skills.

#### **Department of Marathi**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

उदिष्टे:- 1. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरुची निर्माण करणे.

- 2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- 3. विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- 4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
- 5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

#### **Course Outcomes**

ध्येयः— 1. भावी काळात विदयार्थ्यांमधून साहित्यनिर्मिती करणे.

- 2. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करुन संवादशील वातावरण निर्मिती करणे.
- 3. विभागात विविध उपक्रमांचे आयोजन करुन मराठी भाषेचा दर्जा वाढविणे.
- 4. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे.
- 5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

CO1 भारतीय लोकशाहीचे मूल्य विदयार्थ्यांमध्ये रुजविणे.

CO2 ग्रामीण जनजिवन व शेतीनिष्ठेशी विदयार्थ्यांची नाळ जोळणे.

CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.

- CO4 शाह् महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
- CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.
- CO6 विदयार्थ्यामध्ये आधूनिक मूल्य रुजविणे
- CO7 विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण करणे.
- CO8 विदयार्थ्यामध्ये सर्जनशीलता निर्माण करणे.

#### **Financial Accounting**

#### **Course Objectives and Course Outcomes**

#### Unit No.I - Financial Accounting.

- Objective- To make the students understand Financial Accounting. Meaning, Principles& Problem.
  - Outcome -Students understood the following topics. Financial Accounting. Meaning, Objective, Principles & Problem.

#### Unit No 2- Hire Purchase Account.

- Objective To make the students understand Hire Purchase Account Meaning, Method & Problems.
- Outcome- Students understood the following topics Hire Purchase Account Meaning, Method & Problems.

#### Unit No 3- Final Account of Co-Operative Societies.

- Objective To make the students to understand the Final AccountCo-Operative Societies .Introduction, Type, Co-operative Legislation and Problems.
- Outcome- Students understood the following topics
   Final Account of Co-Operative Societies
   Introduction, Type, Co-Operative Legislation and Problems

#### Unit No 4- Join Venture Accounts.

- Objective- To make the students understand Join Venture Accounts Meaning, Method and Problem.
- Outcome Students understood the following topics Join Venture Accounts Meaning, Method and Problems.

#### **BUSINESS ORGANISATION**

#### **Course Objectives and Course Outcomes**

#### **Objectives**

- To make the students understand the concept, objective, importance of business.
- To acquaint the students with various forms of Business organization and their functioning.
- To make the students understand the concept, functions of Organization and types of Organization.
- To make the students understand the Internal constituents of the Business Organization Key Manageriall Personnel, Chairman, Chief executive officer, E-Commerce, E-business and E-banking.

#### Outcomes

Students understood the concept, objective and importance of business.

- Acquainted the students with various forms of Business organization and their functioning.
- Understood the concept, functions of Organization and types of Organization.
- Understood Internal constituents of the Business Organization Key managerial Personnel, Chairman, Chief executive officer, E-Commerce, E-business and E-banking.

#### **Company Law**

#### **Course Objectives and Course Outcomes**

Unit No. I - Background of New Company

- Objective To make the students understandthe Background of New Company
   Act 2013, Corporate Personality & Kinds of Company.
- Outcome Students understood the following topics. Background of New Company Act 2013, Corporate Personality & Kinds of Company.

Unit No 2- Memorandum of Association, Article of Association and Prospectus.

- Objective To make the students understand the Memorandum of Association, Article of Association and Prospectus.
- Outcome Students understood the Memorandum of Association, Article of Association and Prospectus.

Unit No 3- Shares and Share Capital

- Objective- To make the studentsunderstand Shares and Share Capital.
- Outcome-Capital.
   Students understood the following topics Shares and Share

Unit No 4- Membership in a company, Director.

- Objective To make the students understand Membership in a company, Director.
- Outcome- Students understood the following topics Membership in a company, Director.

# Department of English Semester-II Compulsory English Course Objectives and Course Outcomes

#### **Course Objectives**

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- To understand financial and business acumen through basic research skills for business.
- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.

- To take up tasks and not to worry about the end result for the larger benefit of Humankind.
- To understand that tranquil temperament is the most potent weapon one can have against diversity.
- To understand grammar and apply it in their writing skills.

### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- Understood financial and business acumen through basic research skills for business.
- Understood and valued inclusivity in human nature.
- Understood prioritizing the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.
- Understood the tasks and not to worry about the end result for the larger benefit of Human kind.
- Understood that tranquil temperament is the most potent weapon one can have against diversity.
- Understood grammar and apply it to their writing skills.

### Department of Marathi Course Objectives and Outcomes

- CO1 भारतीय लोकशाहीचे मूल्य विदयार्थ्यांमध्ये रुजविणे.
- CO2 ग्रामीण जनजिवन व शेतीनिष्ठेशी विदयार्थ्यांची नाळ जोळणे.
- CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.
- CO4 शाहू महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
- CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.
- CO6 विदयार्थ्यामध्ये आधूनिक मूल्य रुजविणे
- CO7 विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण करणे.
- CO8 विदयार्थ्यामध्ये सर्जनशीलता निर्माण करणे.

### **Statistics and Business Mathematics**

### **Course Objectives and Course Outcomes**

Unit No. I - Statistics & Measures of Central Tendency

- Objective To make the students understandthe Background of Statistics & Measures of Central Tendency.
- Outcome Students understood the following topics. Statistics & Measures of Central Tendency.

### Unit No 2- Dispersion.

- Objective To make the students understand Dispersion.
- Outcome Students understood the following topics Dispersion.

#### Unit No 3- Skewness

- Objective To make the students understand Skewness.
- Outcome Students understood the following topics Skewness.

### Unit No 4- Business Mathematics

- Objective- To make the studentsunderstand Business Mathematics.
- Outcome Students understood the following topics.

### **BUSINESS MANAGEMENT**

### **Course Objectives and Course Outcomes**

### **Course Objectives**

- To make the students understand the Meaning, types of management, Principles, function of Business Management.
- To make the students know about Planning and Decision Making.
- To make the students know about Delegation of Authority and coordination& Controlling.
- To expose the students for the applicability of recent trends in management practices.
- To make students familiar with the modern management practices being used by the corporate world.

### **Course Outcomes**

- Understood the Meaning, types of management, Principles, and function of Business Management.
- Knew about Planning and Decision Making.
- Students knew about Delegation of Authority and coordination& Controlling.
- Exposed the students for the applicability of recent trends in management practices.
- Understood and became familiar with the modern management practices being used by the corporate world.

### **Secretarial Practice**

### **Course Objectives and Course Outcomes**

### Unit No. I - Incorporation of Company

- Objective To make the students understand the Incorporation of Company, Directors of Company.
  - Outcome Students understood the following topics Incorporation of Company, Directors of Company.
- Unit No 2- Company Meeting, Company Agenda & Voting and Resolution.

- Objective To make the students understand the Company Meeting, Company Agenda & Voting and Resolution.
- Outcome- Understood the Company Meeting, Company Agenda & Voting and Resolution.

Unit No 3- Report Writings, Secretarial audit & E-Governance and E-Filing

- Objective To make the students understand Report Writings, Secretarial Audit &E-Governance and E-Filing.
- Outcome Students get well understood the following topics Report
   Writings, Secretarial audit & E-Governance and E-Filing.

Unit No 4- Key Management Personnel, Appointment of Director & Management Remuneration.

- Objective To Make the students understand Key Management Personnel, Appointment of Director & Management Remuneration.
- Outcome Students understood the following topics
   Key Management Personnel, Appointment of Director &
   Management Remuneration.

# Business Economics II Course Objectives and Course Outcomes

#### Unit I-

### **Market Structure**

Objective- To make the students understand the Market structure.

Outcome-Students understood the Market Structure.

### **Unit II-**

### **Perfect & Imperfect Competition Markets**

Objective- Students should become aware of Perfect & Imperfect Competition.

Outcome-Students understood Perfect & Imperfect Competition.

### **Unit III-**

### **Theories of Distribution**

Objective- Students should become aware of the Theory of Distribution.

Outcome-Students understood & they applied their knowledge.

### **Unit IV-**

### **Business cycles & National Income**

**Objective-** Students should become aware of Business cycles & National Income.

Outcome-Students understood Business cycles & National Income.

# Compulsory English Semester-III Course Objectives and Course Outcomes

### **Course Objectives**

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- To understand financial and business acumen through basic research skills for business.
- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.
- To take up tasks and not to worry about the end result for the larger benefit of Human kind.
- To understand that tranquil temperament is the most potent weapon one can have against diversity.
- To understand grammar and apply it in their writing skills.

### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- Understood financial and business acumen through basic research skills for business.
- Understood and valued inclusivity in human nature.
- Understood prioritizing the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.
- Understood tasks and not to worry about the end result for the larger benefit of Humankind.
- Understood that tranquil temperament is the most potent weapon one can have against diversity.
- Understood grammar and apply it in their writing skills.

### Department of Marathi Semester III

### **Course Objectives and Outcomes**

- CO1 मातृभाषेची आवड व जाणीव निर्माण करणे
- CO2 प्राचिन मराठीचे वैशिष्ट्रे स्पष्ट करणे.
- CO3 विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.
- CO4 संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोकशाहीचा पुरस्कार करणे.
- CO5 स्त्री विषयक जाणिव जागृती करणे.
- CO6 वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे.

### **Financial Accounting II**

### Semester III

### Unit I-

### **Consignment Accounts**

Objective- Students should become awareof the topic of Consignment Accounts.

Outcome-Students understood & Solve the Problems.

### Unit II-

### **Branch Accounts**

Objective- Students should become aware of topic of Branch Accounts.

Outcomes-Students understood & solve the Problems.

### **Unit III-**

### **Capital Structure & Issues of Shares**

**Objective**- Students should become a ware of topic of Capital Structure & Issues of Shares.

Outcome-Student understood& solved the Problems of Issues of Shares.

### **Unit IV-**

### **Final Accounts of Joint Stock Companies**

**Objective-** Students should become aware of the topic of Final Accounts of Joint Stock Company.

**Outcome-** Student understood & solved the problems.

# **Business Communication & Management Course Objectives and Course Outcomes**

- Unit No. I Meaning, Definition and concept of Communication, objective of Communication
- Objective To make the students understand the Meaning, Definition and concept of Communication, objective of Communication
- Outcome The students understood the Meaning, Definition and concept of Communication, the objective of Communication
- Unit No 2- Business Communication.
- Objective To make the students understand the Business Communication.
- Outcome- The students understood Business Communication.
- Unit No 3- Technology and Business Communication
- Objective To make the students understand Technology and Business Communication.
- Outcome- Students understood the following topics;
- Technology and Business Communication.
- Unit No 4- M.S. Office Aided Communication.
- Objective To make the students understand M.S. Office-Aided Communication.
- Outcome Students understood the following topics;
  - M.S. Office Aided Communication.

### **Business Law**

# Course Objectives and Course Outcomes Course Objectives

- Students will be able to understand various provisions of the related Acts the course gives the knowledge regarding The Indian Contract Act, 1872, The Sales of Goods Act, 1930, The Indian partnership Act 1932, Negotiable Instruments Act 1881.
- To make the students gain knowledge of various legal aspects of the business.
- To make the students understand laws that affect mercantile transactions.
- Students will be able to understand court interpretations of laws like,
   Prevention of Money Laundering Act-2002, Consumer Protection Act –
   2002

### **Course Outcomes**

- Student understood various provisions of the related Acts the course gives the knowledge regarding The Indian Contract Act, 1872, The Sales of Goods Act, 1930, The Indian partnership Act 1932, Negotiable Instruments Act 1881.
- Students gained knowledge of various legal aspects of the business.
- Students understood laws that affect mercantile transactions.
- Students understood court interpretations of laws like, the Prevention of Money Laundering Act-2002, Consumer Protection Act – 2002

# Monetary Economics-I Course Objectives and Course Outcomes

Unit I-

Money

Objective- To make the students understand the concept of Ethe volution of Money & Functions of Money.

Outcome-Students understood the concept of the Evolution of Money & Functions of Money.

Unit II-

Inflation & Deflation

Objective- To make the students understand the concept of inflation and deflation.

Outcome-Students developed their knowledge about inflation and deflation.

Unit III-

Money Market & Policies

Objective- To make the students understand the concept of the Money Market and Monetary Policy.

Outcome-Students understood & they applied their knowledge.

Unit IV-

**Public Finance** 

Objective- To make the students understand the concept of Public Finance.

Outcome-Students applied & developed the knowledge.

# Compulsory English Semester-IV Course Objectives and Course Outcomes

### Course Objectives

- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.

- To take up tasks and not to worry about the end result for the larger benefit of Humankind.
- To understand grammar and apply it in their writing skills.

### Course Outcomes

- Understood and valued inclusivity in human nature.
- Understood prioritizing the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.
- Understood tasks and not to worry about the end result for the larger benefit of Humankind.
- Understood grammar and apply it to their writing skills.

### Department of Marathi Course Objectives and Outcomes

- CO1 मातुभाषेची आवड व जाणीव निर्माण करणेण
- CO2 प्राचिन मराठीचे वैशिष्ट्रे स्पष्ट करणे.
- CO3 विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.
- CO4 संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोकशाहीचा पुरस्कार करणे.
- CO5 स्त्री विषयक जाणिव जागृती करणे.
- CO6 वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे.

### **Financial Accounting III**

### **Course Objectives and Outcomes**

### Unit I-

### **Final Accounts of Banking Companies**

**Objective-**Students should become aware of the topic of Final Accounts of Banking Companies.

Outcome-Students understood and solved the Problems.

### Unit II-

### **Final Accounts of General Insurance Companies**

**Objective-** Students should become aware of the topic of Final Accounts of General Insurance Companies.

**Outcome-**Student understood and solved the Problems.

### **Unit III-**

### Valuation of Goodwill

**Objective-** Students should become aware of the topic of the Valuation of Goodwill.

Outcome-Student understood and solved the Problems.

**Unit IV-**

### **Liquidation of Company**

**Objective-** Students should become aware of the topic of the Liquidation of Company.

Outcome-Student understood & solved the Problems.

### **Skill Development**

### **Course Objectives and Course Outcomes**

Unit No. I - Introduction- Basic Personality, Human Growth and Behavior and Motivation.

- Objective To make the students understand the Introduction- Basic Personality, Human Growth and Behavior and Motivation.
- Outcome The students understood the Introduction- Basic Personality, Human Growth and Behavior and Motivation.

Unit No 2- Communication Skill and Personality Development.

- Objective To make the students understand Communication Skills and Personality Development.
- Outcome The students understood the Communication Skills and Personality Development.

Unit No 3- Techniques in Personality Development.

- Objective To make the studentsunderstand Techniques in Personality Development.
- Outcome Students understood the following topics Techniques in Personality Development.

Unit No 4- Entrepreneurial Skill Development.

- Objective To make the students understand Entrepreneurial Skill Development.
- Outcome- Students understood Entrepreneurial Skill Development.

# Income Tax Course Objectives and Course Outcomes

### **Course Objectives**

- To make the students understand the basic concepts involved in the Income Tax act and the basics of income tax.
- To make the students understand the Taxable Salary and tax liability.
- Students get exposure to provisions of taxation of house property.
- To make the students understand Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and 80U. Students get exposure to provisions of taxation of Income from other sources.
- They learn the procedure of filing tax returns, Advance tax and tax refunds.

#### **Course Outcomes**

 Understood the basic concepts involved in Income Tax act and also the basics of income tax.

- Understood the Taxable Salary and tax liability.
- Students got exposure to provisions of taxation of house property.
- Understood Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and 80U. Students get exposure to provisions of taxation of Income from other sources.

They learn the procedure of filing tax returns, Advance tax and tax refunds

### **Monetary Economics-II**

### **Course Objectives and Course Outcomes**

### Unit I-

### **Commercial Bank**

Objective-To make the students understand the functions of Commercial Bank.

Outcome-Students understood the functions of Commercial Bank.

### Unit II-

### E-Banking and Core Banking

**Objective**- To make the students understand -Banking and Core Banking.

Outcome-Students developed their knowledge.

#### **Unit III-**

### **Banks and Customers Relationship and Service**

**Objective-** To make the studentsunderstand the Banks Customers Relationship and Service.

Outcome-Students understood & applied their knowledge.

### **Unit IV-**

### **Central Bank**

Objective- To make the students to understand the Central Bank.

Outcome-Students developed the knowledge about Central Bank.

# Financial Accounting-IV Semester-V Course Objectives and Course Outcomes

- Unit No.I Amalgamations & Absorption of Companies.
- Objective To make the students understand Amalgamations & Absorption.
- Outcome Students understood the topics like Amalgamations & Absorption.
- Unit No 2- Reorganization & reconstruction of Companies.
- Objective To make the studentsunderstand the Reorganization & reconstruction problem.
- Outcome Students understood the concepts of the Reorganization & reconstruction problems.

Unit No 3- Valuation of Shares

Objective - To make the students understand Valuation of Shares Problems.

Outcome- Studentsunderstood the Valuation of Shares Problems.

Unit No 4- Double Account system

Objective - To make the students understand Double Account system.

Outcome - Students understood the Double Account system.

# Management Process Course Objectives and Course Outcomes

### Unit I-

Management and Administration

Objective- To make the students understand meaning and difference of Management and Administration.

Outcome-Students applied the knowledge of Management and Administration.

#### Unit II-

Managerial Development & Group Dynamics

Objective- To make the students to understand the Managerial Development & Group Dynamics

Outcome-Students understood the knowledge of Managerial Development & Group Dynamics.

Unit III-

Managerial Style

Objective- To make the students understand the Managerial Style.

Outcome-Students developed the knowledge of Managerial Style.

Unit IV-

Motivation:

Objective- To make the students understand the Motivation.

Outcome- Students understood the meaning of Motivation and their types.

### Indian Economics -I

### **Course Objectives and Course Outcomes**

### Unit I-

### **Indian Economy& Planning**

Objective- To make the students understand the Indian Economy & Planning.

Outcome-Students understood the Indian Economy & Planning.

### Unit II-

### **Indian Economy & Policy**

**Objective-** To make the students understand the Indian Economy & Policy.

**Outcome-**Students understood the concept of the Indian Economy & its Policy.

### **Unit III-**

### **Population & Unemployment**

**Objective-** To make the students understand the Population & Unemployment.

**Outcome-**Students understood & created the knowledge.

#### **Unit IV-**

#### **India's Public Finance**

**Objective-** To make the students understand the India's Public Finance.

Outcome-Students developed the knowledge of India's Public Finance.

# **Computerize Accounting Course Objectives and Course Outcomes**

Objective - To make the students understand Introduction of Computerize Accounting, Advantage, Need and Accounting Groups.

Outcome - Students understood the following topics; Introduction of Computerize Accounting, Advantage, Need and Accounting

Groups.

Unit No 2- Accounting Software's.

Objective - To make the students understand Accounting Software.

Outcome - Students understood the topic- Accounting Software.

Unit No 3- Accounts Info Menu, Accounts Groups.

Objective - To make the studentsunderstand the Accounts Info Menu, Accounts Groups-

Create Group, Ledger Accounts, Voucher& Features of Account Voucher.

Outcome - Students understood the following topics-

Accounts Info Menu, Accounts Groups-

Create Group, Ledger Accounts, Voucher & Features of Account

Voucher.

Unit No 4- Inventory Info, Features of Inventory Info. Configure.

Objective - To make the students understand the Inventory Info, Features of the Inventory

Info. Configure.

Outcome - Students understood the following topics-Inventory Info, Features of Inventory Info. Configure.

# Auditing Course Objectives and Course Outcomes

### **Course Objectives**

- To make the Students learn a lot about the basics of audit and auditing, internal and external check, periodic audits, internal audit exteral audit, continuous audit, cost audit, management audit and annual audit.
  - To make the Students learn the Audit Planning and Audit Documentation and Evidence.
  - To make the studentsunderstand standard on Auditing, Vouching & Verification Vouching, Verification of Assets and Liabilities.
  - A glimpse into company audit gives an idea of appointing a company auditor, and the Procedure of audit in a company etc. along with the rules of company and corporate audit.

### **Course Outcomes**

• Students learnt a lot about basics of audit and auditing, internal and external check, periodic audit, internal audit external audit, continuous audit, cost audit, management audit and annual audit.

- Students learnt Audit Planning and Audit Documentation and Evidence.
- Students understood the standard on Auditing, Vouching & Verification Vouching, Verification of Assets and Liabilities.
- A glimpse into company audit gave an idea of appointing a company auditor, and the Procedure of audit in a company etc.along with the rules of the company and corporate audit.

### Financial Accounting-V Semester-VI Course Objectives and Course Outcomes

Unit No.I - Accounting of Holding Company.

- Objective To make the students understand Accounting of Holding Company
- Outcome Students understood the following topics Accounting of Holding Company.

Unit No. 2 - Insurance Claims.

- Objective To make the students understand the Insurance Claims.
- Outcome Students understood the following topics Insurance Claims.

Unit No. 3 - Investment Accounts.

- Objective To make the studentsunderstand Investment Accounts.
- Outcome Students understood the topic- Investment Accounts.

Unit No. 4 - Profit Prior to Incorporation.

- Objective To make the students understand the Profit Prior to Incorporation.
- Outcome Students understood the topic- Profit Prior to Incorporation.

### **Management Accounting**

### **Course Objectives and Course Outcomes**

### **Course Objectives**

- To make the students get a clear idea about the concept, objectives, importance and benefits of management accounting along with the basic advantages and significance of various techniques of management accounting and Break-Even Poing Analysis.
- A good idea of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organizations.
- Students get a clear idea of Ratio Analysis like- Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Classification of Ratio, Liquid Ratio, Inventory Turnover Ratio, Debtors and Creditors Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, Earnings per Share Ratio.
- To make the students understand and get a clear idea of the Fund Flow Statement.

### **Course Outcomes**

- Student got a clear idea about the concept, objectives, importance and benefits
  of management accounting along with the basic advantages and significance of
  various techniques of management accounting and Break-Even Poing Analysis.
- Understood good ideas of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organizations.

- Students understood clear idea of Ratio Analysis like- Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Classification of Ratio, Liquid Ratio, Inventory Turnover Ratio, Debtors and Creditors Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, Earnings per share Ratio.
- Understood and got clear idea of Fund Flow Statement

#### **Advanced Statistics**

### **Course Objectives and Course Outcomes**

Objective - To make the students understand the Accounting of Correlation

Outcome - Students understood the following topics. Correlation Company

Unit No. 2 - Regression.

Objective- To make the students understand Regression.

Outcome - Students understood the Regression.

Unit No. 3 - Index Number.

Objective - To make the students to understand Index Number.

Outcome - Students understood the following topics Index Number.

Unit No. 4 - Time Series Analysis.

Objective - To make the students understand Time Series Analysis.

Outcome- Students understood the Time Series Analysis.

### Indian Economics -II

### **Course Objectives and Course Outcomes**

### Unit I

### **Indian Agriculture**

Objective- To make the students understand the Indian Agriculture.

Outcome-Students applied the knowledge.

### Unit II

### **Indian Industry**

Objective- To make the students understand the Indian Industry.

Outcome-Students created the knowledge.

### **Unit III**

### India's Service Sector and International Trade

**Objective-** To make the students understand the India's International Trade.

**Outcome-**Students developed the knowledge.

### **Unit IV**

### **Contribution of Indian Economic Thinkers**

**Objective**- To make the students understand the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar Lohiya.)

**Outcome-**Students understood the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar Lohiya.)

### **Human Resource Management**

### **Course Objectives and Course Outcomes**

### Unit I-

#### Introduction

**Objective**- To make the students understand the concept of Human Resources Management & Human Resource Manager.

**Outcome-**Students understood the concept of Human Resources Management & Human Resource Manager.

### Unit II-

### Recruitment, selection and training

Objective- To make the students understand the Recruitment, selection and training

Outcome-Students understood the Recruitment, selection and training

### Unit III-

### Labor welfare and collective bargaining

**Objective**- To make the students to understand the Labor welfare and collective bargaining.

Outcome-Students understood the Labor welfare and collective bargaining.

### Unit IV-

### **Human Resource Planning and Accounting**

**Objective-** To make the students understand the Human Resource Planning and Accounting.

Outcome-Students understood Human Resource Planning and Accounting.

### **Industrial Law**

# Course Objectives and Course Outcomes Course Objectives

- To make the students to understand The Indian Factories Act, 1948 and The Industrial Disputes Act, 1947.
- Learners learn Laws Relating to Wages, Laws Relating to Bonus and Gratuity, Laws Relating to Employee's State Insurance and Provident Fund and Laws Relating to Workmen Compensation and Maternity Benefits.
- To make the students to understand Child Labour Act, 1986, Trade Union Act,
   1926, International Labour Organisation ILO and Contract Labour Act, 1971.
- Students will be able to understand the meaning and nature of Industrial Estate, Technology Park, SEZ and Co-operative Industrial Estate.
- Learners learn Intellectual Property Rights Law in India and Environment Protection Act, 1986.

#### **Course Outcomes**

- Understood The Indian Factories Act, 1948 and The Industrial Disputes Act, 1947.
- Learned Laws Relating to Wages, Laws Relating to Bonus and Gratuity, Laws Relating to Employee's State Insurance and Provident Fund and Laws Relating to Workmen Compensation and Maternity Benefits.
- Understood Child Labour Act, 1986, Trade Union Act, 1926, International Labour Organisation – ILO and Contract Labour Act, 1971.
- Understood the meaning and nature of Industrial Estate, Technology Park, SEZ and Co-operative Industrial Estate.
- Learners learnt Intellectual Property Rights Law in India and Environment Protection Act, 1986.

# **Bachelor of Science (B.Sc.)**

### Semester-I Department of English Compulsory English

### **Course Objectives and Course Outcomes**

Unit I: Objective-Making students' conscious about the functioning of Democracy.

Outcome-Students tried to understand the importance of democracy.

Unit II: Objective- Making students understand slavery and its effects.

Outcome-Students tried to understand the effects of slavery and its punishing practice.

**Unit III: Objective-**to make students understand correct usage of Tense, Transformation of sentences and Common errors.

**Outcome-**Students tried to solve the examples of Tense, Transformation of sentences and Common errors.

Unit IV: Objective-To create the ability of writing Curriculum Vitae.

Outcome-Students attempted to write the Curriculum Vitae.

Unit I: Objective-Making students conscious of slavery, education, and compassion.

**Outcom**e-Students understood the issues related with slavery, education and struggle in life.

**Unit II: Objective-** Making students understand about Self- reliance, Indian Freedom and words of wisdom.

Outcome- students understood about Self- reliance, Indian Freedom and words of Wisdom.

**Unit III**: Objective-To make students understand the value of struggle, Kindness and honesty.

Outcome- students understood the value of struggle, Kindness and honesty.

**Unit IV**: **Objective**-To create the ability of writing and comprehension.

Outcome-Students attempted to write and comprehend the passage.

### Department of Marathi Course Objectives and Outcomes

### **Course Objectives**

उदिष्टे:- १. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरूची निर्माण करणे.

- २. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- 3. विदयार्थ्यामध्ये असलेल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- ४. साहित्यातून मानवतावादी दृष्टिकोण रूजविणे.
- ७. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

ध्येय:- १. भावी काळात विदयार्थ्यामधून साहित्यनिर्मिती करणे.

- २. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करून संवादशील वातावरण निर्मिती करणे.
- विभागात विविध उपक्रमांचे आयोजन करून मराठी भाषेचा दर्जा वाढविणे.
- ४. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे
- ५. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

### **Course Outcomes**

साहित्य सेतू

CO1 विदयार्थ्यांनमध्ये साहित्य विषयक आवड निर्माण करणे

CO2 वाचन संस्कृतीचा पुरस्कार करणे

CO3 भारतीय संविधानाचे महत्व समजावून सांगणे

CO4मानवी मुल्यांची जपणुक करणे

CO5 कविता लंखनाचे तंत्र अवगत करणे

CO6 पर्यावरण विषयक जागती निर्माण करणे

CO7 व्यावहारीक मराठीचे महत्व समजावून सांगणे

# Department of Chemistry Programme Educational Objectives (PEOS)

**PEO1:** Graduates will pursue higher studies in related fields including management

**PEO2:** Graduates will perform as employee in private/government institutions rising up to top positions

**PEO3:** Graduates will become entrepreneurs.

**PEO4:** Graduates will prepare for various competitive examinations.

### **Programme Specific Outcomes (PSOS)**

**PSO-1:** Gain the knowledge of Chemistry through theory and practical.

**PSO-2:** To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.

**PSO-3:** Identify chemical formulae and solve numerical problems.

**PSO-4:** Use modern chemical tools, Models, Chem-draw, Charts and Equipment's.

**PSO-5:** Know structure-activity relationship

**PSO-6:** Understand good laboratory practices and safety.

**PSO-7**: Make aware and handle the sophisticated instruments/equipment.

**PSO-8:** Develop research-oriented skills.

**PSO-9:** Study and understand the different techniques used in purification of compounds

### **Programme Outcomes (POs)**

- The students are expected to understand the fundamentals, principles, and recent developments in the subject area.
- It is expected to inspire and boost interest of the students towards chemistry as the main subject.
- To impart practical skills and learn basics behind experiments
- To prepare background for advanced and applied studies in chemistry.
- To inculcate the scientific temperament in the students and outside the scientific community.
- To inculcate the scientific temperament in the students and outside the scientific community.
- Use modern techniques, decent equipment and Chemistry software

# Course Outcomes (COs)

Course Name: B. Sc. Year/Semester: First/First Subject: Chemistry

Paper	CO	Outcomes
FY Paper-I Inorganic Chemistry (101)	101.1	<ul> <li>To understand the basic structure of atom.</li> <li>Understand shape of orbitals.</li> <li>Understand periodic properties such as atomic and ionic radii, ionization energy, electron affinity etc.</li> </ul>
	101.2	<ul> <li>To understand the concept of covalent bond.</li> <li>To understand the bond parameters and various types of types of hybridization.</li> <li>To understand the ionic structures with respect to NaCl and CsCl.</li> </ul>
	101.3	Understand s block element and their properties such as electronic

		<ul> <li>configuration, atomic and ionic radii,</li> <li>I.P. etc.</li> <li>Understand chemical properties of the noble gases, preparation, structures, bonding and applications.</li> </ul>
	101.4	<ul> <li>To understand the P block element. Comparative study of groups 15,16, 17 with respective their properties.</li> <li>Understand the Hydrides, Oxides, Peroxyacids, Hydrides.</li> </ul>
FY Paper-II Physical Chemistry (102)	102.1	<ul> <li>Understand the common thermodynamics terms. Types of systems and varies thermodynamics processes.</li> <li>State and path functions and their differentiation.</li> <li>Understand the first law of thermodynamics.</li> </ul>
*	102.2	<ul> <li>Understand gas equation and laws.</li> <li>Understand qualitative discussion of the Maxwell-Boltzmann distribution.</li> <li>Understand ideal gas and real gases behaviors.</li> </ul>
* ( <del>-</del>	102.3	<ul> <li>Understand the Intermolecular forces, structure of liquid, structural difference between solid, liquid and gases.</li> <li>Properties of liquid like surface tension, viscosity, refractive index.</li> </ul>
*	102.4	<ul> <li>Understand the concept of different types of surface phenomenon and catalytic property, like Adsorption mechanism of adsorption, factor affecting adsorption. Difference between adsorption and absorption, etc.</li> <li>Understand types of catalysis and enzymes.</li> </ul>
F.Y. Chemistry Practical Course	103	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

### **Department of Physics**

### **Programme Educational objectives (PEOS)**

- **PEO1:** Graduates will pursue higher studies in related fields including management
- **PEO2:** Graduates will perform as employee in private/government institutions rising up to top positions
- **PEO3:** Graduates will become entrepreneurs.
- **PEO4:** Graduates will prepare for various competitive examinations.

### **Programme Specific Objectives (PSOS)**

- **PSO-1:** Gain the knowledge of Physics through theory and experiments.
- **PSO-2:** Understand good laboratory practices and safety.
- **PSO-3:** Develop research-oriented skills.
- **PSO-4:** Make aware and handle the sophisticated instruments/equipments.

### **Programme Outcomes (POs)**

- Bachelor of Science offers theoretical as well as practical knowledge about different subject areas.
- This course forms the basis of science for coherent understanding of the academic field to pursue multi and interdisciplinary science careers in future.
   These subject areas include Physics, Chemistry, Mathematics and Botany and Zoology.
- Able to plan and execute experiments or investigations, analyze and interpret data information collected using appropriate methods
- It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace through research.
- Think critically; follow innovations and developments in science and technology.

### **Course Outcomes (COs)**

Course Name: B. Sc.

**Year/Semester:** First/First

**Subject: Physics** 

Paper	CO	Outcomes	
Paper 1:	101.1	• Understand the mechanical behavior of the material and	
Properties of		the fundamental terminology like Stress, Strain, Poisson's	

Matter and Mechanics		ratio, Hooks law, bending moment and modulus of elasticity
(101)	101.2	<ul> <li>Understand the concept of viscosity.</li> <li>Apply Poiseuille's Equation, Bernoulli's Theorem, Stoke's law and the concept of terminal velocity.</li> </ul>
	101.3	Understand the concept of surface tension and surface energy, Newton's laws of motion and to resolve the components of velocity and acceleration in different coordinate system.
	101.4	Understand the System of particles and conservation laws.
Paper 2: Electrostatics, Time varying	102.1	Understand the concept of Electrostatic force, Electric field, Electric potential, Electric dipole, Electric dipole moment.
fields & Electric Currents (102)	102.2	<ul> <li>Understand the concept of polarization and capacitors with and without dielectric.</li> <li>Apply Gauss law to parallel plate capacitor.</li> </ul>
*//	102.3	<ul> <li>To understand the concept of electromagnetic induction and transformer.</li> <li>Apply equation of continuity and Kirchhoff's law to rise and decay of current in LR, CR and LCR circuits.</li> </ul>
*// 5	102.4	<ul> <li>To apply complex number in solving an a.c. circuit.</li> <li>Apply j- operator in LR, CR and LCR circuit.</li> <li>Understand the concept of Resonance</li> <li>Calculate I, Z, Φ and fr.</li> </ul>
Physics Practical (103)	103	<ul> <li>Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.</li> <li>Interpret the experimental data</li> </ul>

# **Department of Mathematics**

# **Programme Educational Objectives (PEOs): B.Sc. (Mathematics)**

1.	Graduates will pursue higher studies in related fields including management			
2.	To prepare necessary knowledge base for research and development in			
	Mathematics			
3.	To help student's build-up a successful career in Mathematics			

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### **Programme Specific Outcomes (PSO): B.Sc. (Mathematics)**

1.	Enhance students' ability to develop mathematical models			
2.	Develop research-oriented skills.			
3.	Nurture problem solving skills, thinking, and creativity through assignments,			
	project Work.			
4.	Prepare for various competitive exams			

### **Programme Outcomes (POs): B.Sc. (Mathematics)**

1.	Understand and solving of major concepts in all disciplines of mathematics.
2.	Solve the problem and also think methodically, independently and draw a logical
	conclusion.
3.	To inculcate the scientific temperament in the students and outside the scientific
	community.
4.	Create an awareness of the impact of mathematics on society and development
	outside the scientific community.
5.	Gain experience investigating the real-world problems and learn to how to apply
	Mathematical ideas and models to those problems.
6.	Understand and able to use mathematical formulae in another subject.

# COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: First/First Subject: Mathematics

After successful completion of three-year degree programme in **Mathematics** students

should be able to;

Paper	CO	Outcomes			
FY	101.1	Understand the basic concept related to Matrices and			
Paper-I		solve the problem based on a system of Linear			
Algebra and	1	equations			
Trigonometry	101.2	Understand the general properties of equations and			
101		Solutions of Different equations			
11	101.3	Understand the basics of complex numbers and solve			
$\times$ \ \ -		the problems			
$T \setminus \{$	101.4	understand Group theory and general properties			
FY	102.1	Using Definition, verify the values of limit and			
Paper-II		continuity and solve the problem on Differentiation			
102	102.2	Understand the concept of Maclaurins and Taylor's			
Calculus	//	theorem			
	,	Indentify Indeterminate forms and application of			
		L'Hospitals Rule			
	102.3	Understand the concept of partial differential			
	1	equation, Eulers Theorem and Jacobians			
	102.4	Identify the various types and methods to solve			
		Integration and application of Reduction Formulae			

### **Department of Zoology**

	PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):
1.	Graduates will pursue higher studies in related fields including
	management
2.	Graduates will perform as employers in private/government institutions
	rising up to top positions

PRO	PROGRAMME OUTCOMES (PO)		
1.	The students are expected to understand the fundamentals, principles, and recent developments in the subject area.		
2.	It is expected to inspire and boost interest of the students towards zoology as the main subject.		
3.	To impart practical skills and learn basics behind experiments.		
4.	To prepare background for advanced and applied studies in zoology.		
5.	To inculcate the scientific temperament in the students and outside the scientific community.		
6.	To inculcate the scientific temperament in the students and outside the scientific community.		
7.	Use modern techniques, decent equipments and Zoology softwares.		

S	PROGRAMME SPECIFIC OUTCOME	
1.	Gain the knowledge of Zoology through theory and practicals.	
2.	Use modern biological tools, Models, Charts and Equipment's.	1
3.	Know structure-activity relationship.	
4.	Understand good laboratory practices and safety.	
5.	Make aware and handle the sophisticated instruments/equipment.	
6.	Develop research-oriented skills.	1
7.	Study and understand the different technique used in purification of	
	compounds	

### **COURSE OUTCOMES (COs)**

Course Name: B. Sc.

Year/Semester: First/First

**Subject: Zoology** 

Paper	CO	Outcomes
FY	101.1	To understand general characters and classification up to
Paper-I		classes of protozoa, structure and reproduction of
Life and		Paramoecium, structure and life cycle of Plasmodium,
Diversity of		parasitic Protozoans of Man (Entamoeba, Trypanosoma,
Animals –		Giardia and Leishmania ). Mode of infection and its control.
Non-	101.2	To understand the general characters and classification up to
chordates		classes of porifera, Structure, reproduction and development,
(Protozoa to		Canal system in sponges, General characters and
Annelida)		classification up to classes of Coelenterata, structure and life
(101)		cycle of Obelia, Polymorphism in hydrozoa.
	101.3	To Understand the Helminthes: General characters and
		classification up to classes, Ascaris: External morphology,
		reproductive system and life cycle, <i>Taenia solium</i> : Structure

		and life cycle, Elementary idea of parasitic adaptations in
		helminthes
	101.4	To Understand the Annelida: General characters and
		classification up to classes, Leech: Morphology, digestive
		and urinogenital system, Trochophore larva and its
		significance, Vermiculture and its importance
FY	102.1	To understand the Atmosphere: Major zones and its
Paper-II		importance, composition of air, Hydrosphere: Global
Environmental		distribution of water, Physico-chemical characteristics of
Biology		water, Lithosphere: Types of rocks, formation of soil,
(102)		Renewable and non- renewable energy sources
	102.2	Understand the Ecosystem - Definition and types, Detailed
		study of pond ecosystem, Food chain, food web and
		ecological pyramids, Energy flow in an ecosystem, Single
		channel, Y – shape and Universal model
<b>V</b>	102.3	To understand the Biodiversity and its conservation, Causes
		of reduction of biodiversity, Wildlife conservation acts (1972
/		and 1984), Introductory study of national parks and
4/	/ 4	sanctuaries – Tadoba, Kanha, Bharatpur and Nagzira, Hot
R//		spots of biodiversity in India
'//	102.4	To understand the Sources, effect and control measures of air
. / /	0	pollution, Acid rain, green house effect, ozone depletion and
<b>-</b> //	20	global warming, Sources, effect and control measures of
~///		water pollution, Sources effect and control measures of noise
111		pollution, Toxic effect of heavy metals (lead, cadmium and
11/6	100	mercury) – Bioaccumulation and biomagnification
F.Y.	103	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
Practical		Improve analytical skills
Course		Correlate the theory and experiments and understand
*//		their importance
7	1141	

# **Department of Botany**

PROG	RAMME EDUCATIONAL OBJECTIVES (PEOs)
1.	Graduates will pursue higher studies in related fields including
	management
2.	Graduates will perform as employee in private/government institutions
	rising up to top positions
3.	Graduates will become entrepreneurs.
4.	Graduates will prepare for various competitive examinations.

- **PO1**.Understanding of Plant Diversity and its importance in the maintenance of ecological balance.
- **PO2**. Students learn to carry out practical work, in the field and in the laboratory, interpreting plantmorphologyandanatomy, Plant identification, Vegetation analysis techniques.
- **PO3**. Applytheknowledgeofbasic science, life sciences and fundamental process of plants.

**PO4**. Apply modern techniques and instruments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological studies of plants with anunderstanding of the applications in human life.

**PO5**. Apply theknowledge gained from the studies for the upliftment of society via addressinghealth, environmental issues, food scarcityetc.

### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

**PSO1**. Critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize the irposition in the classification systems and at phylogenetic level.

**PSO2**.Students will be able to access the primary literature, identify relevant works for a particular topic, and evaluate the scientific content of these works

**PSO3**. Students will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms.

**PSO4**. Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unityand diversity of life on earth.

**PSO5**.Students will be able to explain how Plants functionat gene, genome, cellular and tissue level,

**PSO6**. Students will be will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.

**PSO7.** Students will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find alivelihood via establishing miniature plant nurseries

Course Name: B. Sc. Year/Semester: First/First

**Subject: Botany** 

Paper	CO	Outcomes
Faper FY Paper-I Viruses, Prokaryotes,Alg ae And Biofertilizers (101)	101.1	<ul> <li>To understand the nature of viruses,         Ultra-structure and economic         importance.</li> <li>Understand the properties of         Mycoplasma and its reproduction.</li> <li>Understand general characteristics and         reproduction in bacteria.</li> </ul>
	101.2	<ul> <li>To understand general characteristics and classification of algae</li> <li>To understand the to understand general structure of Cyanobacteria and its reproduction.</li> </ul>
	101.3	Understand life cycle of Chara,     Vaucheria ,Ectocarpus, and     Batrachospermum.
	101.4	To understand Scope and importance of Biofertilizers.

		Understand the microbes used in biofertilizers.
FY Paper-II Fungi, Plant Pathology,Liche ns, Bryophyta	102.1	<ul> <li>Understand the Characteristics of fungi.</li> <li>Understand the reproduction and life cycle of <i>Albugo</i>, <i>Mucor</i>, <i>Puccinia and Cercospora</i>.</li> </ul>
and Mushroom Cultivation (102)	102.2	Pathogen study, control and causes of diseases: leaf curl of papaya, Citrus canker and red rot of sugarcane
	102.3	<ul> <li>Understand classification and general characteristics of Bryophyta.</li> <li>Life history of Marchantia, Anthoceros and Funaria</li> </ul>
*//	TRI	To Study the nutritional and medicinal values of edible and non-edible mushrooms. Technology of mushroom cultivation
F.Y. Chemistry Practical Course	103	<ul> <li>Study the fungal genera.</li> <li>Study the lichens, thallus structure and types of lichens.</li> <li>Plant pathological study.</li> <li>Study of bryophytes and identification of its characteristics.</li> <li>Preparation of mushroom beds.</li> </ul>

# Semester II Department of English Course Objectives and Outcomes Compulsory English

Unit I: Objective-Making students conscious about the functioning of Democracy.

Outcome-Students tried to understand the importance of democracy.

Unit II: Objective- Making students understand slavery and its effects.

Outcome-Students tried to understand the effects of slavery and its punishing practice.

**Unit III: Objective-**To make students understand correct usage of Tense, Transformation of sentences and Common errors.

**Outcome-**Students tried to solve the examples of Tense, Transformation of sentences and Common errors..

Unit IV: Objective-To create the ability to write Curriculum Vitae.

Outcome-Students attempted to write the Curriculum Vitae.

### Department of Marathi Course Objectives and Outcomes Programme Objectives

उदिष्टे:- 1. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरुची निर्माण करणे.

- 2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- 3. विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- 4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
- 5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

### **Course Outcomes**

साहित्य सेतू

ध्येय:- 1. भावी काळात विदयार्थ्यांमधून साहित्यनिर्मिती करणे.

- 2. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करुन संवादशील वातावरण निर्मिती करणे.
- 3. विभागात विविध उपक्रमांचे आयोजन करुन मराठी भाषेचा दर्जा वाढविणे.
- 4. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे.
- 5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

### **Department of Chemistry Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/ Second

**Subject: Chemistry** 

Paper	CO	Outcomes
FY Paper -I Organic Chemistry (201)	201.1	<ul> <li>To make students understand different organic compounds and the concept structure and bonding in organic compounds.</li> <li>Understand the mechanism of organic reaction.</li> </ul>
	201.2	<ul> <li>Understand the concept of stereochemistry of organic compounds.</li> <li>To make the structure of Geometrical isomerism and conformational isomerism.</li> </ul>
	201.3	Many of the daily used materials are organic compounds and majority of them are hydrocarbons therefore this topic makes the concept regarding their information

	201.4	<ul> <li>Basic of the alkane and alkynes with respect to their chemical point of view.</li> <li>To understand the aromaticity of organic compounds.</li> </ul>
F.Y. Pape-II Physical Chemistry (202)	202.1	<ul> <li>To understand the thermodynamics of chemical reactions.</li> <li>Understand free energy functions like work function, Gibb's free energy etc.</li> </ul>
	202.2	To understand the concept of phase equilibria.  Statement of phase rule and term. Application of phase rule
<b>X</b>	202.3	Understand the concept of nuclear chemistry and molecular structure
4/	202.4	To Understand the concept of chemical kinetics and theories of chemical kinetics.
F.Y. Chemistry Practical course	203	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

# **Department of Physics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Physics** 

After the successful completion of the course students will be able to-			
Paper	CO	Outcomes	
Paper 1:	201.1	To understand the concept of linear and angular	
Oscillations,		S.H.M., Damped harmonic oscillator	
Kinetic theory of	201.2	To understand the concept of Forced oscillation with	
gases and		one degree of freedom and kinetic theory of gasses.	
Thermodynamics	201.3	• To understand the Transport phenomenon in gases,	
(201)		Zeroth and First law of thermodynamics and	
		Cornot's Theorem	
	201.4	To understand second and third law of thermodynamics and Maxwell's general relationship and its applications	
Paper 2: Gravitation,	202.1	To understand Newton's laws of gravitation and the concept of Gravitational self-energy of the galaxy	
Astrophysics, Magnetism and Magnetostatics	202.2	• Know the constituents of universe (Solar system, Stars, Galaxies) and some physical aspects of universe	
(202)	202.3	• To understand the concepts of Dimagnetism, Paramagnetism and Ferromagnetism and their applications	

	202.4	• To understand the Concept of magnetic field and to study various laws of magneto static and their applications.
Physics Practical (203)	203	• Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.

# **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/ Second

**Subject: Mathematics** 

After successful completion of three-year degree programme in **Mathematics** students

should be able to;

Paper	CO	Outcomes
FY	201.1	Understand the concept of Solid Geometry
Paper-I	202.2	Identify and solve the problems on Differential equations
201		of first order
Geometry,	203.3	Understand the Higher order linear differential equations
Differential and	2	with constant coefficient
Difference	204.4	Understand the basic concept of Difference equation
<b>Equations</b>	5	
FY	202.1	Students learn the concept of Vector differentiation and
Paper-II		Line Integral
202	202.2	Learn the evaluation of area by double Integral
	202.3	Apply integration to evaluate over surface and volume
	202.4	Evaluate Improper Integrals also study the gamma and
		Beta functions

### **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Zoology** 

Paper	CO	Outcomes
FY	201.1	To understand the, Arthropoda: General characters and
Paper -I		classification up to classes, Cockroach: Mouth parts,
Life and Diversity		digestive system and reproductive system, Insects as
of Animals –	30	Vectors: Mosquito, Housefly, Sandfly, Tse-Tse fly,
Nonchordates		Study of crustacean larvae: Nauplius, Zoea and
(Arthropoda to		Megalopa; Social behavior in honey bees
Hemichordata)	201.2	To understand the Mollusca : General characters and
(201)		classification up to classes, <i>Pila</i> : Morphology,
		digestive, respiratory and reproductive system, Pearl
		formation in Mollusca, Molluscan larvae : Glochidium
		and Veliger
	201.3	To understand the Echinodermata : General characters
		and classification up to classes, Asterias: External
		features and digestive system, Water vascular system
		and locomotion in Starfish, Echinoderm larvae:

		Bipinnaria and Auricularia
	201.4	To understand Hemichordata : General characters and
		phylogeny, <i>Balanoglossus</i> : External features and
		digestive system, Reproduction in <i>Balanoglossus</i> ,
		Tornaria larva, Affinities of <i>Balanoglossus</i>
F.Y.	202.1	To understand the Ultrastructure of prokaryotic and
Paper-II		eukaryotic cell, Plasma membrane: Structure- Fluid
Cell Biology		Mosaic Model and functions, Endoplasmic reticulum:
(202)		Types, ultrastructure and functions, Golgi complex:
		Ultrastructure and functions
	202.2	To understand Ultrastructure of mitochondria,
		Oxidative phosphorylation – Glycolysis and Kreb's
		cycle, Electron Transport Chain and terminal oxidation,
	X	Lysosome: Structure, polymorphism and functions
	202.3	To understand the Nucleus: Ultrastructure of nuclear
		membrane, Structure and functions of nucleolus,
7/		Chromosome: Structure and types, structure of
		nucleosome, Giant chromosomes: Lamp-brush and
4//	2024	polytene chromosome
7//	202.4	To understand the Ribosome: Structure, types, Lake's
///	2	model and functions, Somatic cell division: Cell cycle
1///	2	and Mitosis, Meiosis (different phases and
<b>*</b> // / / / / / / / / / / / / / / / / / /		significance), synaptonemal complex, Cellular ageing
		and cell death, Elementary idea of cancer and its
F.Y.	203	causative agents
	203	Verify theoretical principles experimentally
Zoology Practical course		Interpret the experimental data
Tractical course		Improve analytical skills
1 1		<ul> <li>Correlate the theory and experiments and</li> </ul>
VII _	-	understand their importance
411 3		मा ज्यातासम्ब

## Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Botany** 

Paper	CO	Outcomes
FY	201.1	<ul> <li>To make students understand fossils,</li> </ul>
Paper -I	3	Pseudofossils, and its importance.
Paleobotany, Pteridophytes,		<ul> <li>Knowledge about types of fossils.</li> </ul>
Gymnosperms and Soil		<ul> <li>Details of Geological time scale.</li> </ul>
Analysis (201)		<ul> <li>Differentiation among the types of</li> </ul>
		fossil.
		Study the general characteristics of
	201.2	Pteridophytes and its classification.
		• Life history of <i>Selaginaella</i> . And
		Equisetum.
	201.3	Classify the Gymnosperms, its

		characteristics and economic
		importance.
		Understand the fossil gymnosperm.
		• Study the life cycle of <i>Cycas</i> and <i>Pinus</i>
	201.4	Skill development and soil analysis.
		Identification of types of soil on the
		basis of its color and texure.
		Study the physical properties of soil.
		Understand the pH of soil and nitrogen
		availability in it.
F.Y.	202.1	Study the morphological characteristics
Pape-II		of plants.
Morphology of		Identification of morphological
Angiosperms and		characters of plants.
Floriculture (202)		Study the modification occure in root,
(202)	-17	stem and leaf.
1//	202.2	Study the reproductive morphology.
*// 3/	11	<ul> <li>Study the types of inflorescence.</li> </ul>
1//	1979	<ul> <li>Study the calyx, corolla and</li> </ul>
. // 5=	-38	Androecium.
1/20	202.3	Understand the structure of gynoecium.
		<ul> <li>Study the fruit and its types.</li> </ul>
	202.4	Develop the skills of floriculture and
L (C)	CF	cultivation
F-1 3:	2025	Method of cultivation.
F.Y.	203	Study of different root and stem
Botany Practical course		modification and branching patterns.
Tractical course	1	<ul> <li>Study the types of leaf and its phyllotaxy, venation and modification.</li> </ul>
T// 144	1 41	Understand the flower structure and
		position of calyx, corolla, androecim
~//		and gynoecium.

# Semester-III Department of Chemistry COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Chemistry** 

Paper	CO	Outcomes
S.Y Paper-I Inorganic	301.1	Understand the concept of molecular orbital theory and VSEPR theory.
Chemistry (301)	301.2	Understand the properties of d and f block elements.
	301.3	<ul><li>Understand the role of nonaqueous solvents.</li><li>Understand concept of errors and evaluation</li></ul>

		in chemical analysis.
	301.4	Understand the concept of chemistry of Lanthanides and Actinides series.
S.Y. Paper-II Organic	302.1	Understand the structure and chemical bonding in aryl, alkyl halides, and aldehydes.
Chemistry (302)	302.2	Understand the structure and chemical bonding in alcohols and phenols.
	302.3	Understand the nomenclature, structure of the carbonyl group, synthesis of aldehydes and ketones
*	302.4	Understand chemical reaction of carboxylic acids and its derivatives.
S.Y. Chemistry Practical	303	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> </ul>
Course	5	Correlate the theory and experiments and understand their importance

# Department of Physics COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Physics** 

Paper	co	Outcomes
Paper 1: Sound	301.1	
- 1	301.1	• Understand the concept of group and phase velocities,
Waves, Applied		formation of standing waves and diagrammatic
Acoustic,		introduction of human ear and its responses.
Ultrasonic and	301.2	• Understand the working of transducers and their
Power Supply		characteristics and the concept of acoustic and its
(301)		applications.
	301.3	• Understand the production and applications of
	301.5	
		ultrasonic waves.
	301.4	• Understand the concept of voltage regulation and
		working of the half, full and bridge rectifier.
<b>Paper 2:</b> Physical	302.1	• Understand the concept of interference of light
Optics and		through thin film
Electromagnetic		Apply the concept of interference of light through
Waves		thin film in wavelength determination.
(302)	202.2	-
(302)	302.2	• Understand the concept of diffraction, Resolving
		Power of grating and Rayleigh's criterion for
		resolution.
	302.3	• Understand the concept of polarization and double
		refraction
	302.4	Understand the origin and characteristics of EM
	304.7	
		waves, Physical significance of Maxwell's equations,

		Characteristics impedance of dielectric and Poynting theorem.
Physics Practical (303)	303	• Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.

### **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Mathematics** 

After successful completion of three-year degree programme in Mathematics students

should be able to;

Paper	CO	Outcomes
SY	301.1	Students understand Mean Value theorem
Paper-I	301.2	Learn about an envelope of a family of curves in the
301		plane and study the Langranges Multiplier method
Advanced	301.3	Understand the concept of sequence
Calculus,	301.4	Use Tests for convergence
Sequences	4	
&Series		
SY	302.1	Understand the concept of Special Functions(Bessels and
Paper-II	0	Legendre's function)
302	302.2	Students understand the concept of Laplace Transform
Differential		and solve the problems
Equation and	302.3	Applications of Laplace Transform & Fourier Transform
Group	302.4	Students develop knowledge in group theory
Homomorphism		100

## Department of Zoology Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Zoology** 

CO	Outcomes
301.1	Understand the Protochordata : General characters and classification
	up to order, <i>Herdmania</i> : Structure, digestive system, ascidian
1	tadpole and retrogressive metamorphosis, Amphioxus: Structure,
	digestive system, circulatory system, sense organs and
	protonephridia, Agnatha: General characters of Cyclostomata
	(Petromyzon and Myxine)
301.2	Understand the Pisces: Salient features of Chondrichthyes and
	Osteichthyes, Origin of paired fins in fishes, Migration and
	Accessory respiratory organs in fishes, Amphibia : General
	characters and classification up to order, Parental care and Neotony
	in Amphibia
301.3	Understand the Gametogenesis and type of eggs, Fertilization of
	egg, Post fertilization development of fish, Types of scales of fishes,
	Development of placoid scales
301.4	Understand the Frog Embryology - Cleavage, blastulation and
	gastrulation, Fate map, Morphogenetic movements in gastrula of
	301.2

		frog, Development of respiratory organs in frog, Development of
		Aortic arches of frog
S.Y.	302.1	Understand the Mendelian Principles- Dominant recessive
Paper-II		relationships, Mendelian laws, Interaction of genes- Epistasis -
Organic		dominant and recessive, codominance, incomplete dominance,
Zoology		Quantitative genetics – Polygenic traits, inbreeding and
(302)		outbreeding, hybrid vigor, Extracellular genome – Presence and
, , ,		functions of mitochondrial DNA, plasmids
	302.2	Understand the concept of Cytoplasmic inheritance- <i>Kappa</i> particles
		in <i>Paramecium</i> , CO2 sensitivity in <i>Drosophila</i> , milk factor in mice,
		Linkage and crossing over – Basic concepts of linkage, types and
		theories, Concepts of genes – Cistron, muton and recon, Genetic
		disorders in human beings – Haemoglobin disorders – Thalassemia
		and Sickle cell anemia. Metabolic disorder: Phenylketonurea
	302.3	Understand the concept of Sex determination – ZZ, XY, XO, ZW
		pattern, Sex determination in <i>Drosiphila</i> – Genic balance theory,
*		Environmental sex determination in <i>Bonellia</i> , Chromosomal
1/		aberrations: addition, deletion, duplication and inversion, Gene
/ /		mutations- Spontaneous and induced mutations, mutagenic agents,
-//	3	Disorders related to chromosomal number- Turner syndrome,
~//		Klinefelter syndrome and Down syndrome
//	302.4	Understand the Lethal genes – Concepts and consequences,
A / / /	06	Population genetics: Basic concepts in population genetics, Hardy
$\mathbf{X} / / \mathcal{L}$		Weinberg equilibrium and its significance, Genetic counseling –
1////	7	Introduction, purpose, hereditary diseases and disorders, Applied
	I	genetics - DNA fingerprinting, amniocentesis, sperm banks,
(60		karyotyping
S.Y.	303	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
Practical		Improve analytical skills
Course		
	144	Correlate the theory and experiments and understand their
	4 4 1	importance
		//

# Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Botany** 

Paper	CO	Outcomes
S.Y Paper-I	301.1	<ul> <li>Understand the study of angiosperms, Fossil angiosperms, Angiosperms taxonomy.</li> <li>Understand the nomenclature.</li> <li>Study the trends in taxonomy.</li> </ul>
Botany (301)	301.2	Understand the classification system of Benthem and Hooker, Engler and Prantle.
	301.3	<ul> <li>Study the types of pollinaton and its significance</li> <li>Study the structure of anther, pollen grain and male gametophyte development.</li> <li>Study the types of ovules and female gametophyte.</li> </ul>

	1	
		<ul> <li>Understand the fertilization process.</li> </ul>
	301.4	<ul> <li>Study the skills of landscaping and gardening.</li> </ul>
S.Y.	302.1	<ul> <li>Understand anatomical features of plants and its</li> </ul>
Paper-II		organs.
Angiosperm		<ul> <li>Study the tissue its types and functions.</li> </ul>
anatomy and	302.2	• Study the primary and secondary growth I stem and
Horticulture		root.
(302)	302.3	• Study the periderm growth rings, sap heartwood,
		leaf anatomy.
		<ul> <li>Study the Senescence and Abscission.</li> </ul>
	302.4	<ul> <li>Study the techniques of horticulture, methods of</li> </ul>
		propagation.
		<ul> <li>Learn the technique of bonsai preparation.</li> </ul>
S.Y.	303	<ul> <li>Study the simplest and complex tissue from</li> </ul>
Botany		permanent micro-preparation.
Practical		<ul> <li>Identification of types of vascular bundle.</li> </ul>
Course		<ul> <li>Anatomy of Dicot and Monocot stem with</li> </ul>
/ .		temporary or double stained.
7-//	3	<ul> <li>Study the internal structure of dicot and monocot</li> </ul>
~//	1	leaf.

### SEMESTER IV **Department of Chemistry Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Fourth

Subject: Chemistry

After the successful completion of the course students will be able to

After the succes	stui com	pletion of the course students will be able to-
Paper	CO	Outcomes
S.Y. Paper-I Inorganic Chemistry	401.1	Understand the properties of coordination compounds. Chelates: classification and their application and valance bond theory of complexes.
(401)	401.2	<ul> <li>Understand the concept of isomerism in coordination compounds. Concept of oxidation and reduction and balancing of redox reaction.</li> </ul>
	401.3	<ul> <li>Understand the concept of colorimetry and spectrophotometry.</li> <li>Understand the concept of separation technique like chromatography ion exchange and solvent extraction.</li> </ul>
	401.4	Understand the concept of inorganic polymers.
S.Y. Paper-II Physical Chemistry (402)	402.1	<ul> <li>Understand solid state and their classification and their laws.</li> <li>To understand the concept of determination of crystal structure.</li> </ul>
(102)	402.2	Understand electrochemistry of reversible and

		<ul><li>irreversible cells.</li><li>Understand the concept of electrical transport and transport number.</li></ul>
	402.3	<ul><li>Use spectroscopy for chemical analysis.</li><li>Understand types of spectroscopy.</li></ul>
	402.4	Understand the concept of quantum chemistry and wave function.
S.Y. Chemistry practical Course	403	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

## Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Physics** 

After the successful completion of the course students will be able to-		
Paper	CO	Outcomes
Paper 1:	401.1	• Understand the basic concept of crystallography, find
Solid State		various lattice parameters, find Miller Indices of the
Physics, X-ray		given plane and draw planes from the set of Miller
and Laser		Indices.
(401)	401.2	• Understand main feature of continuous X-ray spectra
1.1		and Characteristics X-ray spectra,
VII -		• Apply Moseley's law to determine wavelength of X-
4 \ \ 7	HIJ	ray.
, /// ,	401.3	<ul> <li>Understand the basic concept of solid state physics.</li> </ul>
		• Apply Bragg's law for wavelength determination and
XII		simple cubic structure determination.
7 / /		<ul> <li>Calculate Miller indices of the given plane and identify</li> </ul>
		the orientation of the plane from the given set of
		Millar indices.
	401.4	<ul> <li>Understand the concepts of LASER emission.</li> </ul>
		• Understand the construction and working of various
		types of LASER.
Paper 2:	402.1	• Understand the construction and working and
Solid State		characteristics of various solid state devices.
Electronics, and	402.2	• Understand the construction and working and
Molecular		characteristics of various FETs.
Physics	402.3	Understand the concept molecular physics.
(402)	402.4	Understand and apply the Raman spectroscopy.
Physics	403	• Apply and demonstrate the theoretical concepts of
Practical		Physics and to develop scientific attitude.
(403)		
(403)		

#### **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Mathematics** 

After successful completion of three-year degree programme in Mathematics students

should be able to;

Paper	CO	Outcomes
SY	401.1	Understand the concept of ordinary Differential Equations
Paper-I		in more than two variables
401	401.2	Use the methods to solve the linear and nonlinear partial
Partial		differential equations of first order
Differential	401.3	Understand the concept of Higher Partial Differential
<b>Equations &amp;</b>	46	Equations
Calculus of	401.4	Find the distance between the curves and understand the
Variation		concept of Eulers differential equation
		4377
SY	402.1	Students learn about Coplanar Forces, Virtual Work and
Paper-II	4	Catenary
402	402.2	Understand the velocity, Acceleration and simple
Mechanics	12	harmonic Motion
1///	402.3	Understand the concept of Lagranges Equations of motion
	402.4	Learn the problem of two bodies moving under the
	5	influence of a mutual central force

#### **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Fourth

Subject: Zoology
After the successful completion of the course students

After the successful completion of the course students will be able to-		
Paper	CO	Outcomes
XII		
S.Y.	401.1	Understand the Reptilia- Classification based on
Paper-I		temporal vacuities, Poison apparatus, biting mechanism,
Life and Diversity		snake venom and its importance, Aves – Comparison of
of Animals –		Ratitae and Caranitae, Flight adaptations and migration,
Chordates		Mammals – General characters of Prototheria,
(Reptilia, Aves and		Metatheria and Eutheria
Mammals)	401.2	Understand the Modern theories of evolution:
(401)		Darwinism and Neo-Darwinism, Adaptations –
		Cursorial, Aquatic, Terrestrial, Fossorial and Volant,
		Introduction to genetic basis of evolution – Species
		Deme, Variation, Races in Man (Caucasoid, Negroid,
		Mongoloid and Australoid)
	401.3	Understand the Comparative account of aortic arches and
		heart in Reptiles, Birds and Mammals, Structure of hen's
		egg, Development of chick up to premitive streak stage,
		Development of extra embryonic membranes in chick
		and functions
	401.4	Understand the Frog Embryology - Cleavage,
		blastulation and gastrulation, Fate map, Morphogenetic

		, , , 1 CC D 1 , C
		movements in gastrula of frog, Development of
		respiratory organs in frog, Development of Aortic arches
		of frog
S.Y.	402.1	Understand the DNA: Structure of DNA, forms of DNA,
Paper-II		properties of DNA, DNA as a genetic material, RNA:
Molecular Biology		Structure of RNA, types of RNA, RNA as a genetic
and		material, Prokaryotic and eukaryotic gene structure,
Immunology(402)		Recombination in Bacteria: Bacterial transformation –
		Griffith's experiment, Conjugation in bacteria,
		transduction
	402.2	Understand the concept DNA replication:
	402.2	Semiconservative model, Meselson Stahl experiments.
		Process of replication – origin of replication, concept of
N N		replication, directionality of replication, Genetic code:
4	NA -	Characteristics of genetic code, Wobble hypothesis,
		Protein synthesis: Transcription mechanism – Initiation,
		elongation and termination of transcription. Translation –
		activation of amino acids, transfer of activated amino
. //	-	acids to tRNA, Initiation, elongation and termination of
4//	1	polypeptide chain; inhibitors of protein synthesis, Gene
4//	4	regulation models- Lac operon and tryptophan operon
///	402.3	
1//0	402.5	Understand the Concepts of immunity – Innate and
*//		acquired immunity, organs of the immune system,
		Antigen - Structure, diversity, functions and types of
		antigen, Antibody- Structure, types and functions,
100		Antigen-antibody interaction – Precipitation and
	402.4	agglutination  Lindarstand the Types of immune responses P cell
	402.4	Understand the Types of immune response: B cell
		response (antibody mediated), T cell response (cell
	- 1	mediated), Complement system: Basic concepts of complement cascades, classical, alternative and MBL
<b>#</b>  \ \ \ \ \ \ \	U.U	
1 / / (1)	1	pathways, implications of complement system in
		immune defense, Cytokines- General account on
~ \ \ \		cytokines, Cytokine related diseases, Autoimmunity and immunodeficiencies- Autoimmune diseases and their
7\\		treatment, AIDS and other immunodeficiencies
CV	402	
S.Y.	403	Verify theoretical principles experimentally
Zoology practical		<ul> <li>Interpret the experimental data</li> </ul>
Course		<ul> <li>Improve analytical skills</li> </ul>
4		<ul> <li>Correlate the theory and experiments and</li> </ul>
l v		
		understand their importance

#### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

**Year/Semester: Second/Fourth** 

**Subject: Botany** 

Paper	СО	Outcomes
S.Y. Paper-I	401.1	Understand the brief account of cell theory.  Comparison between eukaryotic and prokaryotic

Call biology Dis-4		cell.
Cell biology, Plant		
Breeding,		Structure and function of cell wall, Endoplasmic
Evolution, and		reticulum, Golgi complex, plasma membrane,
Technology (401)		Ribosome and Vacuole.
	401.2	<ul> <li>Understand the structure and functions of</li> </ul>
		chloroplast, Mitochondria and Nucleus.
		<ul> <li>Understand the chromosome morphology,</li> </ul>
		Molecular organization of chromosomes.
		<ul> <li>Understand the sex chromosomes and cell</li> </ul>
		division process.
	401.3	<ul> <li>Understand plant breeding, methods of plant</li> </ul>
		breeding.
		<ul> <li>Understand the biostatistics and determine the</li> </ul>
		Mean, Mode, Median.
	V	<ul> <li>Understand the evolution process.</li> </ul>
M /	401.4	Understand the seed development technology
7/		which is used to increase a commercial value of
		seeds.
S.Y.	402.1	Understand the principle of Mendelism.
Paper-II	A -	<ul> <li>Understand the linkage and crossing over process.</li> </ul>
1// 2	402.2	Understand the Mutation , chromosomal
(402)	-	aberrations and variation in chromosome number.
		Understand the DNA damage and repair process.
	402.3	<ul> <li>Study the concept of DNA and RNA.</li> </ul>
	102.0	<ul> <li>Understand the concept of gene, genetic code.</li> </ul>
100		<ul> <li>Understand the concept of gene, genetic code.</li> <li>Understand the process of protein synthesis and</li> </ul>
		regulation of gene interaction.
	402.4	
	704.4	Study the skill development.      Develop the skills related with plant pursary.
~!!	3	Develop the skills related with plant nursery.  Ladoreteed the second seco
CV	102	Understand the nursery management techniques  Standard Management techniques
S.Y.	403	Study the Mendel's law of segregation with help
Botany		of color beads.
practical Course		Prove the Mendel's law of independent
7		assortment.
	. "	Study the different method of vegetative
4		propagation.
7	-	<ul> <li>Study the method of soil sterilization for plant</li> </ul>
		nursery.

# SEMESTER V Department of Chemistry Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Chemistry** 

Paper	CO	Outcome
T.Y. Paper-I	501.1	<ul> <li>Understand the concept of organic compounds of nitrogen and amines.</li> </ul>

Organic Chemistry (501)	501.2	Understand heterocyclic compounds and their structure.
(301)	501.3	<ul> <li>Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.</li> <li>Understand reaction and structure of organometallic compounds.</li> </ul>
	501.4	<ul> <li>To study Spectroscopy.</li> <li>To understand Electromagnetic and Infrared absorption spectroscopy</li> </ul>
T.Y. Paper-II Physical Chemistry	502.1	<ul> <li>Understand electrochemistry and various types of cells.</li> <li>Understand types of reversible electrodes.</li> </ul>
(502)	502.2	Understand quantum chemistry and molecular orbital theory.
1//	502.3	<ul> <li>Understand the concept of Photochemistry.</li> <li>To study Raman Spectroscopy</li> </ul>
.7// 6	502.4	To understand colligative properties and macromolecules.
T.Y. Chemistry Practical Course	503	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

### Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Atomic	501.1	Understand Vector atom Model, the concept of
Physics, Free		space quantization, Zeeman Effect and L-S and J-J
Electron Theory		coupling.
and Statistical	501.2	Apply free electron theory and band theory of
Physics	4	solid to classify solids as conductor,
(501)		semiconductor and insulator.
	501.3	Understand and apply Maxwell-Boltzmann statistics
	501.4	• Understand and apply Bose-Einstein statistics and Fermi-Dirac statistics.
Paper 2: Quantum Mechanics, Nanomaterials and	502.1	• Understand the basics of quantum mechanics and apply it to explain the phenomena like black body radiation and Compton Effect.
Nanotechnology (502)	502.2	• Understand and apply Schrodinger's equation to free particle in a one and three dimension.
	502.3	Understand the basics of nanotechnology.

	502.4	<ul> <li>Understand the synthesis and characterization techniques of nano materials.</li> </ul>
Physics Practical (503)	503	<ul> <li>Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.</li> </ul>

## **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth Subject: Mathematics

After successful completion of three year degree program in Mathematics a Student

should be able to;

Paper	CO	Outcomes
TY	501.1	Understand the concept of Fourier series
Paper-I	501.2	Understand the concept of Riemann-Stieltjes integral
501	501.3	Understand the concept of Analytics Functions
Analysis	501.4	Students learn about Mobius Transformation
TY	502.1	Students deal with the definition, properties and
Paper-II	2_	examples of countable and uncountable sets and
502		understand the metric space
Metric spaces,	502.2	Understand the concept of Completeness, Compactness
Complex		and Connectedness
integration &	502.3	Understand the concept of Ring
Algebra		Analyze and demonstrate examples of ideals and
		quotient rings
	502.4	Understand the basic concept of Complex Integration
		Evaluate integrals along a path - directly from the
$\sim 11$	-	definition and also via the Fundamental Theorem of
<b>411</b> 7		Contour Integration and Cauchy's Theorem

### **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Zoology** 

Paper	CO	Outcomes
T.Y.	501.1	Understand the Enzymes – Distribution and chemical nature of
Paper-I		enzymes, General properties of enzymes, Classification of enzymes,
General		Factors affecting enzyme activity
Mammalian	501.2	Understand the Structure and functions of digestive glands -
Physiology –		(Salivary, Gastric, Intestinal, Liver and Pancreas), Gastrointestinal
I		hormones, Digestion and absorption of proteins, carbohydrates and
(501)		lipids, Vitamins- Fat soluble and water soluble vitamins; Sources,
		deficiency and diseases
	501.3	Understand the Respiratory pigments - Types, distribution and
		properties, Mechanism of Respiration, Transport of O2 and CO2,
		Respiratory disorders and effects of smoking
	501.4	Understand the Composition and functions of blood, Blood clotting
		– Intrinsic and extrinsic factors, blood groups and <i>Rh</i> factor, Cardiac

		cycle, E.C.G. and Blood pressure
T.Y.	502.1	Understand Site selection and construction ,Pre stocking and post
Paper-II		stocking manangement of nursery, rearing and stocking ponds,
Physical		Breeding of fishes by bund and Chinese hatcheries. Induced
Zoology		breeding by hypophysetion. New generation drugs in induced
(502)		breeding, Brief study of freshwater aquaculture system –
		Polyculture, cage culture, sewage fed fish culture, integrated fish
		farming, Fish products and byproducts, Fish preservation
	502.2	Understand the Prawn culture and Pearl culture, Fabrication and
		setting up of aquarium and its maintenance, Breeding of aquarium
		fishes – Live bearers and egg layers, Diseases caused by fungi,
		bacteria, protozoa and helminthes
	502.3	Understand the concept Chemical control: Insecticides -
		Pyrethroids, carbomate and HCN – mode of action, merits and
	V	demerits, Biological control – Biological agents – predators and
<u> </u>		parasites; merits and demerits, Crop pest: Life cycle, damage and
	-//	control of Cotton spotted boll worm -Earias vitella ,Stored grain
7		pest- Rice Weevil, Sitophilus oryzae, Animal pest: Life cycle,
4		damage and control of – House fly – <i>Musca nebulo</i> , Stable fly –
7//	<i></i>	Stomoxys calcitrans
1//	502.4	Understand the Sericulture- Types of Silkworm. Life cycle and
. //	0	rearing of mulberry silkworm, <i>Bombyx mori</i> , Life cycle and rearing
<b>-</b> //	K	of non mulberry silkworm (Tasar), Antheraea mylitta; Brief idea of
~//	10	coccon processing for silk fabric - coccon boiling, reeling, rereeling,
		winding, doubling, twisting and weaving, Apiculture – Types of
1 /	-	honey bees. Life cycle, culture, movable frame hive, bee product and
KIIG		its economic importance, Lac culture – Lac insect, Laccifer lacca -
T.Y.	503	Life cycle, Lac processing, Lac products and Economic Importance
Zoology	505	Verify theoretical principles experimentally
Practical		Interpret the experimental data
Course	TI	Improve analytical skills
Course	1114	Correlate the theory and experiments and understand their
		importance

#### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Botany** 

Paper	CO	Outcomes
T.Y.	501.1	<ul> <li>Understand water relation and its significance.</li> </ul>
Paper-I		<ul> <li>Understand the Osmosis, Diffusion, Osmotic Pressure.</li> </ul>
Plant		<ul> <li>Understand the ascent of sap.</li> </ul>
physiology, Mineral		<ul> <li>Understand the transpiration, phloem transport and mineral uptake.</li> </ul>
Nutrition and Hydrophoni	501.2	<ul> <li>Understand the photosynthesis process, photosynthetic pigments.</li> <li>Understand the light and dark reaction of</li> </ul>

oc ( <b>501</b> )		photographogic
cs (501)		photosynthesis.
		Understand the respiration and its mechanism.
		Understand the fermentation process.
	501.3	<ul> <li>Understand the nitrogen fixation by symbiotic and</li> </ul>
		Non-Symbiotic mechanism.
		<ul> <li>Study the pant movements and photoperiodism.</li> </ul>
		<ul> <li>Study the circadian rhythms and Biological Clock.</li> </ul>
	501.4	Understand the mineral nutrition, source and types.
		Study the role and deficiency symptoms
		Macronutrients and Micronutrients.
		Study the hydroponics, advantages and disadvantages
		of hydroponics.
T.Y.	502.1	Understand the concept of Ecology.
Paper-II	40	• Study the climatic, Edaphic and Physiographic factors.
Plant	502.2	Study the ecosystem, components of Ecosystem.
Ecology and	-	Understand the food chain, food web and ecological
Organic	//	pyramids.
Farming		Study the Autecology and Synecology.
(502)	502.3	Understand the process of succession.
7//		Study the plant adaptations.
//	1	Study the Biogeochemical cycles.
1/	502.4	Develop the skills of organic farming.
$\mathbf{X}//$		<ul> <li>Understand the methods of recycling of biodegradable</li> </ul>
	10	kitchen, agriculture and industrial waste.
		Study to prepare organic manure.
T.Y.	503	Determining the Frequency, Density, and Abundance
Botany	203	of community by Quadrate Method.
Practical		<ul> <li>Determining the homogeneity of vegetation by</li> </ul>
Course		Raunkier's frequency.
33335		Study the frequency of herbaceous species in
	U+	grassland to compare the frequency distribution with
		Raunkier's standard frequency diagram.
×//		<ul> <li>Study the soil profile of different locations near by</li> </ul>
4		area.  Study the colinity of different water complete
		<ul> <li>Study the salinity of different water samples.</li> </ul>

# SEMESTER VI Department of Chemistry Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Chemistry** 

Paper	CO	Outcomes
T.Y. Paper-I Inorganic	601.1	<ul> <li>Understand Metal ligand bonding in Transition Metal complexes.</li> <li>Electronic spectra of Transition Metal Complexes.</li> </ul>
Chemistry	601.2	Understand Magnetic Properties of Transition metal

(601)		Complexes.  • To study thermodynamic and kinetic aspect of metal complexes.
	601.3	<ul> <li>Understandorganometallic chemistry.</li> <li>Understand properties and structure of metal carbonyls.</li> </ul>
	601.4	<ul> <li>To study Bio-organic chemistry</li> <li>Understand the concept of s Hard and Soft acids and bases.</li> </ul>
T.Y.	602.1	Understand NMR Spectroscopy
Paper-II Organic Chemistry (602)	602.2	<ul> <li>Understand Organic Synthesis via Enolates.</li> <li>Carbohydrates: classification, reaction and mechanisms.</li> </ul>
7	602.3	<ul> <li>Understand Amino acids, peptides and nucleic acids.</li> <li>To study Fats, oil and detergents.</li> </ul>
*//	602.4	Understand synthetic dyes, synthetic drugs, syntheticpolymer.
T.Y. Chemistry Practical Course	603	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

### Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Physics** 

	-	ction of the course students win be able to-	
Paper	CO	Outcomes	
Paper 1: Relativity, Nuclear Physics and Bio Physics (601)	601.1	<ul> <li>Understand the postulates of the special theory of relativity.</li> <li>Apply the concept of relativity to explain Length contraction, Time dilation, Velocity addition theorem, Variation of mass with velocity, Mass energy equivalence.</li> </ul>	
	601.2	Understand the concept of nuclear physics.	
	601.3	<ul> <li>Apply the concept of nuclear physics to explain various decay processes.</li> </ul>	
	601.4	• Understand the Principle, Construction and working of different bio instruments.	
Paper 2: Electronics, Fiber	602.1	• Understand the operations and applications of operational amplifiers.	
Optics, Communication and Digital	602.2	• Understand the various basic structures of optical fibers and basic concept involved in propagation of light waves through optical fiber.	

Electronics (602)	602.3	• Understand the concept of amplitude modulation and frequency modulation.	
	602.4	Understand various number systems.	
		<ul> <li>Construct the truth tables for various logic gates.</li> </ul>	
		Verify De Morgan's theorem	
Physics Practical	603	Apply and demonstrate the theoretical concepts of	
(603)		Physics and to develop scientific attitude.	

## **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Sixth Subject: Mathematics

After successful completion of three-year degree program in Mathematics Students

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should be able to;

Paper	CO	Outcomes			
TY	601.1	Understand the concept of Group Automorphism			
Paper-I	601.2	Understand definition and examples of vector spaces			
601	601.3	Learn about algebra of linear transformation			
Abstract	601.4	Find range, rank, kernel and nullity of matrix and also			
Algebra		study about Inner product spaces			
TY	602.1	Study the Newtonian Mechanics and understand the			
Paper-II		concept special theory of relativity			
602	602.2	Learn the Lorentz transformation and consequences			
<b>Special Theory</b>	602.3	Understand the concept of Tensors and Space -Time			
of Relativity		structure			
602.4		Study the Mass Energy Equivalence, Energy momentum			
<b>4</b> \\	LL	Tensor and Maxwell's Equation of Electromagnetic			
1 1 1	416	theory in Vacuum			

Course Name: B. Sc. Year/Semester: Third/Sixth

**Subject: Zoology** 

Paper	CO	Outcomess		
T.Y.	601.1	Understand the Types of neurons, E.M. structure of		
Paper-I		neuron, Conduction of nerve impulse, Ultrastructure of		
General		striated muscle, Sliding filament theory of muscle		
Mammalian		contraction, Properties of muscles (Twitch, Tetanus,		
Physiology - II		Tonus, Summation, All or None Principle, Muscle fatigue)		
(601)	601.2	Understand Structure of uriniferous tubule, Mechanism of		
		urine formation, Counter – current mechanism, Normal		
		and abnormal constituents of urine; Elementary idea of		
		dialysis		
	601.3	Understand the Structure and functions of pituitary gland,		
		Structure and functions of thyroid and parathyroid gland,		

		Structure and functions of adrenal gland, Structure and		
		functions of pineal gland		
	601.4	Understand the Oestrous and menstrual cycle, Male and		
	001.7	female sex hormones, Causes of infertility in male and		
		female, Contraceptives – Mechanical and hormonal; <i>In</i> -		
		vitro fertilization		
T.Y.	602.1	Understand the Concepts of sterilization: Filtration,		
	002.1	<u> •</u>		
Paper-II		autoclaving, dry heat sterilization, wet sterilization and		
Applied		radiation, Separation of biomolecules: Centrifugation		
Zoology –II		(Sedimentation, density gradient); Chromatography (		
(Biotechniques,		Elementary idea of thin layer, gel filtration and ion		
Microtechnique,		exchange - Principles and applications), Electrophoresis:		
Biotechnology,		Agarose gel electrophoresis, SDS-PAGE, Principles of		
Bioinformatics	(00.0	colorimeter and spectrophotometers		
and	602.2	Understand the concept of Fixation, dehydration, clearing,		
Biostatistics)		embedding & section cutting, Difficulties encountered		
(602)		during section cutting (causes and remedies), Double		
		staining with Haematoxylin and Eosin, Histochemical		
4//		staining techniques for carbohydrates (Periodic acid		
X//	, %	schiff), proteins (Mercury-bromophenol blue) and lipids		
1// 5		(Sudan black-B)		
602.3		Understand the Basic concepts in recombinant DNA		
<b>-</b> ///	20	technology, Gene isolation method- Shotgun cloning,		
A / / /:		Isolation of gene- DNA manipulation enzymes: Nucleases,		
11 1	,	ligases, polymerases, Basic concepts of cloning vectors		
		and splicing: Insertion of DNA and ligation using blunt		
(6.7		ends, cohesive ends, Cloning vectors, Application of		
		biotechnology: Insulin and vaccine production		
	602.4	Understand the Bioinformatics: Definition, Basic concepts		
		in bioinformatics, importance and role of bioinformatics in		
×\\ -		life sciences, Bioinformatics databases- introduction, types		
	744	of databases, Nucleotide sequence databases, Elementary		
		idea of protein databases, Biostatistics – Tabulation of		
		data, presentation of data, sampling errors, mean, mode,		
M-//		median, probability, standard error and standard deviation		
T.Y.	603	Verify theoretical principles experimentally		
Zoology		Interpret the experimental data		
Practical		Improve analytical skills		
Course		<ul> <li>Correlate the theory and experiments and understand</li> </ul>		
		their importance		
	36 G S			

#### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Botany** 

Paper	CO	Outcomes	
Biochemistry,	601.1	• Study the lipids, role of fatty acids, oils	
biotechnology		and waxes.	
And herbal technology		<ul> <li>Study the enzymes its classification and</li> </ul>	

Paper-I		nomenclature.
_		
(601)		Study the basic concepts of
		Enzymology.
		Study the enzyme inhibitors.
	601.2	<ul> <li>Study the tissue culture techniques.</li> </ul>
		<ul> <li>Study the process of sterilization.</li> </ul>
		<ul> <li>Study the preparation of culture media</li> </ul>
	601.3	Understand the techniques of genetic
		engineering.
		<ul> <li>Study the process of DNA library.</li> </ul>
		• Study the types of DNA library.
		Study the Agrobacteria mediated gene
		transfer.
	601.4	Develop the skills of herbal technology.
V		<ul> <li>Study the methods of Cultivation,</li> </ul>
¥ //		Harvesting,
7//	-2-	<ul><li>Understand the technique of dye</li></ul>
	2110	yielding of herbal plants.
4// 0	C	<ul> <li>Study the used of herbs in cosmetics.</li> </ul>
T.Y.	602.1	LICENSE AND ADDRESS OF THE PARTY OF THE PART
Paper-II	002.1	Study the phytogeography, climatic     sections of India
Phytogeography, Utilization		regions of India.
of Plants, Techniques and	-400	Study the Environmental pollution.
Pharmacognosy (602)		Study the Renewable and Non
That macognosy (002)	-23	Renewable sources.
10	(00.0	Understand the conservation strategies.
	602.2	Study the morphology, utilization and
	10	important chemicals constituents of the
1.1	7000	plants.
~		Understand the concept of Ethnobotany.
<b>*</b> \\ <b>711</b> 0	602.3	Study the principle, types and
11 112161	1	application of microscope.
		Study the various techniques.
XII .	602.4	<ul> <li>Understand synthetic dyes, synthetic</li> </ul>
T \ \ /	7	drugs, synthetic polymer.
	UY	<ul> <li>Study the pharmacological plants</li> </ul>
T.Y.	603	Find out the level of noise pollution of
<b>Botany Practical Course</b>		different nearby area with the help of
		decimeter and compare it with tolerance
		limit
		<ul> <li>Study the morphology, utilization, and</li> </ul>
-		important chemical constituents of
	3	plants.
		• Study the Ethnobotanical importance of
		plants.
		1
		Study the different adulterants used

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Bhiwapur Mahavidyalaya
Bhiwapur, Dist.-Nagpur

#### **Backward Class Youth Relief Committee's**

## Bhiwapur Mahavidyalaya, Bhiwapur

Dist - Nagpur, Maharashtra 441201

### Criteria-2

### **Teaching- Learning and Evaluation**

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website.

**Academic Session 2019-20** 



# Programme Outcomes Course Outcomes

Academic session 2019-2020

Bachelor of Arts, Bachelor of Commerce & Bachelor of Science

#### Bhiwapur Mahavidyalaya, Bhiwapur Course Outcomes and Programme Outcomes Index

#### **Bachelor of Arts**

			Bachelor of	
Session	Course	Semester	Sr. No.	Subject
	B. A.	First	1	English
			2	Marathi
			3	Political Science
			4	Economics
			5	English Literature
		1	6	Sociology
	- h		7	History
			8	Marathi Literature
7	1 /		9	Ambedkar Thought
		Second	10	English
	//	13	<del>\</del> 414	Marathi
1		N.	12	Political Science
7/	/ /	5	13	Economics
. //	\ \h		14	English Literature
<b>\</b> //	K	6	15	Sociology
2019-2020	15		16	History
11	1	-	17	Marathi Literature
	(6)	8	18	Ambedkar Thought
		Third	19	English
		1	20	Marathi
			21	Political Science
<b>*</b> \\	ता	न्या र	22	Economics
. / /		4 / 4 4	23	English Literature
4			24	Sociology
4		12	25	History
		109	26	Marathi Literature
7	1/	_ ′	27	Ambedkar Thought
/		Fourth	28	English
			29	Marathi
			30	Political Science
			31	Economics
			32	English Literature
			33	Sociology
			34	History
			35	Marathi Literature
			36	Ambedkar Thought
		Fifth	37	English
		-	38	Marathi
			39 40	Political Science Economics

		41	English Literature
		42	Sociology
		43	History
		44	Marathi Literature
		45	Ambedkar Thought
	Sixth	46	English
		47	Marathi
		48	Political Science
		49	Economics
		50	English Literature
		51	Sociology
		52	History
4/		53	Marathi Literature
4/		54	Ambedkar Thought

# Bachelor of Commerce

Session	Course	Semester	Sr. No.	Subject
1/	B.	First	1	English
$\times$ / /	Com.		2	Marathi
//	10		3	Financial Accounting- I
N-11	100	10	4	Business Organization
KII	-	<b>(</b> 9)	5	Company Law
		1	6	Business Economics- I
		Second	7	English
XII	all	1111	8	Marathi
, //	(14	1611	9	Statistics and Business
	\		10	Mathematics
X-\		137	10	Business Management
	/ /		11	Secretarial Practice
			12	Business Economics-II
		Third	13	English
			14	Marathi
2019-2020	7		15	Financial Accounting- II
		-K	16	Business Communication
			T	and Management
			17	Business Law
			18	Monetary Economics-I
		Fourth	19	English
			20	Marathi
			21	Financial Accounting-III
			22	Skill Development
			23	Income Tax
			24	Monetary Economics-II

	Fifth	25	Financial Accounting-IV
		26	Cost Accounting
		27	Management Process
		28	Indian Economics-I
		29	Computerized Accounting
		30	Auditing
	Sixth	31	Financial Accounting-V
		32	Management Accounting
		33	Advanced Statistics
		34	Indirect Economics-II
	V X	35	Human Resource
14	1		Management
		36	Industrial Law

Bachelor of Science (Physics, Chemistry, Mathematics, Zoology and Botany)

~		0 11	a
/- 4	770000	Sr. No.	Subject
B.Sc.	First	1	English
10	7	2	Marathi
I	1 ( -20%	3	Chemistry I & II
-	CE	4	Physics I & II
	10	5	Mathematics I & II
	-	6	Zoology I & II
		7	Botany I & II
तम	Second	8	English
		9	Marathi
	~	10	Chemistry I & II
	13	11	Physics I & II
	. 07	12	Mathematics I & II
-//		13	Zoology I & II
'		14	Botany I & II
*	Third	15	Chemistry I & II
		16	Physics I & II
		17	Mathematics I & II
		18	Zoology I & II
		19	Botany I & II
	Fourth	20	Chemistry I & II
		21	Physics I & II
		22	Mathematics I & II
		23	Zoology I & II
		24	Botany I & II
	Fifth	25	Chemistry I & II
	B.Sc.	B.Sc. First  Second  Third  Fourth	B.Sc. First 1 2 3 4 5 6 7 Second 8 9 10 11 12 13 14 Third 15 16 17 18 19 Fourth 20 21 22 23 24

	26	Physics I & II
	27	Mathematics I & II
	28	Zoology I & II
	29	Botany I & II
Sixth	30	Chemistry I & II
	31	Physics I & II
	32	Mathematics I & II
	33	Zoology I & II
	34	Botany I & II

#### **Bachelor of Arts**

# Department of English Semester – I Course Objectives and Course Outcomes Compulsory English

#### **ProgrammeOutcomes**

- CO1. Comprehend the use of language and grammar in the given context.
- CO2. Demonstrate advanced critical thinking skills.
- CO3. Communicate in a variety of contexts and genres.
- CO4. Equipped with Listening, Speaking, Reading and Writing skills.
- CO5. Imbibe the nuances of analyzing a text and reproduce with proper interpretations.

#### **ProgrammeSpecificOutcomes(PSOs)**

- PSO1. A vailing job opportunities in translation, transformation and media.
- PSO2. Developing a critical attitude about literary studies.
- PSO3. Imbuing literary research attitude.

#### **Course Objectives**

- To understand the interrelationship between works of literature and society.
- To explain the nature of language and literature.
- To obtain the skill of appreciation for literary works.
- To imbue the skills of essay writing.
- To be able to illustrate the nature of literary form slike one-act-play, travelogues, and short story.

#### **Course Outcomes**

- Understood the interrelationship between works of literature and society.
- Explained the nature of language and literature.
- Obtained the skill of appreciation for literary works.
- Imbued the skills of essay writing.
- Succeeded in illustrating the nature of literary form slike one-act-play, travelogues, and short story.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi

#### साहित्यरंग भाग-1

#### Unit I:

प्रकरण—१. उदिष्ठ— लीळाचरित्रातील मराठी भाषेची जाणीव विद्यार्थ्यांना करुण देणे.

साध्य— विद्यार्थ्यांना लीळाचरित्रातील गद्य मराठी भाषेची ओळख झाली.

**प्रकरण—२.उदुष्ठ—**शिवकालीप मराठी गद्य भाषाशैली व आज्ञापत्रातील अमात्याची लेखनशैलीची ओळख करणे.

**साध्य**—आज्ञापत्रातील मराठी गद्य भाषाशैली, अमात्याच्या लेखनशैली वरून छत्रपतीच्या स्वराज्य रक्षणाची जाणीव विद्यार्थ्यांना झाली.

प्रकरण—३.उद्घ महात्मा फुले यांनी भारतीय शेतकऱ्यांच्या उत्थानासाठी सांगीतलेले उपाय.

**साध्य**—शेतकऱ्यांची प्रगती व्हावी म्हणून विद्यार्थ्यांनी म. फुल्यांनी शेतीबध्द्ल सुचविलेले उपाय समजून घेतले.

प्रकरण-४.उदुष्ठ-साने गुरुजींनी सांगीतलेली संस्कृती विषयी विद्यार्थ्यांना बोध करणे.

**साध्य**—सकळ संस्कृतीचा पाया प्रेम असून प्रेमावर संस्कृती आधारलेली असल्याचे विद्यार्थ्यांनी आत्मसात केले.

प्रकरण—५.उद्ष्टि—शंभर दिडशे वर्षापूर्वी समाजात स्त्रियांना सासूरवास कसा सहन करावा लागायचा याची जाणीव विद्यार्थ्यांना करणे.

साध्य—लक्ष्मीबाई टिळकांना झालेल्या सासूरवासाचे चित्रणामुळे विद्यार्थ्यांना सासूरवासाबध्द्ल जाणीव झाली.

#### Unit II:

कविता— १.उदिष्ठ—संत ज्ञानेश्वरांनी हरिपाबातून सांगीतलेल्या नामस्मरणाचे महत्व पटवून देणे.

**साध्य**—हरिच्या नामस्मरणाने संसारातील अनेक प्रकारच्या दुःखातून व संकटातून मुक्ती मिळते याची जाणीव विद्यार्थ्याना झाली.

किवता—२. उद्ष्टि—हंस—नल संवादातून तेराव्या शतकातील पंडिती काव्यशैलीची ओळख विद्यार्थ्यांना करून देणे. साध्य—नल—दमयंती आख्यान काव्याची रघुनाथ पंडितांनी रचलेली आख्यान काव्याची ओळख विद्यार्थ्यांना झाली किवता —३.उद्ष्टि—घन:श्याम सुंदरा या भूपाळीतून शाहिरी काव्य व प्रात:समयीचे रम्य वातावणाची जाणीव करून टेणे

साध्य—शाहीर होणाजी बाळा यांचे शाहिरी काव्यातूनव प्रभात समईचे रम्य वातावरणाची जाणीव विद्यार्थ्यांना झाली. किवता—४.उद्षिट—रफूर्ती कवितेतून केशवसुतांनी समाजातील रुढी, अन्याय, अत्याचाराला नाहीसे करण्याकरिता केलेल्या बंडाची विद्यार्थ्यांना जाणीव करणे.

**साध्य**—कवितेतून समाजातील अन्याय, अत्याचार कविच्या काव्य लेखनामुळे व समाजाला काव्यातून उद्बोधन केल्याने झाली हे विद्यार्थ्यांना कळून आले.

कविता—५.उद्ष्ठ—खेडयातील रात्र कवितेतून बालकविंनी रेखाटलेल्या रात्रीचे भयानक चित्रणाची ओळख करुन देणे. साध्य—पन्नास वर्षापूर्वी व आजही अतिशय दुर्गम भागातील खेडयातील परिस्थितीचे व रात्र कशी भयाकूल असते याची खात्री विद्यार्थ्यांना पटली.

#### **Unit III:**

प्रकरण— १.उद्ष्ठ— व्यावहारिक मराठीची आवश्यकता जीवन व्यवहारासाठी का आहे याची यथार्थता विद्यार्थ्यांना पटिवणे.

**साध्य**—जीवन व्यवहारात व्यावहारिक मराठीची उपयुक्तता असल्याचे विद्यार्थ्यांना कळले तसेच अनेक व्यवहार क्षेत्रात व्यावहारिक मराठीची उपयुक्तता असल्याचे स्पष्ट झाले.

प्रकरण— २.उदिष्ठ—भाषिक संवाद व्यवहाराच्या मूलतत्वांची ओळख व माहिती विद्यार्थ्यांना करुन देणे.

**साध्य**—भाषा हे संवादाचे माध्यम असून लेखन, वाचन , श्रवण व भाषण यातून भाषेचा संवाद व्यवहार चालतो हे कळले सोबतच विविध मुलतत्वाची ओळख विद्यार्थ्यांना झाली.

#### Department of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

- To understand the basic concept and ideological orientations of Political Science discipline.
- To understand the processes and dynamics of Indian government and Politics.
- To understand the contribution of the main traditions of Indian Political Thought.
- To understand the contribution of the main traditions of Western Political Thinkers to Political Thought.

#### **Course Outcomes**

- Understoodthe basic concepts and ideological orientations of the Political Science discipline.
- Understood the processes and dynamics of Indian government and politics
- Came to know the contribution of the main traditions of Indian Political Thought.
- Understood the contribution of the main traditions of Western Political thinkers to political thought.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

#### Unit - I

- Objective To develop preliminary knowledge of Economic concepts for the understanding of Economics Nature, Definition, and Method of Economics Analysis.
- Outcome Students learned preliminary knowledge of Economic concepts and definitions.

#### Unit - II

- Objective To provide an orderly and objective way of thinking about Economic Demand & Supply Theory.
- Outcome- The students learned about the knowledge of Demand and Supply.

#### Unit - III

- Objective- To gain knowledge about Consumer Behavior Utility Analysis.
- Outcome- The Students gained the knowledge of Consumer Behavior and Utility Analysis

#### Unit - IV

- Objective –To explain core Economics- various factors of production.
- Outcome Students learnt about the production function.

# Department of English Course Objectives and Course Outcomes English Literature

#### **ProgramOutcomes**

- CO1. Comprehend the use of language and grammar in the given context.
- CO2. Demonstrate advanced critical thinking skills.
- CO3. Communicate in a variety of contexts and genres.
- CO4. Equipped with Listening, Speaking, Reading and Writing skills.
- CO5. Imbibe the nuances of analyzing a text and reproduce with proper interpretations.

#### Programme specific Outcomes (PSOs)

- PSO1. Availing job opportunities intranslation, trans formation and media.
- PSO2. Developing a critical attitude about literary studies
- PSO3. Instilling literary research attitude.

#### **Course Objectives**

- To understand the interrelationship between works of literature and society.
- To explain the nature of language and literature.
- To obtain the skill of appreciation for literary works.
- To imbue the skills of essay writing.
- To be able toillustrate the nature of literary form slike one-act-play, travelogue, and short story.

#### **Course Outcomes**

- Understood the interrelationship between works of literature and society.
- Explained the nature of language and literature.
- Obtained the skill of appreciation for literary works.
- Imbued the skills of essay writing.
- Succeeded in illustrating the nature of literary form slike one-act-play, travelogue, and short story.

#### Department of Sociology Course Objectives and Course Outcomes

#### Introduction

#### Unit - I Understanding Sociology

**Objective -** To make students know in detail about Understanding Sociology.

Outcome - Students understood the concept of Understanding Sociology.

#### Unit – II Basic Concepts in Sociology

**Objective -** To Make Students Aware of Basic Concepts in Sociology.

**Outcome** -Students understood the concept of Basic Concepts in Sociology.

#### **Unit - III Socialization**

**Objective** - To Make Students Aware of Socialization.

**Outcome** - Students understood the concept of Socialization.

#### Unit – IV Social Structure

**Objective -** To make the students know in detail about Social Structure.

**Outcome -** Student understood the concept of Social Structure.

#### **Department of History**

#### **Course Objectives and Course Outcomes**

After successful completion of three-year Degree Programme in History a student should be able to know;

#### **Programme Outcomes**

- ➤ PO1: History has an unprecedented significance in human life.
- ➤ PO2: The study of history preserves culture.
- ➤ PO3: The study of history leads to Socio-Political awareness.
- ➤ PO4: Learn about world events.
- ➤ PO5: The study of History is important for competitive examination.
- PO6: Conversational skills come and understand the importance of human society.

#### **Course Objectives**

- To know the importance of culture gives you the ability to make decisions in yourself.
- To gain the ability to make decisions while living life.
- To gain employment opportunities through competitive examinations.
- To acquire moral values, devotional movement and Sufi sect.

#### **Course Outcomes**

- Knew the importance of culture gives you the ability to make decisions in yourself
- Gained the ability to make decisions while living life
- Received employment opportunities through competitive examinations.
- Acquired moral values, devotional movement and Sufi sect.

#### **Department of Marathi**

#### **Course Objectives and Course Outcomes**

#### **Marathi Literature**

#### Unit I:

#### तहान (कादंबरी)—

**उद्ष्ठ**—पाण्याच्या भीषण समस्येमुळे ग्रामीण जीवनातल्या मानवी भाव—भावनांचे आविष्करण करणे. **साध्य**—ग्रामीण भागात पाणी टंचाईच्या दिवसात जनतेला कशा हालअपेष्ठा सहन कराव्या लागतात याची सत्यता विद्यार्थ्यांना समजली.

#### Unit II:

साहित्यप्रकार-कथा व कविता-

**उद्घ**—कथा व कविता या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना देणे. साध्य—कथा व कविता हे साहित्यप्रकार कसे भिन्न आहेत याबध्दल विद्यार्थ्यांना कळून आले.

#### Semester-II Course Objectives and Course Outcomes Compulsory English

#### **Course Objectives**

- To study lessons based on the themes of humor, emotional bonding, ethics and values.
- To motivate themselves even in adverse situations by reading successful people's life sketches.
- To prioritize life's needs over wants.
- To apply grammar lessons to spoken English.
- Grasp the nuances of learning a foreign language.

#### **Course Outcomes**

- Studied lessons based on the themes of humor, emotional bonding, ethics and values.
- Motivated themselves even in adverse situations through reading their lives.
- Applied grammar lessons to spoken English.

#### Course Objectives and Course Outcomes Compulsory Marathi (साहित्यरंग.भाग-1)

#### Unit I:

प्रकरण— ६.उद्ष्ठि—इरावती कर्व्याचे व्यक्तिचित्रणाची ओळख पाठाच्या आधारे करुन देणे. साध्य—पु.ल. देशपांडे यांनी इरावती कर्व्याचे ज्ञान, लेखन व संशोधन याबष्ट्रल दिलेल्या माहितीमूळे विद्यार्थ्यांना कर्वेची ओळख पटली व माहिती मिळाली.

प्रकरण— ७.उद्घि—संस्कार पाठातून नायकाच्या मनावर झालेल्या संस्काराचे चित्रन करुन विद्यार्थ्याच्या मनावर योग्य संस्काराची रूजवणूक करणे.

**साध्य**—हिंदू मुस्लिम असा जातीभेद असूनही वा.कृ. चोरघडे यांना शालेय जीवनापासून सलमा हीने योग्य असे संस्कार दिले याची विद्यार्थ्यांना जाणिव झाली.

प्रकरण— ८.उदि्ष्ठ—ग्रेस पाठातून वेगळया व्यक्तिमत्वाची ओळख विद्यार्थ्यांना करुन देणे.

साध्य—ग्रेस या दुर्बोध व आगळया वेगळया व्यक्तिचित्रणाची मधुकर केचे यांनी करुन दिलेली ओळख विद्यार्थ्यांना माहिती झाली.

प्रकरण—९.उद्ष्टि—जात चोरीच्या आपत्तीमुळे कोणते संकटे येतात याची जाणीव विद्यार्थ्यांना करुन देणे.

साध्य—बाबुराव बागुल यांनी आपली अस्पृश्य महार ही जात लपविल्यामुळे त्यांना आलेला अनूभवाचे वर्णन विद्यार्थ्यांना समजून आले.

प्रकरण—१०.उद्ष्ठ—पुर्णिया या बिहार राज्यातील मागसलेल्या जिल्हयातील लोकांच्या दु:खी कष्टी जीवनाची माहिती विद्यार्थ्यांना देणे.

साध्य—अनिल अवचट यांनी पूर्णियामधून रेखाटलेले स्यांचे बदिस्त जीवन, शाळा, नोकऱ्यांचा प्रश्न, राजकीय परिस्थिती, मजूरांचे हलाकीचे जीवन, उपासमारी इ.ची माहिती विद्यार्थ्यांना मिळाली.

#### **Unit II:**

किवता— ६.उद्ष्ठि—मुक्त पक्षी या किवतेतू पिंजऱ्यातील पक्षी स्वातंत्र का नाकारतो याची माहिती देणे.

**साध्य**—गुलामीची सवय जडल्यामुळे पक्षी पिंज्न्यातून मुक्त केल्यावरही स्वातंत्र नाकारतो याची ज्ञान विद्यार्थ्यांना प्राप्त झाले.

कविता—७.उद्ष्ठि— जीवन मरणाबध्दल बहिणाबाईंनी केलेल्या चिंतनाची सार्थकता पटवून देण.

**साध्य**—जन्ममृत्यु विषयी कवियत्रीने किवतेत प्रगट केलेले विचार मानवी जीवनाची सार्थकता पटवून देतात याची विद्यार्थ्यांना खात्री पटली.

कविता —८.उद्ष्टि—राष्ट्रसंतांना गरीबाच्या झोपडीमधील सुखाची माहिती विद्यार्थ्यांना देणे

साध्य—महालातील सुखापेक्षा लहानशा झोपडीतील सुख हे महान असल्याची प्रचिती कवितेच्या भावार्थावरुन विद्यार्थ्यांना आली.

कविता—९.उद्ष्ठि—माणसाच्या मनातील मोठेपना नाहिसा होण्याची कविची इश्वराकडे केलेली मागणीचे ज्ञान विद्याथ्याना देणे.

साध्य—कविने आपल्या जीभेवरचा लोभ जळू देण्यासाठी व मी पणाचे साम्राज्य नाहीसे होण्याची कविची भावना विद्यार्थ्यांना समजली.

कविता—१०.उद्षिष्ठ—कुसुमाग्रजांच्या कवितेतून मानवी सामर्थ्य निसर्गावर कसे मात करते याची ओळख विद्यार्थ्यांना करून देणं.

साध्य—कवितेतील नायकाचा गंगा नदीच्या पुरामुळे संसार उघ्वस्त होऊनही सराच्या आर्शिवादाची थाप मागणारा नायक प्रतिकूल परिस्थितीवर मात करुन संसार उभा करतो याची विद्यार्थ्यांना प्रेरणा मिळाली.

#### Unit III:

प्रकरण— ३.उद्ष्ठ—पत्रलेखनाचे स्वरुप, पत्राचे प्रकार, पत्रलेखाचे घटक, वैशिष्टये व पत्राचा नमूना विद्यार्थ्याना समजावून देणे.

साध्य—विद्यार्थ्यांना पत्राचे स्रुप कसे असते ,घटक कोणते, खजगी पत्रे व कार्यालयीन पत्रे कशी लिहावीत याचे कौशल्य व ज्ञान प्राप्त झाले.

प्रकरण— ४.उद्ष्टि—सारांशलेखन कसे करावे व सारांश लेखन करतांना कोणती काळजी घ्यावी व सारांशलेखनाचे फायदे याविषयी विद्यार्थ्यांना माहिती देणे.

साध्य—विद्यार्थ्याना सारांशलेखन करण्याची माहिती मिळाली तसेच दिलेल्या सारांशाचे एक तृतियांश लेखन करण्याचे कौशल्य प्राप्त होऊन सारांशलेखनाचे फायदे समजले.

## **Department of Political Science Course Objectives and Course Outcomes**

#### **Course objectives**

- To understand the processes and dynamics of the Indian government and politics.
- To understand the contribution of the main traditions of Indian Political Thought.

 To understand the contribution of the main traditions of Western Political Thinkers to Political Thought.

#### **Course Outcomes**

- Familiarized with the basic concepts and ideological orientations of the Political Science discipline.
- Exposed to the processes and dynamics of Indian government and politics.
- Made to understand the contribution of the main traditions of Indian Political Thought.
- Made to understand the contribution of the main traditions of Western Political thinkers to Political thought.

# Department of Economics Micro Economics Theory -II Course Objectives and Course Outcomes

Unit – I: Cost and Revenue Analysis Cost of Production:

**Objective-** To explain the Kinds of Cost and Revenue Analysis Cost of Production

Outcome - Explained theknowledge of Cost and Revenue Analysis.

Unit – II: Market Structure and Perfect Competition Market

**Objective-** To explain major types of market Structure and Identify Characteristics of Perfect Competition.

**Outcome** —Received assignments from the students those are coherent, organized, concise, grammatically correct and well-presented.

Unit – III: Monopoly and Imperfect Competition Market

**Objective-** To identify and discuss the key concepts of Monopoly and Imperfect Competition Market.

**Outcome** —Identified economic theory in the Monopoly and Imperfect Competition Unit – IV: Factors Pricing and Statistics for Economics Factors Pricing:

**Objective-** To explain the contribution of Factors of production.

**Outcome** – Students learned about the factor of production.

#### **English Literature**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To make the students familiar with literary texts in a given historical, geographical,
   and cultural context.
- To apply critical theories to the reading of multiple genres of literature.
- To make the students able to identify critical ideas and themes.

 To make the students able to write analytically with the help of language competencies.

#### **Course Outcomes**

- Students will be familiar with literary texts in a given historical, geographical, and cultural context
- Students should be able to apply critical theories to the reading of multiple genres of literature
- Students should be able to identify and analyze the critical ideas and themes
- Students should be able to write analytically with the help of language competencies
- Students should be able to imbibe, ethical, moral, and cultural values

#### Department of Sociology Course Objectives and Course Outcomes

#### Themes and Perspectives

#### **Unit - I** Culture and Society

Objective - To Make the students know in detail about culture and society

Outcome - Students understood the concept of culture and society.

#### Unit - II Social Deviation and Social Control

Objective – To make the students aware of social deviation and social control.

Outcome – Students understood the concept of social deviation and social control.

#### **Unit - III Social Stratification and Social Mobility**

**Objective -** To Make Students know in detail about Social Stratification and Social Mobility.

**Outcome** – Students understood in detail about SocialStratification and Social Mobility.

### Department of History Course Objectives and Course Outcomes

History of India (1526 - 1761)

#### **Course Objectives**

- Tounderstand how the Mughal power was established in India.
- To learn information about Sher Shah Suri and the Mughal administration.

- To get information about Chhatrapati Shivaji and Mughal relationship war took place.
- To understand the Panipat Third War and the arrival of the British.

#### **Course Outcomes**

- Understood how the Mughal power was established in India.
- Learned information about Sher Shah Suri and the Mughal administration.
- Student got information about Chhatrapati Shivaji and Mughal relationship war took place.
- Understood the Panipat Third War and the arrival of the British.

#### Department of Marathi Marathi Literature Course Objectives and Course Outcomes

#### Unit I:

#### अश्रुंची झाली फुले- नाटक-

**उद्गिल**-अश्रूंची झाली फुले या नाटकातून मानवी जिवनातील कौटुंबिक,सामाजिक व वैक्षाणिक क्षेत्रातील संघर्षप्रवण परिस्थितीविषयी विद्यार्थाना बोध करणे.

**साध्य-**वसंत कानेटकरांनी नाटकाच्या कथानकातून व रेखाटलेल्या पात्रांतून मानवी जीवन कसे संघर्शिबल आहे याची माहिती विद्यार्थ्यांना मिळाली.

#### Unit II:

#### साहित्यप्रकार-कादंबरी, चरित्र,आत्मचरित्र.

उद्दिष्ठ-काढंबरी, चरित्र,आत्मचरित्र.या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना देणे. साध्य-काढंबरी, चरित्र,आत्मचरित्र.या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना झाली

#### Department of English Compulsory English

#### **Course Objectives and Course Outcomes**

**Unit I: Objective-**Making students aware of the importance of Honesty.

**Outcome-**Students tried to examine and applied through the various activities carried out in the class.

Unit II: Objective- Making students realize the beauties of nature and sublime.

**Outcome-**Students tried to apply the values of nature and the sublime.

**Unit III: Objective-** Making students understand the social evils of society and the values of Humanity.

**Outcome-**Students were exposed to the social evils of society through discussion.

Unit IV: Objective-Grammatically correct usage of Narration and Punctuation.

Outcome-Students solved the examples of Narration and Punctuation.

**Unit V: Objective-**To create the ability to use English for the purpose of communication.

**Outcome-**Students attempted to use English for the purpose of communication in the Class.

#### **Department of Marathi**

#### Course Objectives and Course Outcomes Compulsory Marathi साहित्य संवाद,श्राग, २

#### Unit I:

प्रकरण -१.उद्दिष्ठ-तेराव्या षतकातील दृष्टांतपाठातील गद्य भाषाषैली, श्रीचक्रधरस्वामीचे चरित्र, महानुभाव पंथा विषयी माहिती देणे.

**साध्य-**दृष्टांतपाठातील गद्य भाषाषैली, श्रीच्रक्रधरस्वामीचे चरित्र, महानूभाव पंथाचे समाजाला दिलेले योगदान विद्यार्थाना समजून आले.

प्रकरण -२.उदिष्ठ-स्त्री पुरुष तुलना या पाठातून ताराबाई षिंदे हीने पारतंत्र्यांच्या काळात रित्रयांच्या निषेबी येणाऱ्या दुर्गुणांची जाणीव वरून देणे.

**साध्य**-सर्व प्रकारचे दुर्गुण स्त्रियांतच असतात या पुरुषांच्या पूर्वग्रहदूषित विचारांची विद्यार्थाना माहिती प्राप्त झाली.

**प्रकरण -३.उद्दिष्ठ-**यषस्वी ववता होण्यासाठी प्र.के.अत्रे यांनी सांगीतलेला अनूभव विद्यार्थाना सांगणे.

साध्य-विद्यार्थ्यांनी यषस्वी ववता होण्यासाठी अन्यांच्या अनुभवाचा बोध घतला.

प्रकरण -४.उदिष्ठ-पंढरपूर व विठ्ठलाचे दर्षनाची माहिती विद्यार्थाना करून देणे.

साध्य -पंढरपूर व पांडुरंगाचे संपूर्ण वर्णन तेथील भैगोलिक परिस्थितीची माहिती विद्यार्थांना प्राप्त झाली.

प्रकरण—५. उद्घ्य—राष्ट्रसंताच्या मते शिक्षक हाच राष्ट्राचा भाग्यविधाता असल्याची खात्री विद्यार्थ्यांना करून देणे. साध्य-विक्षाकाचे विद्यार्थी, समाजाप्रती केलेल्या संपूर्ण कार्याची व षैक्षाणिक कार्याची जाणीव विद्यार्थांना कळली.

#### **Unit II:**

**कविता -१.उदिष्ठ**-संत नामदेवांनी श्रीविठ्ठलाचे वर्णन, विठ्ठलभवितचे व नामस्मरणाचे महात्म्य विद्यार्थाना सांगणे

**साध्य**-अभंगाच्या निंपनातून विठ्ठलाच्या अनंत लावण्याची षोभा, विठ्ठलभवितवे व नामस्मरणाचे महात्म्य विद्यार्थाना कळले.

कविता -२.उद्बिष्ठ-मारोपंतानी सत्संगतीचा वर्णन केलेला महिमा सांगणे.

**साध्य-**सत्संगतीत समाजजिवनाला उद्बोधन करण्याचे सामर्थ्य आहे याची विद्यार्थ्यांना माहिती मिळाली.

**कविता -३.उद्गिल्ज-**भला जन्म हा तुला लाभला यातून राम जोषीनी सांगीतलेल्या मानवी जीवनाचे सार्थकृत्व पटविणे

साध्य-उपदेषपर लावणीतून मानवी जीवनाची सार्थकता विद्यार्थाना पटली.

कविता -४.उदिष्ठ-षेतकरी-कष्टकऱ्यांची जीवलगाथा व परीस्थितीचे वर्णल करणे.

साध्य-विद्यार्थी ग्रामीण भागातला असून षेतकऱ्यांच्या परीरिथतीची जाणीव झाली.

कविता- ५.उद्दिष्ठ-कवी अनिलांच्या विराणीतून कवी मनाच्या उदासीनतेचे दर्षन घडविणे.

**साध्य-**कविला लाभलेल्या दु:खामुळे कविच्या मनाला उदासिनता प्राप्त झाली याची विद्यार्थ्यांना प्रचिती आली.

#### **Unit III:**

प्रकरण - १.उद्दिष्ठ-इतिवृत्त लेखन, प्रकार,पध्दती व लेखनाची काळजी याविषयी विद्यार्थ्यांना माहिती देणे

**साध्य** -इतिवृत्त म्हणजे सभेची नोंद्र, प्रकार पध्दती व लेखन करतांना घ्यावयाची काळजी याची विद्यार्थ्यांना माहिती मिळाली. **प्रकरण - २.उद्घिन**-प्रसारमाध्यमे आणि वृत्तलेखन याविषयी विद्यार्थांना माहितीचे विष्लेषण करणे

**साध्य-**दृक श्राट्य प्रसारमाध्यमांच्याट्दारे बातमी, बातमीचे लेखनव वृत्तपत्रीय लेखन कसे केले जाते याची माहिती विद्यार्थाना झाली.

# Department of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

- To explain the vital contemporary emerging issues of center-state relations, political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts, etc.
- To understand the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs.
- To understand the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions
- To understand the basic concept and issues concerning human rights and challenges.

#### **Course Outcomes**

- Familiarized with the vital contemporary emerging issues of center-state relations, political parties, the emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts, etc.
- Analyzed the strengths and weakness of Indian political processes, both in terms
  of their effectiveness in responding to public policy needs and retaining
  constitutional protections.
- Understood the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions.
- Acquainted with a basic understanding of concepts and issues concerning the Right to Information Act, Human Rights, and Challenges.

# Department of Economic Course Objectives and Course Outcomes

#### **Unit – I Introduction to Macro Economics**

**Objective** – To discuss the Introduction of Macro Economics.

**Outcomes** – Students understand the concept of Macro Economics.

Unit – II **National Income** 

**Objective** – To explain the concept of National income.

**Outcome** – Students understood the various concept of National income.

Unit – III Money and Value of Money

**Objective** – To evaluate the value of money and theories of the Value of Money.

**Outcome** – Students learned the theories of Value of Money.

Unit – IV Output and Employment

**Objective** – To introduce the theory of Employment.

**Outcome**- Students learnt thetheory of Employment.

#### **Department of English**

#### **Course Objectives and Course Outcomes**

#### **English Literature**

#### Unit I:

**Objective-** Making students aware of the importance of dreams, Rules, Thoughts and Club Life.

**Outcome-**Students attempted to preserve the importance of dreams, Rules and Thoughts.

#### **Unit II:**

Objective- Making students realize aesthetic satisfaction.

Outcome-Students realized aesthetic satisfaction.

#### **Unit III:**

**Objective-** Making students understand the Novel, the Essay, and the Short story.

**Outcome-** Students understood the Novel, the Essay, and the Short Story.

#### **Unit IV:**

**Objective-**Making students understand the Literary Terms.

Outcome-Students understood the Literary Terms and their usage.

#### Department of Marathi Course Objectives and Course Outcomes Marathi Literature

#### **Unit I:**

#### तुकारामाचे अभंग-

**उद्भिन**-संत तुकारामाच्या निवडक षंभर अभंगाच्या आधारे संत तुकारामाचे जीवन कार्य,काव्यषैली व तत्कालीन सामाजिक परिस्थितीची जाणीव विद्यार्थ्यांना करून देणे.

**साध्य-**संत तुकरामांनी अभंगाच्या माध्यमातून समाजसुधारणेसाठी केलेल्या उद्बोधनाचे मर्म विद्यार्थांना समजून आले.

#### Unit II:

**उद्गिन्ठ-**काव्यषास्त्र पश्चिय यातून काव्याची लक्षणे व काव्याच्या प्रयोजन काय याची माहिती विद्यार्थ्यांना देणे

**साध्य-**काव्याची लक्षण व काव्याची प्रयोजने कोणती याचे ज्ञान व माहिती विद्यार्थ्यांना प्राप्त ज्ञाली

#### **Department of Sociology**

#### Course Objectives and Course Outcomes Foundations of Social Thought

Unit - I Emergence of Sociology as a Discipline

**Objective** - To Make the students know in detail about the emergence of sociology as a discipline.

**Outcome** - Students understood the concept of the emergence of sociology as a discipline

Unit - II Founders of Sociology I

**Objective** - Students understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer,)

Outcome - Students understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer)

Unit – III Founders of Sociology II

**Objective** - Students understood the concept of Founders of Sociology-II (Charles of Horton Cooley, Emile Durkheim)

Outcome - Students understood the concept of Founders of Sociology-II(Charles of Horton Cooley, Emile Durkheim)

Unit - IV Founders of Sociology III

**Objective** - Students understood the concept of Founders of Sociology-III ( Karl Marx, Max Weber)

Outcome -Students understood the concept of Founders of Sociology-II( Karl Marx, Max Weber)

#### **Department of History**

#### Course Objectives and Course Outcomes History of India (1764 - 1884)

#### **Course Objectives**

- To study Battle of Buxar and English policy.
- To understand Kayamdhara Methods, Ryotwari, and Lord Wellesley.
- To understand the uprising of 1857 (independent war) results.
- To understand how did nationalism emerge in India?

#### **Course Outcomes**

- Studied the Battle of Buxar and how the British implemented their policy in India
- Gained information about working methods, Kaymdhara, ryotwari and Mahalwari and Lord Wellesley deployment forces.
- The uprising of 1857 (independent war) result was known
- Learned how Nationalism emerged in India

#### Department of Marathi Course Objectives and Course Outcomes Marathi Literature

#### Unit I:

**उद्गिल**-कुसुमाग्रजाच्या रसयात्रा कविता संग्रहाच्या आधारे विविध प्रकारच्या कवितांची ओळख व माहिती विद्यार्थ्यांना देणे.

**साध्य**-कुसुमाग्रजांच्या कवितासंग्रहातून सामाजिक कविता,राजकीय, राष्ट्रीय कविता, प्रेम कविता,निसर्ग कविता व तत्वज्ञानपर कवितांची माहिती विद्यार्थांना झाती.

#### **Unit II:**

उद्दिष्ठ-काव्यषास्त्र परिचय यातून काव्यकारण व षब्दबवती याविषयी विद्यार्थ्यांना माहिती देणे. साध्य-विद्यार्थ्यांना काव्य निर्मितीचे कारण व षब्दाच्या अभिदा, व्यंजना व लक्षणा या षब्दबवतीची माहिती प्राप्त झाली

#### **Semester-IV**

#### Department of English Course Objectives and Course Outcomes Compulsory English

**Unit I: Objective**-Making students aware of the importance of faith and friendship **Outcome**-Students understood the value of friendship.

**Unit II: Objective-** Making students realize about discipline and struggle.

Outcome-Students tried to apply the discipline and struggle in their lives.

**Unit III: Objective-** Making students understand the presence of the mind.

**Outcome-** Students were put through various activities to get the feel ofit.

Unit IV: Objective-Grammatically correct usage of Tense and Voice.

Outcome-Students tried to solve the examples of Tense and Voice.

**Unit V: Objective-**To create the ability to use English for the purpose of communication.

**Outcome-**Students attempted to use English for the purpose of communication in the Class.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi साहित्यरंग,भाग.2

#### Unit I:

प्रकरण - ६.उदिष्ठ-मराठी माघ महिण्यातील मायावीपणाचे वर्णन विद्यार्थाना करन देणे.

साध्य-मराठी माघ महिण्यातील निसर्गातील विविध बदलाचा विद्यार्थाना अनुभव आला.

प्रकरण - ७.उदिष्ठ-तपस्वीव्यवती कसा असतो याचे चित्रण विद्यार्थ्यांना करून देणे.

**साध्य-**पु.भा. भावे यांनी तपस्वीचे केलेले व्यक्तीचित्रण ऐकून विद्यार्थांना तपस्वी कसा असतो याची जाणिव झाली.

**प्रकरण - ८.उद्दिष्ठ-**संताचे विचार आत्मसात करून मानसिक परिवर्तन घडून रोण्याची आवष्यकता

**साध्य-**संताचे विचार आत्मसात केल्याने परीवर्तनाची नवी पहाट उगवत असल्याची जाणीव विद्यार्थ्यांना झाली.

**प्रकरण -९.उदिष्ठ-**लपलेला तारा यातून अवकाषातील विविध ताऱ्यांची माहिती विद्यार्थांना करून देणे.

**साध्य-**ग्रहमालेतील विविध ग्रह व तारे तसेच डायसनचा गोळा याची माहिती विद्यार्थाना झाली. **प्रकरण -१०.उद्गिल**-समाजपरिवर्तनातून सामाजिक समता प्रस्थापीत करण्याचे डॉ. आंबेडकरांचे विचार विद्यार्थाना सांगणे.

साध्य-डॉ. आंबेडकरांनी सांगीतलेल्या सामाजिक समतेच्या विचाराचा बोध विद्यार्थ्यांनी घेतला.

#### **Unit II:**

**कविता - ६.उद्ष्टि-**जनसामान्यांचे अनुभव कसे असतात याची कवितेतून माहिती देणे. **साध्य-**कविच्या संघर्षप्रवण प्रवृत्तीचा अनुभव एका नव्या संघर्षात या कवितेतून विद्यार्थांना आला.

कविता -७.उदिष्ठ-स्मरण या कवितूतून जीवनाचे अंतिम सत्य सांगणे.

**साध्य-**सुरेष भटांनी मृत्यु हेच जीवनाचे अंतीम सत्य असल्याची जाणीव विद्यार्थाना झाली.

**कविता - ८.उद्रिष्ठ-**मानवी मनाचा निसर्गाषी असलेला संबंध उलघडणे.

**साध्य**-निसर्गाषी असलेले अतूट नाते व त्याच्याषी मानवी मनाचा साधलेला संवाद व्यवत झाल्याची विद्यार्थाना माहिती मिळाली.

**कविता - ९.उद्दिष्ठ-**मानवी जीवनाच्या विविध टप्यावर वंचितांच्या वाटयाला आलेल्या दुःखाची साक्ष पटविणे

**साध्य-**मानवी जीवनाच्या विविध टप्यावर वंचितांच्या वाटयाला आलेल्या दुःखाची विद्यार्थ्यांना साक्ष पटली.

**कविता- १०.उद्ष्ट-**आदिवासिंच्या न्यायासाठी कविने मागीतलेल्या मागणीचा विद्यार्थाना मार्ग सांगणे

**साध्य-**आदिवासिंच्या न्याय व हवकासाठी कविने मागीतलेल्या मागणीचा विद्यार्थ्यांनी मार्ग समजून घेतला<u>.</u>

#### **Unit III:**

प्रकरण— ३.उद्ष्ठ—भाषांतर या शास्त्र व कलेची जाणीव विद्यार्थ्यांना करणे.

साध्य-एका भाषेचे दुसऱ्या भाषेत भाषांतर करण्याची कला विद्यार्थ्यांना अवगत झाली.

प्रकरण- ४.उद्ष्ट-मुलाखत लेखनाचे स्वरूप स्पष्ट करणे.

**साध्य**—व्यक्तिमत्वाचे दर्शन घडविणे हा मुलखतीचा मुख्य उद्देश असतो हे विद्यार्थ्यांना कळले.

#### **Department Of Political Science**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To explain the vital contemporary emerging issues of center-state relations and political parties, the emergence of the new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- To understand the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs.
- To understand the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions.
- To understand the basic concept and issues concerning human rights and challenges.

#### **Course Outcomes**

- Familiarized with the vital contemporary emerging issues of center-state relations, political parties, the emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- Analyzed the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs and retaining constitutional protections.
- Understood the political issues in context of wider debates about democratic life in
   India and the capacity of political institutions.
- Acquainted with a basic understanding of concept and issues concerning Right to Information Act, Human Rights and Challenges.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

#### **Unit -I: Commercial and Central Bank Commercial Banks:**

Objective – To explain the function of the Commercial and Central Bank and why it is importance.

Outcome – Students learned the function of the Commercial and Central Bank and why it is important.

#### Unit –II: RBI and Innovation in Banking Reserve Bank of India:

Objective - Introduce RBI and innovation in Banking Sector.

Outcome – Students learnt about the structure of RBI and its function.

#### **Unit -III: Financial Market Money Market:**

Objective – To define Financial Market.

Outcome – Students understood the function of Financial Market.

#### **Unit –IV: Health Economics and Statistics for Economics Health Economics:**

Objective – To explain the importance of Health Economics and Statistics.

Outcome – Students understood the knowledge of Health Economics and Statistics

#### **Department of English**

#### **Course Objectives and Course Outcomes**

#### **English Literature**

Unit I: Objective-Making students conscious of the various issues of Indian society.

Outcome-Students attempted to understand the various issues of Indian society

Unit II: Objective- Making students realize revolution and its effects.

Outcome-Students realized equality, revolution, and their effects.

Unit III: Objective- Making students understand the biography, autobiography and Criticism.

Outcome- Students understood the biography, autobiography and Criticism.

Unit IV: Objective- Making students understand the Literary Terms.

Outcome- Students understood the Literary Terms and their usage.

#### **Department of Sociology**

### **Course Objectives and Course Outcomes**

#### **Indian Sociological Tradition**

#### **Unit - I** Theoretical Roots of Caste in India

**Objective** - To make the students aware of the Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

**Outcome -** Student understood the concept of Founders of Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

#### Unit - II Social Change from Indian Perspective

**Objective -** To make the students aware of Social Change from Indian Perspective (M.N. Shriniwas, D.P.Mukharjee)

**Outcome -** Student understood the concept of Social Change from Indian Perspective (M.N. Shriniwas, D.P.Mukharjee)

#### **Unit - III Indian Society and Contemporary Change**

**Objective -** To make the students aware of Indian Society and Contemporary Change (R.K. Mukharjee, S.C. Dube)

**Outcome -** Student understood the concept of Indian Society and Contemporary Change (R.K. Mukharjee, S.C. Dube)

#### Unit - IV Gender and Society in India

**Objective** - To Make Students Aware of Gender and Society in India (Tarabai Shinde, Jyotiba Fule and Savitribai Fule)

**Outcome -** Student understood the concept of Gender and Society in India (Tarabai Shinde, Jyotiba Fule and Savitribai Fule)

#### Department of History Course Objectives and Course Outcomes

#### History of India (1885 - 1947)

#### **Course Objectives**

- To study How the National Congress was formed.
- To understand what was the role of Jahal and Mawal.
- To study non-cooperation and civil disobedience movements.
- To learn the Indian Independence Mountaineering Scheme.

#### **Course Outcomes**

- Learned about the establishment of the National Congress.
- Understood the role of Jahal and Mawal.
- Information was received about the non-cooperation and civil disobedience movements.
- Gained detailed knowledge of how India became independent.

#### Department of Marathi Course Objectives and Outcomes Marathi Literature

#### Unit I:

उद्ष्ठ- कुसुमाग्रजाच्या रसयात्रा कविता संग्रहाच्या आधारे विविध प्रकारच्या कवितांची ओळख व माहिती विद्यार्थ्यांना देणे.

साध्य-कुसुमाञ्जांच्या कवितासंग्रहातून सामाजिक कविता,राजकीय, राष्ट्रीय कविता, प्रेम कविता,निसर्ग कविता व तत्वज्ञानपर कवितांची माहिती विद्यार्थांना ज्ञाती

#### Unit II:

उद्ष्टि-काव्यषास्त्र परिचय यातून काव्यकारण व षब्दषवती याविषयी विद्यार्थांना माहिती देणे. साध्य- विद्यार्थांना काव्य निर्मितीचे कारण व षब्दाच्या अभिदा, व्यंजना व लक्षणा या षब्दषवतीची माहिती प्राप्त झाली.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi

#### Unit I:

प्रकरण -१.उद्दिष्ठ-लीळाचरित्रातून गोविंदप्रभूचे व्यवतीमत्व व विवाहपध्दतीची माहिती विद्यार्थ्यांना देणे. साध्य-वीव्हावो स्वीकारू या लीळेतून गोविंदप्रभूचे चरित्र, विवाहाची पध्दती व प्राचीन काळातील खाद्यापदार्थाची माहिती विद्यार्थ्यांना प्राप्त झाली.

**प्रकरण -२.उद्छि-**आगरकरांचा सुधारक काढण्याचा कोणता हेतू होता याची जाणीव वरून देणे. **साध्य-**अज्ञानी भारतीय समाजत्यवस्थेला सज्ञान करण्याच्या हेतून आगरकरांनी सुधारक वृत्तपत्र काढला याचीजाणीवविद्यार्थाना झाली.

प्रकरण -3.उदिष्ठ-युगाला आकार देणारे आम्ही काळपुरुष आहोत याची विद्यार्थांना साक्ष पटविणे. साध्य-विद्यार्थांनी विनोबा भावेनी सांगीतलेल्या सृष्टीच्या दानाचे महत्व ओळखून महत्व लक्ष्यात घेतले.

प्रकरण -४.उद्दिष्ठ-महाभारतातील मयसभेवे वर्णन व माहिती विद्यार्थाना करून देणे.

साध्य -खांडव वन तेथील भौगोलिक परिस्थिती व पांडवांची मयसभा याची माहिती विद्यार्थ्यांना प्राप्त झाली.

**प्रकरण -५.उद्दिष्ठ**-किडलेली माणसं या कथेतून माणसाच्या क्षुद्ध विचाराचे दर्षन विद्यार्थांना करून देणे.

साध्य-मानवी जीवनाचे दु:ख व विचाराची क्षुद्रता यांची अनुभूती विद्यार्थ्यांना आली

प्रकरण - ६.उद्दिष्ठ-चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करून देणे.

साध्य-महाभारतातील द्रौपदीच्या मनातील गूढ वगुंतागुंतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्रापत झाली.

प्रकरण - ७,उदिष्ठ-पक्षीगान पाठातून पक्ष्यांच्या सौदयिव दर्बन घडविणे...

साध्य-पक्षीगान मधून विविधक्षी, पश्यांची घरटी, त्यांची पिल्ले यांची माहिती व ओळख विद्यार्थाना झाली.

प्रकरण - ८,उदिष्ठ-अन्वरषा फकीर या मुस्तीम व्यवतीमत्वाची ओळख विद्यार्थाना करून देणे.

**साध्य-**लहान मुले, स्त्रीया, माणसे व आजुबाजूच्या गावातील जनतेसाठी उपयुक्त असे अन्वरषा फकीराचे व्यक्तिमत्व असल्याचे विद्यार्थ्यांना कळून आले.

प्रकरण -९.उदिष्ठ- दाभोळकराच्या अंधश्रध्दा निर्मूतनाचे कार्याची माहिती विद्यार्थाना करून देणे

**साध्य-**वैज्ञानिक दृश्टकोण व षास्त्रीय विचार पध्दतीने अंधश्रध्दा निर्मूतन करण्याचे घ्येय दाभोळकरांचे होतेयाची माहिती विद्यार्थ्यांना झाली.

प्रकरण -१०,उद्गिष्ठ-महिला ग्रामपंचायतीच्या निवडणुकीचे वित्रण विद्यार्थ्यांना सांगणे.

साध्य-ग्रामीण भागातील ग्रामपंचायत मधील निवडणूकीची माहिती व परिस्थितीची जाणीवविद्यार्थाना आली.

न्द्रपज प्यू

**कविता - १.उद्घ्ट**-संत तुकारामांनी अभंगाच्या आधारे समाजजीवनाचे वर्णन केलेले वित्रण विद्यार्थांना सांगणे. **साध्य**-अभंगाच्या आधारे तत्कालीन सामाजिक परिस्थितीची जाणीव विद्यार्थांना झाली.

कविता -२.उदिष्ठ-ष्याहिर प्रभाकरांनी केलेले पंढरीवर्णन वर्णन करणे व महत्व प्रतिपादन करणे.

साध्य-विठ्ठल, रुविमणी, व पंढरपुर नगरी, भिमातट याची विद्यार्थ्यांना माहिती मिळाली.

कविता - ३.उदिष्ठ-चाफा या कवितेतून षुध्द प्रेमाचे भाववर्णन करणे.

साध्य-साधे प्रेम व आंतरिक षुध्द प्रेमाची सार्थकता विद्यार्थाना पटली.

कविता - ४.उद्दिष्ठ-ध्येय आणि परिस्थितीया दोन्हीं ही ओढल्या जाणाऱ्या जीवाची ओढताण वर्णन करणे. साध्य-कळा। ज्या लागल्या जीवा यातून ज्यांचे दुःख्व त्यालाच सहन करावे लागते याची जाणीव विद्यार्थ्यांना झालीं.

**कविता- ५.उदिष्ठ-**समाधान कवितूतून नायकाच्या वाटयाला आलेल्या कष्टपद जीवनाचे दर्षन घडविणे. **साध्य-**कविला त्याच्या पत्निचा प्रेमळ सहवास व निसर्गरम्य परिसरामुळे जीवन सुसहय वाटते याची साक्ष विद्यार्थाना पटली.

कविता - ६.उदिष्ठ-ही निळी पांढरी कवितेतील षरद ऋतूतील दुपारचे वर्णन करून देणे. साध्य-इंदिरा संतानी केलेलीषरद ऋतूतील उन्हाची माहिती विद्यार्थाना प्राप्त झाली.

**कविता -७.उद्छि-**दोन ज्योती यातून कविने वर्णन केलेल्या दोन ज्योतीचा उलघडा करणे . **साध्य-**एक दु:खाची ज्योत लाल असते व दुसरी दु:खाची ज्योत काळी असून तीचे दु:ख कायम टिकणारे असते याची जाणीव विद्यार्थ्यांना झाली.

कविता - ८,उद्दिष्ठ-पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थांना उलघडून दाखविणे . साध्य-ग्रेस कवीने रेखाटलेले स्त्री वेदनेवे स्वरूप व स्त्री मनाच्या भावना याविषयीविद्यार्थांना माहिती मिळाली.

कविता - ९.उद्दिष्ठ-प्रेम कवितेव्या आधारे कविने रेखाटलेले पीडितांचे चित्रन करून जाणीव करून देणे. साध्य-मानवी समाजरचनेत माणूसपण विसरत चालला असून पीडितांना न्याय मिळत नसल्याची साक्ष विद्यार्थ्यांना पटली

**कविता- १०.उद्घ्ट-** टाहारा कवितेतून आदिवासी समाजाला कसा पुढारी हवा याची माहिती विद्यार्थ्यांना देणे. **साध्य**-कवितेत वर्णन केलेला आदिवासिंचा पुढारी कविला हवा असल्याची जाणीव विद्यार्थ्यांना झाली.

न्द्रपज य्य्यू

**प्रकरण - १.उद्रिष्ठ-**संपादन प्रक्रिया, प्रेरणा व स्वरूप याविषयीची माहिती विद्यार्थाना देणे.

**साध्य -**ग्रंथाचे संपादन कसे करावे, संपादनाच्या प्रेरणा कोणत्या, व ग्रंथाचे स्वरूप कसे असते याचे ज्ञान विद्यार्थ्यांना प्राप्त झाले.

प्रकरण - २,उद्रिष्ठ-कार्यालयीन लेखनत्यवहाराविषयी विद्यार्थ्यांना माहिती देणे.

साध्य-कार्यालयीन लेखव्यवहारात टिप्पणी, पध्दती व अप्पणीचे प्रकार याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण - ३.उदिष्ठ-ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थीना करणे.

**साध्य-** ग्रंथपरीक्षण करताना परिक्षणाची पहीली पायरी ग्रंथवाचन होय त्यानंतर इतर बाबीवडे लक्ष्य द्यावे याची माहिती विद्यार्थ्यांना प्राप्त झाली.

**प्रकरण - ४.उदिष्ठ-**इंटरनेट आणि मराठी भाषा व साहित्य याची माहिती विद्यार्थ्यांना करून देणे.

**साध्य-** संगणक संवाद,मराठी संकेतस्थळे, इंटरनेटवरील मराठी दैनिके, व मायबोली या संकेतस्थळावरील लेख, कविता, व इतर मराठी साहित्याची माहिती विद्यार्थांना झाली.

#### **Department of Political Science**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To understand the difference between scholarly and popular publications in Comparative Politics.
- To understand the issues of International and Domestic Politics and Public Policy.
- To analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- To discuss the major theories and concepts of political science and its subfields.
- To relate the basics of International Relations and the new trends in the realm of International Relations.

#### **Course Outcomes**

- Understood the analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the Indian model.
- Exposed the issues of International and Domestic Politics and Public Policy
- Analyzed contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- Presented the major theories and concepts of political science and its subfields.
- Made aware of the basics of International Relations and the new trends in the realm of international relations.

#### **Department of Economics**

# **Course Objectives and Course Outcomes**

Unit – I Nature of Indian Economy

Objective – To introduce the basic Knowledge of the Indian Economy

Outcome -Students learnt about the Knowledge of the Indian Economy.

Unit – II Agriculture

Objective -To explain the importance of the Agriculture Sector the in Indian Economy.

Outcome -Students learnt about the Importance of the Agriculture Sector the in Indian Economy.

Unit – III - Industry

Objective – To explain the Importance and Role of Industries in Economic Development

Outcome -Students learnt about the Knowledge of Industries in the Economic Development.

Unit – IV- Employment and Poverty

Objective- To develop preliminary knowledge of Employment and Poverty

Outcome -Students learnt about the preliminary knowledge of Employment and Poverty.

### **Department of English**

# **Course Objectives and Course Outcomes**

#### **English Literature**

**Objective**: To enable students to analyse literary text.

Outcome: Students showed their ability to analyze literary text.

**Objective**: To enable students to interpret literary texts.

Outcome: Students showed their ability to interpret the literary text.

**Objective**: To enable students to understand significant developments in the history of English and Indian literature.

**Outcome**: Students became aware of significant developments in the history of English and Indian literature

**Objective**: To enable students to apply theoretical approaches to the critical reading of literary texts.

**Outcome**: Students tried to apply theoretical approaches to the critical reading of literary texts.

# Department of Sociology Course Objectives and Course Outcomes Indian Society: The Structural Issues

Unit - I Indian Society, Structure and Inequality

Objective - To know in detail about Indian Society, Structure and Inequality

Outcome - Student understood the concept of Indian Society, Structure and Inequality

Unit - II Family in Contemporary India

Objective - To make the students aware of Family in Contemporary India.

Outcome -Student understood the concept of Family in Contemporary India

Unit - III Tribal Issues and Problems in India

Objective - To make the students aware of Tribal Issues and Problems in India.

Outcome – Students understood the concept of Tribal Issues and Problems in India.

Unit - IV Rural Community in India

Objective - To make the students know in details about Rural Community in India.

Outcome - Student understood the concept of Rural Community in India

# Department of History Course Objectives and Course Outcomes

#### Modern World (1789-1920)

# **Course Objectives**

- To understand What were the causes and consequences of the French Revolution?
- To study how imperialism came into being.
- To study World War- I Treaty of Vasai.
- To understand United Nation and its performance.

#### **Course Outcomes**

- Understoodthe French Revolution the first revolution in the world.
- Studied, what are the reasons for imperialism?.
- Understood World War -I the Treaty of Vasai.
- Learned about the United Nations and its achievements and

Failures.

# Department of Marathi Course Objectives and Cousre Outcomes Marathi Literature

### Unit I:

प्रकरण - ६,उद्विष्ठ-चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करून देणे. साध्य-महाभारतातील द्रौपदीच्या मनातील गूढ वगुंतागुंतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्रापत झाली. प्रकरण - ७,उद्विष्ठ-पक्षीगान पाठातून पक्ष्यांच्या सौंदराचि दर्षन घडविणे..

साध्य-पक्षीगान मधून विविधक्षी, पक्ष्यांची घरटी, त्यांची पिल्ले यांची माहिती व ओळख विद्यार्थांना झाली

प्रकरण - ८,उद्गिष्ठ-अन्वरषा फकीर या मुस्तीम त्यवतीमत्वाची ओळख विद्यार्थाना करून देणे.

**साध्य**-लहान मुले, स्त्रीया, माणसे व आजुबाजूच्या गावातील जनतेसाठी उपयुक्त असे अन्वरषा फकीराचे व्यक्तिमत्व असल्याचे विद्यार्थांना कळून आले.

प्रकरण -९.उदिष्ठ- दाभोळकराच्या अंधश्रध्दा निर्मूलनाचे कार्याची माहिती विद्यार्थांना करून देणे

साध्य-वैज्ञानिक दृश्टकोण व षास्त्रीय विचार पध्दतीने अंधश्रध्दा निर्मूतन करण्याचे घ्येय दाभोळकरांचे होतेयाची माहिती विद्यार्थ्यांना झाली.

प्रकरण -१०.उद्रिष्ठ-महिला ग्रामपंचायतीच्या निवडनुकीचे चित्रण विद्यार्थाना सांगणे.

साध्य-ग्रामीण भागातील ग्रामपंचायत मधील निवडणूकीची माहिती व परिस्थितीची जाणीवविद्यार्थ्यांना आली.

#### Unit II:

**कविता - ६.उद्रिष्ठ-**ही निळी पांढरी कवितेतील घरद ऋतूतील दुपारचे वर्णन करून देणे.

साध्य-इंदिरा संतानी केलेलीषरद ऋतूतील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

**कविता -७.उदिष्ठ-**दोन ज्योती यातून कविने वर्णन केलेल्या दोन ज्योतीचा उलघडा करणे

**साध्य-**एक दु:खाची ज्योत लाल असते व दुसरी दु:खाची ज्योत काळी असून तीचे दु:ख कायम टिकणारे असते याची जाणीव विद्यार्थ्यांना झाली.

**कविता - ८.उद्छि**-पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थांना उत्पध्टून दाखविणे . **साध्य-**ग्रेस कवीने रेखाटलेले स्त्री वेदनेचे स्वरूप व स्त्री मनाच्या भावना याविषयीविद्यार्थांना माहिती मिळाली.

कविता - ९.उद्दिष्ठ-प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रन करून जाणीव करून देणे.

**साध्य-**मानवी संमाजश्वनेत माणूसपण विसरत चालवा असून पीडितांना न्याय मिळत नसल्याची साक्ष विद्यार्थांना पटली

**कविता- १०.उदिष्ठ-** टाहारा कवितेतून आदिवासी समाजाला कसा पुढारी हवा याची माहिती विद्यार्थ्यांना देणे. **साध्य-**कवितेत वर्णन केलेला आदिवासिंचा पुढारी कविला हवा असल्याची जाणीव विद्यार्थ्यांना झाली.

#### Unit III:

**प्रकरण - ३.उद्घन्-**ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे

**साध्य-** ग्रंथपरीक्षण करताना परिक्षणाची पहीली पायरी ग्रंथवाचन होय त्यानंतर इतर बाबीवडे लक्ष्य द्यांचे याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण - ४.उद्दिष्ठ-इंटरनेट आणि मराठी भाषा व साहित्य याची माहिती विद्यार्थाना करून देणे.

**साध्य-** संगणक संवाद, मराठी संकेतस्थळे, इंटरनेटवरील मराठी दैनिके, व मायबोली या संकेतस्थळावरील लेख, कविता, व इतर मराठी साहित्याची माहिती विद्यार्थ्यांना झाली

# Department of Marathi Course Objectives and Outcomes Compulsory Marathi

#### Unit I:

प्रकरण - ६.उद्ष्टि-चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे वित्रण विद्यार्थ्यांना माहित करून देणे. साध्य- महाभारतातील द्रौपदीच्या मनातील शूढ वगुंतागुंतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्रापत झाली. प्रकरण - ७.उद्गिट-पक्षीगान पाठातून पक्ष्यांच्या सौदयीचे दर्बन घडविणे..

साध्य-पक्षीगान मधून विविधक्षी, पक्ष्यांची घरटी, त्यांची पिल्ले यांची माहिती व ओळख विद्यार्थांना झाली. प्रकरण - ८.उद्रिष्ठ-अन्वरषा फकीर या मुस्तीम व्यवतीमत्वाची ओळख विद्यार्थांना करून देणे.

साध्य-लहान मुले, स्त्रीया, माणसे व आजुबाजूच्या गावातील जनतेसाठी उपयुवत असे अन्वरषा फकीरावे व्यवितमत्व असल्याचे विद्यार्थ्यांना कळून आले.

प्रकरण -९.उद्षिष्ठ- दाभोळकराच्या अंधश्रध्दा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करून देणे. साध्य-वैज्ञानिक दृष्ट्टकोण व षास्त्रीय विचार पध्दतीने अंधश्रध्दा निर्मूलन करण्याचे घ्येय दाभोळकरांचे होते याची माहिती विद्यार्थ्यांना झाली.

प्रकरण -१० उद्दिष्ठ-महिला ग्रामपंचायतीच्या निवडनुकीचे चित्रण विद्यार्थाना सांगणे.

साध्य- ग्रामीण भागातील ग्रामपंचायत मधील निवडणूकीची माहिती व परिस्थितीची जाणीव विद्यार्थ्यांना आली.

#### **Unit II:**

कविता - ६,उद्दिष्ठ-ही निकी पांढरी कवितेतील षरद ऋतूतील दुपारचे वर्णन करून देणे. साध्य-इंदिरा संतानी केलेलीषरद ऋतूतील उन्हाची माहिती विद्यार्थाना प्राप्त झाली.

**कविता -७.उद्छि-**दोन ज्योती यातून कविने वर्णन केलेल्या दोन ज्योतीचा उलघडा करणे . **साध्य-**एक दु:खाची ज्योत लाल असते व दुसरी दु:खाची ज्योत काळी असून तीचे दु:ख कायम टिकणारे असते याची जाणीव विद्यार्थ्यांना झाली.

**कविता - ८,उद्ष्टि**-पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थाना उलघडून दारनविणे . **साध्य-**ग्रेस कवीने रेखाटलेले स्त्री वेदनेचे स्वरूप व स्त्री मनाच्या भावना याविषयीविद्यार्थांना माहिती मिळाली.

**कविता - ९.उद्छि-** प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रन करून जाणीव करून देणे. **साध्य-**मानवी समाजरचनेत माणूसपण विसरत चालवा असून पीडितांना न्याय मिळत नसल्याची साक्ष विद्यार्थांना

**कविता- १०.उदिष्ठ-** टाहारा कवितेतून आदिवासी समाजाला कसा पुढारी हवा याची माहिती विद्यार्थ्यांना देणे. **साध्य-**कवितेत वर्णन केलेला आदिवासिंचा पुढारी कविला हवा असल्याची जाणीव विद्यार्थ्यांना झाली.

#### **Unit III:**

प्रकरण - ३.उद्दिष्ठ-ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे

**साध्य-** ग्रंथपरीक्षण करताना परिक्षणाची पहीली पायरी ग्रंथवाचन होय त्यानंतर इतर बाबीवडे लक्ष्य द्यांवे याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण - ४.उद्दिष्ठ-इंटरनेट आणि मराठी भाषा व साहित्य याची माहिती विद्यार्थ्यांना करून देणे.

**साध्य**- संगणक संवाद,मराठी संकेतस्थळे, इंटरनेटवरील मराठी दैनिके, व मायबोली या संकेतस्थळावरील लेख, कविता, व इतर मराठी साहित्याची माहिती विद्यार्थ्यांना झाली

# Department of English Course Objectives and Course Outcomes Compulsory English

**Objective**: To enable students to read fluently with proper pronunciation and comprehend the prose.

Outcome: Students read fluently with proper pronunciation and comprehended the prose

Objective: to make students enable to understand and enjoy one act play

Outcome: Students understood and enjoyed one-act- play.

**Objective:** To enable students to understand the poets and their prescribed poetry.

**Outcome-** Students understood the theme of the poems and had knowledge about the prescribed poets.

**Objective**: To enable students to have knowledge of applied skills like composing an Email, Curriculum vitae, paragraph with the help of given hints/points.

**Outcome**: Students had knowledge of applied skills like composing an Email, Curriculum vitae, paragraph with the help of given hints/points.

**Objective**: To enrich conversational skills of students **Outcome**: Conversational skill of students improved.

# Department of Political Science Course Objectives and Course Outcomes

### **Course Objectives**

- To understand the difference between scholarly and popular publications in Comparative Politics.
- To understand the issues of International and Domestic Politics and Publicpolicy.
- To analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- To discuss the major theories and concepts of political science and its subfields.
- To relate the basics of International Relations and the new trends in the realm of International Relations.

#### **Course Outcomes**

- Understood the analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the Indian model
- Understood the issues of International and Domestic Politics and Public Policy
- Analyzed contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- Presented with the major theories and concepts of political science and its sub fields.
- Made aware of the basics of International Relations and the new trends in the realm of international relations.

### **Department of Economics**

#### **Course Objectives and Course Outcomes**

### Unit -I: Economic Development and Growth

- Objective- To develop the ability to explain the core economic Sector of Economic Development and Growth.
- Outcome Students learnt and accepted the Knowledge of Economic Development and Growth.

#### Unit –II: Planning and Policy

- Objective To introduce the theory of Planning and Policy.
- Outcome Students learnt the theory of Planning and Policy

#### Unit -III: Public Finance

- Objective- To develop preliminary knowledge of Public Finance.
- Outcome Students learnt preliminary knowledge of Public Finance.

#### Unit –IV: International Trade

- Objective- To explain the theory of International Trade.
- Outcome –Students learnt about the theory of International Trade.

# Department of Sociology Course Objectives and Course Outcomes

# **Current Social Problems in India**

# Unit - I Education in Contemporary

Objective - To make the students in detail about Education in Contemporary India.

Outcome - Students understood the concept of Education in Contemporary India.

#### Unit - II Displacement and Rehabilitation

Objective – To make the students aware of Displacement and Rehabilitation.

Outcome – Students understood the concept of Displacement and Rehabilitation.

Unit - III Intolerance, Riot Crime

Objective - To make students know in detail about Intolerance, Riot Crime.

Outcome - Students understood the concept of Intolerance, Riot Crime.

Unit IV Corruption

Objective - To make students aware of Corruption.

Outcome -Students understood the concept of Corruption.

# **Department of History**

# **Course Objectives and Course Outcomes**

B. A. III (VI –Sem.) Modern World (1920 -1960)

# **Course Objectives**

- To Study what were Russia's five-year plans?
- To understand Hitler Mussolini's foreign policy.
- To understand the Causes of World War II.
- To study the United Nations the and performance of Suez Canal.

#### **Course Outcomes**

- Learned about Russia's Five-Year Plan
- Learned about Hitler Mussolini's foreign policy in detail.
- Learned the reasons for the Second World War.
- Received information about the United Nations .
- Understood the performance of the Suez Canal, NATO SEATO, Warsaw Pact.

# **Department of Marathi**

#### **Course Objectives and Outcomes**

#### **Marathi Literature**

#### Unit I:

गरूडझेप- भरत आंधळे

उद्ष्टि गरूड झेप मधील लेखकानी नोकरीसाठी ध्येयवेडा प्रवास कसा केला याची माहिती देऊन विद्यार्थ्यांना प्रेरीत करणे.

साध्य- भरत आंधळेच्या षैक्षणिक प्रगतीचा व स्पर्धा परीक्षेच्या कार्याचा आढावा घेऊन विद्यार्थ्यांनी गरुडझेप आत्मकथनातून पेरणा घेतली.

प्राचीन मराठी वाङ्मयाचा इतिहास- ल.रा. निषराबादकर.

उद्ष्ठ- प्राचीन मराठी वाड्.मयाचा इतिहासाच्या आधार संतसाहित्य, पंडिती साहित्य,षाहिरी साहित्य, बखर वाड्. मय या साहित्याची माहिती विद्यार्थ्यांना देणे

साध्य- संतसाहित्य, पंडिती साहित्य,षाहिरी साहित्य, बखर वाड्.मय या साहित्याची माहिती विद्यार्थीना झाली. भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. कुळकर्णी उद्ष्टि- भाषाविज्ञानाचा परिचय विद्यार्थ्यांना करून देणे. साध्य- मराठी मूळाक्षारे, स्वन व स्वनांतरे यांची माहिती विद्यार्थ्यांना झाली.

# **Bachelor of Commerce**

# Semester -I Course Objectives and Course Outcomes Compulsory English

#### **Course Objectives**

- To understand the meaning of start-up through the prescribed Life Sketches of Start-up founders.
- To understand financial and business acumen through basic research skillsfor business.
- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.
- To take up tasks and not to worry about the end result for the larger benefit of Human-kind.
- To understand that tranquil temperament is the most potent weapon one can have against diversity.
- To understand grammar and apply it in their writing skills.

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- Understood financial and business acumen through basic research skills for business.
- Understood and value inclusivity in human nature.
- Understood prioritize the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts .
- Understood the meanings of motivation and indomitable spirit.
- Understood tasks and not to worry about the end result for the larger benefit of Human kind.
- Understood that tranquil temperament is the most potent weapon one can have against diversity.

Understood grammar and apply it in their writing skills.

#### **Department of Marathi**

### **Course Objectives and Course Outcomes**

#### **Course Objectives**

उदिष्टे:- 1. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरुची निर्माण करणे.

- 2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- 3. विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- 4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
- 5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे

#### **Course Outcomes**

ध्येयः- 1. भावी काळात विदयार्थ्यांमधून साहित्यनिर्मिती करणे.

- 2. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करुन संवादशील वातावरण निर्मिती करणे.
- 3. विभागात विविध उपक्रमांचे आयोजन करुन मराठी भाषेचा दर्जा वाढविणे.
- 4. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे.
- 5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.
- CO1 भारतीय लोकशाहीचे मूल्य विदयार्थ्यांमध्ये रुजविणे.
- CO2 ग्रामीण जनजिवन व शेतीनिष्ठेशी विदयार्थ्यांची नाळ जोळणे.
- CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.
- CO4 शाह् महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
- CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.
- CO6 विदयार्थ्यामध्ये आधूनिक मूल्य रुजविणे
- CO7 विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण करणे.
- CO8 विदयार्थ्यामध्ये सर्जनशीलता निर्माण करणे.

### **Financial Accounting**

#### **Course Objectives and Course Outcomes**

# Unit No. I - Financial Accounting.

- Objective- To make the students understand Financial Accounting. Meaning, Principles & Problem.
  - Outcome -Students understood the following topics. Financial Accounting.
     Meaning, Objective, Principles & Problem.
- Unit No 2- Hire Purchase Account.
  - Objective To make the students understand Hire Purchase Account Meaning, Method & Problems.
  - Outcome- Students understood the following topics
     Hire Purchase Account Meaning, Method & Problems.
- Unit No 3- Final Account of Co-Operative Societies.
  - Objective To make the students to understand the Final AccountCo-Operative Societies .Introduction, Type, Co-operative Legislation and Problems.
  - Outcome- Students understood the following topics
     Final Account of Co-Operative Societies
     Introduction, Type, Co-Operative Legislation and Problems

Unit No 4- Join Venture Accounts.

- Objective- To make the students understand Join Venture Accounts Meaning, Method and Problem.
- Outcome Students understood the following topics
   Join Venture Accounts Meaning, Method and Problems.

#### **BUSINESS ORGANISATION**

#### **Course Objectives and Course Outcomes**

#### **Objectives**

- To make the students understand the concept, objective, importance of business.
- To acquaint the students with various forms of Business organization and their functioning.
- To make the students understand the concept, functions of Organization and types of Organization.
- To make the students understand the Internal constituents of the Business Organization KeyManageriall Personnel, Chairman, Chief executive officer, E-Commerce, E-business and E-banking.

#### **Outcomes**

- Students understood the concept, objective and importance of business.
- Acquainted the students with various forms of Business organization and their functioning.
- Understood the concept, functions of Organization and types of Organization.
- Understood Internal constituents of the Business Organization Key managerial Personnel, Chairman, Chief executive officer, E-Commerce, E-business and E-banking.

#### **Company Law**

#### **Course Objectives and Course Outcomes**

Unit No. I - Background of New Company

- Objective To make the students understandthe Background of New Company Act 2013, Corporate Personality & Kinds of Company.
- Outcome Students understood the following topics. Background of New Company Act 2013, Corporate Personality & Kinds of Company.

Unit No 2- Memorandum of Association, Article of Association and Prospectus.

- Objective To make the students understand the Memorandum of Association, Article of Association and Prospectus.
- Outcome Students understood the Memorandum of Association, Article of Association and Prospectus.

Unit No 3- Shares and Share Capital

- Objective- To make the studentsunderstand Shares and Share Capital.
- Outcome-Capital.
   Students understood the following topics Shares and Share

Unit No 4- Membership in a company, Director.

 Objective - To make the students understand Membership in a company, Director.  Outcome- Students understood the following topics Membership in a company, Director.

# Department of English Semester-II Compulsory English Course Objectives and Course Outcomes

#### **Course Objectives**

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- To understand financial and business acumen through basic research skills for business.
- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.
- To take up tasks and not to worry about the end result for the larger benefit of Humankind.
- To understand that tranquil temperament is the most potent weapon one can have against diversity.
- To understand grammar and apply it in their writing skills.

### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- Understood financial and business acumen through basic research skills for business.
- Understood and valued inclusivity in human nature.
- Understood prioritizing the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.
- Understood the tasks and not to worry about the end result for the larger benefit of Human kind.
- Understood that tranquil temperament is the most potent weapon one can have against diversity.
- Understood grammar and apply it to their writing skills.

# Department of Marathi Course Objectives and Outcomes

- CO1 भारतीय लोकशाहीचे मूल्य विदयार्थ्यांमध्ये रुजविणे.
- CO2 ग्रामीण जनजिवन व शेतीनिष्ठेशी विदयार्थ्यांची नाळ जोळणे.
- CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.
- CO4 शाह् महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
- CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.
- CO6 विदयार्थ्यामध्ये आधनिक मल्य रुजविणे
- CO7 विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण करणे.
- CO8 विदयार्थ्यामध्ये सर्जनशीलता निर्माण करणे.

#### **Statistics and Business Mathematics**

### **Course Objectives and Course Outcomes**

Unit No. I - Statistics & Measures of Central Tendency

- Objective To make the students understand the Background of Statistics & Measures of Central Tendency.
- Outcome Students understood the following topics. Statistics & Measures of Central Tendency.

Unit No 2- Dispersion.

- Objective To make the students understand Dispersion.
- Outcome Students understood the following topics Dispersion.

Unit No 3- Skewness

- Objective To make the students understand Skewness.
- Outcome Students understood the following topics Skewness.

Unit No 4- Business Mathematics

- Objective- To make the studentsunderstand Business Mathematics.
- Outcome Students understood the following topics.

#### **BUSINESS MANAGEMENT**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To make the students understand the Meaning, types of management, Principles, function of Business Management.
- To make the students know about Planning and Decision Making.
- To make the students know about Delegation of Authority and coordination& Controlling.
- To expose the students for the applicability of recent trends in management practices.
- To make students familiar with the modern management practices being used by the corporate world.

#### **Course Outcomes**

 Understood the Meaning, types of management, Principles, and function of Business Management.

- Knew about Planning and Decision Making.
- Students knew about Delegation of Authority and coordination& Controlling.
- Exposed the students for the applicability of recent trends in management practices.
- Understood and became familiar with the modern management practices being used by the corporate world.

# **Secretarial Practice Course Objectives and Course Outcomes**

Unit No. I - Incorporation of Company

- Objective To make the students understand the Incorporation of Company, Directors of Company.
- Outcome Students understood the following topics Incorporation of Company, Directors of Company.

Unit No 2- Company Meeting, Company Agenda & Voting and Resolution.

- Objective To make the students understand the Company Meeting, Company Agenda & Voting and Resolution.
- Outcome- Understood the Company Meeting, Company Agenda & Voting and Resolution.

Unit No 3- Report Writings, Secretarial audit & E-Governance and E-Filing

- Objective To make the students understand Report Writings, Secretarial Audit &E-Governance and E-Filing.
- Outcome Students get well understood the following topics Report
   Writings, Secretarial audit & E-Governance and E-Filing.
- Unit No 4- Key Management Personnel, Appointment of Director & Management Remuneration.
  - Objective To Make the students understand Key Management Personnel, Appointment of Director & Management Remuneration.
  - Outcome Students understood the following topics
     Key Management Personnel, Appointment of Director & Management Remuneration.

# **Business Economics II**Course Objectives and Course Outcomes

#### Unit I-

#### **Market Structure**

Objective- To make the students understand the Market structure.

Outcome-Students understood the Market Structure.

#### **Unit II-**

#### **Perfect & Imperfect Competition Markets**

**Objective-** Students should become aware of Perfect& Imperfect Competition.

Outcome-Students understood Perfect& Imperfect Competition.

#### Unit III-

#### **Theories of Distribution**

Objective- Students should become aware of the Theory of Distribution.

Outcome-Students understood & they applied their knowledge.

**Unit IV-**

#### **Business cycles & National Income**

Objective- Students should become aware of Business cycles & National Income.

Outcome-Students understood Business cycles & National Income.

# Compulsory English Semester-III Course Objectives and Course Outcomes

#### **Course Objectives**

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- To understand financial and business acumen through basic research skills for business.
- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.
- To take up tasks and not to worry about the end result for the larger benefit of Human kind.
- To understand that tranquil temperament is the most potent weapon one can have against diversity.
- To understand grammar and apply it in their writing skills.

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- Understood financial and business acumen through basic research skills for business.
- Understood and valued inclusivity in human nature.
- Understood prioritizing the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.

- Understood tasks and not to worry about the end result for the larger benefit of Humankind.
- Understood that tranquil temperament is the most potent weapon one can have against diversity.
- Understood grammar and apply it in their writing skills.

# Department of Marathi Semester III

## **Course Objectives and Outcomes**

- CO1 मातृभाषेची आवड व जाणीव निर्माण करणे
- CO2 प्राचिन मराठीचे वैशिष्ट्रे स्पष्ट करणे.
- CO3 विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.
- CO4 संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोकशाहीचा पुरस्कार करणे.
- CO5 स्त्री विषयक जाणिव जागृती करणे.
- CO6 वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे.

# **Financial Accounting II**

#### **Semester III**

#### Unit I-

# **Consignment Accounts**

Objective- Students should become awareof the topic of Consignment Accounts.

Outcome-Students understood & Solve the Problems.

**Unit II-**

#### **Branch Accounts**

Objective- Students should become aware of topic of Branch Accounts.

Outcomes-Students understood & solve the Problems.

#### Unit III-

#### **Capital Structure & Issues of Shares**

**Objective-** Students should become aware of topic of Capital Structure & Issues of Shares.

Outcome-Student understood & solved the Problems of Issues of Shares.

#### **Unit IV-**

#### **Final Accounts of Joint Stock Companies**

**Objective-** Students should become aware of the topic of Final Accounts of Joint Stock Company.

**Outcome-** Student understood & solved the problems.

# **Business Communication & Management Course Objectives and Course Outcomes**

- Unit No. I Meaning, Definition and concept of Communication, objective of Communication
- Objective To make the students understand the Meaning, Definition and concept of Communication, objective of Communication
- Outcome The students understood the Meaning, Definition and concept of Communication, the objective of Communication
- Unit No 2- Business Communication.
- Objective To make the students understand the Business Communication.
- Outcome- The students understood Business Communication.
- Unit No 3- Technology and Business Communication
- Objective To make the students understand Technology and Business Communication.
- Outcome- Students understood the following topics;

  Technology and Business Communication.
- Unit No 4- M.S. Office Aided Communication.
- Objective To make the students understand M.S. Office-Aided Communication,
- Outcome Students understood the following topics;
  - M.S. Office Aided Communication.

#### **Business Law**

# Course Objectives and Course Outcomes Course Objectives

- Students will be able to understand various provisions of the related Acts the course gives the knowledge regarding The Indian Contract Act, 1872, The Sales of Goods Act, 1930, The Indian partnership Act 1932, Negotiable Instruments Act 1881.
- To make the students gain knowledge of various legal aspects of the business.
- To make the students understand laws that affect mercantile transactions.

Students will be able to understand court interpretations of laws like,
 Prevention of Money Laundering Act-2002, Consumer Protection Act –
 2002

#### **Course Outcomes**

- Student understood various provisions of the related Acts the course gives the knowledge regarding The Indian Contract Act, 1872, The Sales of Goods Act, 1930, The Indian partnership Act 1932, Negotiable Instruments Act 1881.
- Students gained knowledge of various legal aspects of the business.
- Students understood laws that affect mercantile transactions.
- Students understood court interpretations of laws like, the Prevention of Money Laundering Act-2002, Consumer Protection Act – 2002

### **Monetary Economics-I**

### **Course Objectives and Course Outcomes**

Unit I-

Money

Objective- To make the students understand the concept of Ethe volution of Money & Functions of Money.

Outcome-Students understood the concept of the Evolution of Money & Functions of Money.

Unit II-

Inflation & Deflation

Objective- To make the students understand the concept of inflation and deflation.

Outcome-Students developed their knowledge about inflation and deflation.

Unit III-

Money Market & Policies

Objective- To make the students understand the concept of the Money Market and Monetary Policy.

Outcome-Students understood & they applied their knowledge.

Unit IV-

**Public Finance** 

Objective- To make the students understand the concept of Public Finance.

Outcome-Students applied & developed the knowledge.

# Compulsory English Semester-IV Course Objectives and Course Outcomes

#### Course Objectives

To understand and value inclusivity in human nature.

- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.
- To take up tasks and not to worry about the end result for the larger benefit of Humankind.
- To understand grammar and apply it in their writing skills.

#### **Course Outcomes**

- Understood and valued inclusivity in human nature.
- Understood prioritizing the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.
- Understood tasks and not to worry about the end result for the larger benefit of Humankind.
- Understood grammar and apply it to their writing skills.

# Department of Marathi Course Objectives and Outcomes

- CO1 मातृभाषेची आवड व जाणीव निर्माण करणे.
- CO2 प्राचिन मराठीचे वैशिष्ट्रे स्पष्ट करणे.
- CO3 विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.
- CO4 संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोकशाहीचा पुरस्कार करणे.
- CO5 स्त्री विषयक जाणिव जागृती करणे.
- CO6 वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे.

# **Financial Accounting III**

### **Course Objectives and Outcomes**

#### Unit I-

#### **Final Accounts of Banking Companies**

**Objective**-Students should become aware of the topic of Final Accounts of Banking Companies.

Outcome-Students understood and solved the Problems.

#### Unit II-

#### **Final Accounts of General Insurance Companies**

**Objective-** Students should become aware of the topic of Final Accounts of General Insurance Companies.

Outcome-Student understood and solved the Problems.

**Unit III-**

#### Valuation of Goodwill

**Objective-** Students should become aware of the topic of the Valuation of Goodwill.

**Outcome-**Student understood and solved the Problems.

Unit IV-

### **Liquidation of Company**

**Objective-** Students should become aware of the topic of the Liquidation of Company.

Outcome-Student understood & solved the Problems.

#### **Skill Development**

## **Course Objectives and Course Outcomes**

- Unit No. I Introduction- Basic Personality, Human Growth and Behavior and Motivation.
  - Objective To make the students understand the Introduction- Basic Personality, Human Growth and Behavior and Motivation.
  - Outcome The students understood the Introduction- Basic Personality, Human Growth and Behavior and Motivation.
- Unit No 2- Communication Skill and Personality Development.
  - Objective To make the students understand Communication Skills and Personality Development.
  - Outcome The students understood the Communication Skills and Personality Development.
- Unit No 3- Techniques in Personality Development.
  - Objective To make the studentsunderstand Techniques in Personality Development.
  - Outcome Students understood the following topics Techniques in Personality Development.
- Unit No 4- Entrepreneurial Skill Development.
  - Objective To make the students understand Entrepreneurial Skill Development.
  - Outcome- Students understood Entrepreneurial Skill Development.

# Income Tax Course Objectives and Course Outcomes

#### **Course Objectives**

- To make the students understand the basic concepts involved in the Income Tax act and the basics of income tax.
- To make the students understand the Taxable Salary and tax liability.
- Students get exposure to provisions of taxation of house property.
- To make the students understand Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and

- 80U. Students get exposure to provisions of taxation of Income from other sources.
- They learn the procedure of filing tax returns, Advance tax and tax refunds.

#### **Course Outcomes**

- Understood the basic concepts involved in Income Tax act and also the basics of income tax.
- Understood the Taxable Salary and tax liability.
- Students got exposure to provisions of taxation of house property.
- Understood Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and 80U. Students get exposure to provisions of taxation of Income from other sources.

They learn the procedure of filing tax returns, Advance tax and tax refunds

# **Monetary Economics-II**

# **Course Objectives and Course Outcomes**

#### Unit I-

#### **Commercial Bank**

Objective-To make the students understand the functions of Commercial Bank.

Outcome-Students understood the functions of Commercial Bank.

#### Unit II-

#### E-Banking and Core Banking

**Objective-** To make the students understand -Banking and Core Banking.

Outcome-Students developed their knowledge.

### **Unit III-**

#### Banks and Customers Relationship and Service

**Objective-** To make the studentsunderstand the Banks Customers Relationship and Service.

Outcome-Students understood & applied their knowledge.

#### **Unit IV-**

#### **Central Bank**

**Objective-** To make the students to understand the Central Bank.

**Outcome-**Students developed the knowledge about Central Bank.

# Financial Accounting-IV Semester-V Course Objectives and Course Outcomes

Unit No. I - Amalgamations & Absorption of Companies.

Objective - To make the students understand Amalgamations & Absorption.

Outcome - Students understood the topics like Amalgamations & Absorption.

Unit No 2- Reorganization & reconstruction of Companies.

Objective - To make the studentsunderstand the Reorganization & reconstruction problem.

Outcome - Students understood the concepts of the Reorganization & reconstruction problems.

Unit No 3- Valuation of Shares

Objective - To make the students understand Valuation of Shares Problems.

Outcome- Students understood the Valuation of Shares Problems.

Unit No 4- Double Account system

Objective - To make the students understand Double Account system.

Outcome - Students understood the Double Account system.

# Management Process Course Objectives and Course Outcomes

#### Unit I-

Management and Administration

Objective- To make the students understand meaning and difference of Management and Administration.

Outcome-Students applied the knowledge of Management and Administration.

#### Unit II-

Managerial Development & Group Dynamics

Objective- To make the students to understand the Managerial Development & Group Dynamics

Outcome-Students understood the knowledge of Managerial Development & Group Dynamics.

Unit III-

Managerial Style

Objective- To make the students understand the Managerial Style.

Outcome-Students developed the knowledge of Managerial Style.

Unit IV-

Motivation:

Objective- To make the students understand the Motivation.

Outcome- Students understood the meaning of Motivation and their types.

#### Indian Economics -I

#### **Course Objectives and Course Outcomes**

#### Unit I-

#### **Indian Economy& Planning**

**Objective-** To make the students understand the Indian Economy & Planning.

**Outcome-**Students understood the Indian Economy & Planning.

#### **Unit II-**

#### **Indian Economy & Policy**

**Objective-** To make the students understand the Indian Economy & Policy.

**Outcome-**Students understood the concept of the Indian Economy & its Policy.

#### **Unit III-**

#### **Population & Unemployment**

**Objective-** To make the students understand the Population & Unemployment.

**Outcome-**Students understood the problems.

#### Unit IV-

#### **India's Public Finance**

**Objective-** To make the students understand the India's Public Finance.

Outcome-Students developed the knowledge of India's Public Finance.

# Computerize Accounting Course Objectives and Course Outcomes

- Objective To make the students understand Introduction of Computerize Accounting, Advantage, Need and Accounting Groups.
- Outcome Students understood the following topics; Introduction of Computerize Accounting, Advantage, Need and Accounting Groups.
- Unit No 2- Accounting Software's.
- Objective To make the students understand Accounting Software.
- Outcome Students understood the topic- Accounting Software.
- Unit No 3- Accounts Info Menu, Accounts Groups.
- Objective To make the studentsunderstand the Accounts Info Menu, Accounts Groups-

Create Group, Ledger Accounts, Voucher & Features of Account Voucher.

Outcome - Students understood the following topics-

Accounts Info Menu, Accounts Groups-

Create Group, Ledger Accounts, Voucher & Features of Account Voucher.

- Unit No 4- Inventory Info, Features of Inventory Info. Configure.
- Objective To make the students understand the Inventory Info, Features of the Inventory

Info. Configure.

Outcome - Students understood the following topics-

Inventory Info, Features of Inventory Info. Configure.

# **Auditing Course Objectives and Course Outcomes**

# **Course Objectives**

- To make the Students learn a lot about the basics of audit and auditing, internal and external check, periodic audits, internal audit external audit, continuous audit, cost audit, management audit and annual audit.
  - To make the Students learn the Audit Planning and Audit Documentation and Evidence.
  - To make the studentsunderstand standard on Auditing, Vouching & Verification Vouching, Verification of Assets and Liabilities.

 A glimpse into company audit gives an idea of appointing a company auditor, and the Procedure of audit in a company etc. along with the rules of company and corporate audit.

#### **Course Outcomes**

- Students learnt a lot about basics of audit and auditing, internal and external check, periodic audit, internal audit external audit, continuous audit, cost audit, management audit and annual audit.
  - Students learnt Audit Planning and Audit Documentation and Evidence.
  - Students understood the standard on Auditing, Vouching & Verification Vouching, Verification of Assets and Liabilities.
  - A glimpse into company audit gave an idea of appointing a company auditor, and the Procedure of audit in a company etc.along with the rules of the company and corporate audit.

# Financial Accounting-V Semester-VI Course Objectives and Course Outcomes

Unit No. I - Accounting of Holding Company.

- Objective To make the students understand Accounting of Holding Company
- Outcome Students understood the following topics Accounting of Holding Company.

Unit No. 2 - Insurance Claims.

- Objective To make the students understand the Insurance Claims.
- Outcome Students understood the following topics Insurance Claims.

Unit No. 3 - Investment Accounts.

- Objective To make the studentsunderstand Investment Accounts.
- Outcome Students understood the topic- Investment Accounts.

Unit No. 4 - Profit Prior to Incorporation.

- Objective To make the students understand the Profit Prior to Incorporation.
- Outcome Students understood the topic- Profit Prior to Incorporation.

# **Management Accounting**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To make the students get a clear idea about the concept, objectives, importance and benefits of management accounting along with the basic advantages and significance of various techniques of management accounting and Break-Even Point Analysis.
- A good idea of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organizations.
- Students get a clear idea of Ratio Analysis like- Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Classification of Ratio, Liquid Ratio, Inventory Turnover Ratio, Debtors and Creditors Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, Earnings per Share Ratio.
- To make the students understand and get a clear idea of the Fund Flow Statement.

#### **Course Outcomes**

- Student got a clear idea about the concept, objectives, importance and benefits
  of management accounting along with the basic advantages and significance of
  various techniques of management accounting and Break-Even Poing Analysis.
- Understood good ideas of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organizations.
- Students understood clear idea of Ratio Analysis like- Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Classification of Ratio, Liquid Ratio, Inventory Turnover Ratio, Debtors and Creditors Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, Earnings per share Ratio.
- Understood and got clear idea of Fund Flow Statement

#### **Advanced Statistics**

### **Course Objectives and Course Outcomes**

Objective - To make the students understand the Accounting of Correlation

Outcome - Students understood the following topics. Correlation Company

Unit No. 2 - Regression.

Objective- To make the students understand Regression.

Outcome - Students understood the Regression.

Unit No. 3 - Index Number.

Objective - To make the students to understand Index Number.

Outcome - Students understood the following topics Index Number.

Unit No. 4 - Time Series Analysis.

Objective - To make the students understand Time Series Analysis.

Outcome- Students understood the Time Series Analysis.

#### Indian Economics –II

#### **Course Objectives and Course Outcomes**

#### Unit I

#### **Indian Agriculture**

**Objective-** To make the students understand the Indian Agriculture.

Outcome-Students applied the knowledge.

#### Unit II

#### **Indian Industry**

**Objective-** To make the students understand the Indian Industry.

Outcome-Students created the knowledge.

#### Unit III

#### **India's Service Sector and International Trade**

**Objective-** To make the students understand the India's International Trade.

Outcome-Students developed the knowledge.

#### **Unit IV**

#### **Contribution of Indian Economic Thinkers**

**Objective**- To make the students understand the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar Lohiya.)

**Outcome-**Students understood the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar Lohiya.)

# **Human Resource Management**

# **Course Objectives and Course Outcomes**

#### Unit I-

#### Introduction

**Objective**- To make the students understand the concept of Human Resources Management & Human Resource Manager.

**Outcome-**Students understood the concept of Human Resources Management & Human Resource Manager.

#### Unit II-

#### Recruitment, selection and training

**Objective-** To make the students understand the Recruitment, selection and training

Outcome-Students understood the Recruitment, selection and training

#### **Unit III-**

#### Labor welfare and collective bargaining

**Objective**- To make the students to understand the Labor welfare and collective bargaining.

Outcome-Students understood the Labor welfare and collective bargaining.

#### Unit IV-

## **Human Resource Planning and Accounting**

**Objective**- To make the students understand the Human Resource Planning and Accounting.

**Outcome-**Students understood Human Resource Planning and Accounting.

#### **Industrial Law**

# Course Objectives and Course Outcomes Course Objectives

• To make the students to understand The Indian Factories Act, 1948 and The Industrial Disputes Act, 1947.

- Learners learn Laws Relating to Wages, Laws Relating to Bonus and Gratuity, Laws Relating to Employee's State Insurance and Provident Fund and Laws Relating to Workmen Compensation and Maternity Benefits.
- To make the students to understand Child Labour Act, 1986, Trade Union Act, 1926, International Labour Organisation ILO and Contract Labour Act, 1971.
- Students will be able to understand the meaning and nature of Industrial Estate,
   Technology Park, SEZ and Co-operative Industrial Estate.
- Learners learn Intellectual Property Rights Law in India and Environment Protection Act, 1986.

#### **Course Outcomes**

- Understood The Indian Factories Act, 1948 and The Industrial Disputes Act,
   1947
- Learned Laws Relating to Wages, Laws Relating to Bonus and Gratuity, Laws Relating to Employee's State Insurance and Provident Fund and Laws Relating to Workmen Compensation and Maternity Benefits.
- Understood Child Labour Act, 1986, Trade Union Act, 1926, International Labour Organisation – ILO and Contract Labour Act, 1971.
- Understood the meaning and nature of Industrial Estate, Technology Park, SEZ and Co-operative Industrial Estate.
- Learners learnt Intellectual Property Rights Law in India and Environment Protection Act, 1986.

# **Bachelor of Science (B.Sc.)**

Semester-I Departmentof English Compulsory English

#### **Course Objectives and Course Outcomes**

**Unit I: Objective-**Making students' conscious about the functioning of Democracy. **Outcome-**Students tried to understand the importance of democracy.

**Unit II: Objective-** Making students understand slavery and its effects.

Outcome-Students tried to understand the effects of slavery and its punishing practice.

**Unit III: Objective-**to make students understand correct usage of Tense, Transformation of sentences and Common errors.

**Outcome-**Students tried to solve the examples of Tense, Transformation of sentences and Common errors.

Unit IV: Objective-To create the ability of writing Curriculum Vitae.

Outcome-Students attempted to write the Curriculum Vitae.

**Unit I**: **Objective**-Making students conscious of slavery, education, and compassion.

**Outcome**-Students understood the issues related with slavery, education and struggle in life.

**Unit II: Objective-** Making students understand about Self- reliance, Indian Freedom and words of wisdom.

Outcome- students understood about Self- reliance, Indian Freedom and words of Wisdom.

**Unit III**: Objective-To make students understand the value of struggle, Kindness and honesty.

Outcome- students understood the value of struggle, Kindness and honesty.

Unit IV: Objective-To create the ability of writing and comprehension.

Outcome-Students attempted to write and comprehend the passage.

# Department of Marathi Course Objectives and Outcomes

# **Course Objectives**

उदिष्टे:- १. मराठी भाषेविषयी विदयार्थ्यामध्ये अभिरूची निर्माण करणे.

- २. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- ४. साहित्यातून मानवतावादी दृष्टिकोण रूजविणे.
- ७. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

ध्येय:- १. भावी काळात विदयार्थ्यामधून साहित्यनिर्मिती करणे.

- २. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करून संवादशील वातावरण निर्मिती करणे.
- विभागात विविध उपक्रमांचे आयोजन करून मराठी भाषेचा दर्जा वाढविणे.
- ४. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे
- ५. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

#### **Course Outcomes**

साहित्य सेतू

CO1 विदयार्थ्यांनमध्ये साहित्य विषयक आवड निर्माण करणे

CO2 वाचन संस्कृतीचा पुरस्कार करणे

CO3 भारतीय संविधानाचे महत्व समजावून सांगणे

CO4मानवी मुल्यांची जपणूक करणे

CO5 कविता लंखनाचे तंत्र अवगत करणे

CO6 पर्यावरण विषयक जागती निर्माण करणे

CO7 व्यावहारीक मराठीचे महत्व समजावून सांगणे

# Department of Chemistry Programme Educational Objectives (PEOS)

**PEO1:** Graduates will pursue higher studies in related fields including management

**PEO2:** Graduates will perform as employee in private/government institutions rising up to top positions

**PEO3:** Graduates will become entrepreneurs.

**PEO4:** Graduates will prepare for various competitive examinations.

#### **Programme Specific Outcomes (PSOS)**

**PSO-1:** Gain the knowledge of Chemistry through theory and practical.

**PSO-2:** To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.

**PSO-3:** Identify chemical formulae and solve numerical problems.

PSO-4: Use modern chemical tools, Models, Chem-draw, Charts and Equipment's.

**PSO-5:** Know structure-activity relationship

**PSO-6:** Understand good laboratory practices and safety.

**PSO-7**: Make aware and handle the sophisticated instruments/equipment.

**PSO-8:** Develop research-oriented skills.

**PSO-9:** Study and understand the different techniques used in purification of compounds

# **Programme Outcomes (POs)**

- The students are expected to understand the fundamentals, principles, and recent developments in the subject area.
- It is expected to inspire and boost interest of the students towards chemistry as the main subject.
- To impart practical skills and learn basics behind experiments
- To prepare background for advanced and applied studies in chemistry.
- To inculcate the scientific temperament in the students and outside the scientific community.
- To inculcate the scientific temperament in the students and outside the scientific community.
- Use modern techniques, decent equipment and Chemistry software

#### **Course Outcomes (COs)**

Course Name: B. Sc.

**Year/Semester:** First/First

**Subject: Chemistry** 

After the successful completion of the course students will be able to-

Paper	СО	Outcomes	
FY	101.1	<ul> <li>To understand the basic structure of</li> </ul>	

D 7		,
Paper-I Inorganic Chemistry (101)		<ul> <li>atom.</li> <li>Understand shape of orbitals.</li> <li>Understand periodic properties such as atomic and ionic radii, ionization energy, electron affinity etc.</li> </ul>
	101.2	<ul> <li>To understand the concept of covalent bond.</li> <li>To understand the bond parameters and various types of types of hybridization.</li> <li>To understand the ionic structures with respect to NaCl and CsCl.</li> </ul>
*//	101,3	<ul> <li>Understand s block element and their properties such as electronic configuration, atomic and ionic radii, I.P. etc.</li> <li>Understand chemical properties of the noble gases, preparation, structures, bonding and applications.</li> </ul>
	101.4	<ul> <li>To understand the P block element. Comparative study of groups 15,16, 17 with respective their properties.</li> <li>Understand the Hydrides, Oxides, Peroxyacids, Hydrides.</li> </ul>
FY Paper-II Physical Chemistry (102)	102.1	<ul> <li>Understand the common thermodynamics terms. Types of systems and varies thermodynamics processes.</li> <li>State and path functions and their differentiation.</li> <li>Understand the first law of thermodynamics.</li> </ul>
*	102.2	<ul> <li>Understand gas equation and laws.</li> <li>Understand qualitative discussion of the Maxwell-Boltzmann distribution.</li> <li>Understand ideal gas and real gases behaviors.</li> </ul>
	102.3	<ul> <li>Understand the Intermolecular forces, structure of liquid, structural difference between solid, liquid and gases.</li> <li>Properties of liquid like surface tension, viscosity, refractive index.</li> </ul>
	102.4	<ul> <li>Understand the concept of different types of surface phenomenon and catalytic property, like Adsorption mechanism of adsorption, factor affecting adsorption. Difference between adsorption and absorption, etc.</li> <li>Understand types of catalysis and</li> </ul>

d

		enzymes.
F.Y. Chemistry Practical Course	103	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

#### **Department of Physics**

# **Programme Educational objectives (PEOS)**

- **PEO1:** Graduates will pursue higher studies in related fields including management
- **PEO2:** Graduates will perform as employee in private/government institutions rising up to top positions
- **PEO3:** Graduates will become entrepreneurs.
- **PEO4:** Graduates will prepare for various competitive examinations.

# **Programme Specific Objectives (PSOS)**

- **PSO-1:** Gain the knowledge of Physics through theory and experiments.
- **PSO-2:** Understand good laboratory practices and safety.
- **PSO-3:** Develop research-oriented skills.
- **PSO-4:** Make aware and handle the sophisticated instruments/equipments.

#### **Programme Outcomes (POs)**

- Bachelor of Science offers theoretical as well as practical knowledge about different subject areas.
- This course forms the basis of science for coherent understanding of the academic field to pursue multi and interdisciplinary science careers in future.
   These subject areas include Physics, Chemistry, Mathematics and Botany and Zoology.
- Able to plan and execute experiments or investigations, analyze and interpret data information collected using appropriate methods
- It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace through research.

• Think critically; follow innovations and developments in science and technology.

# **Course Outcomes (COs)**

Course Name: B. Sc. Year/Semester: First/First

**Subject: Physics** 

After the successful completion of the course students will be able to-

Paper CO Outcomes		
	101.1	
Paper 1: Properties of	101.1	• Understand the mechanical behavior of the material and
Matter and		the fundamental terminology like Stress, Strain, Poisson's
Mechanics		ratio, Hooks law, bending moment and modulus of
	101.0	elasticity
(101)	101.2	Understand the concept of viscosity.
*/		<ul> <li>Apply Poiseuille's Equation, Bernoulli's Theorem, Stoke's law and the concept of terminal velocity.</li> </ul>
*//	101.3	• Understand the concept of surface tension and surface energy, Newton's laws of motion and to resolve the components of velocity and acceleration in different
'//		coordinate system.
1//	101.4	Understand the System of particles and conservation laws.
Paper 2:	102.1	Understand the concept of Electrostatic force, Electric
Electrostatics,		field, Electric potential, Electric dipole, Electric dipole
Time varying		moment.
fields & Electric	102.2	Understand the concept of polarization and capacitors with
Currents		and without dielectric.
(102)		Apply Gauss law to parallel plate capacitor.
	102.3	To understand the concept of electromagnetic induction
$\vee$		and transformer.
<b>T</b>     d	44	• Apply equation of continuity and Kirchhoff's law to rise
	4 1	and decay of current in LR, CR and LCR circuits.
		To apply complex number in solving an a.c. circuit.
Apply j- operator in LR, CR and LCR circuit		Apply j- operator in LR, CR and LCR circuit.
4 / /	1	Understand the concept of Resonance
		<ul> <li>Calculate I, Z, Φ and fr.</li> </ul>
Physics Practical	103	Apply and demonstrate the theoretical concepts of Physics
(103)		and to develop scientific attitude.
9	1	Interpret the experimental data

# **Department of Mathematics**

# **Programme Educational Objectives (PEOs): B.Sc. (Mathematics)**

1.	Graduates will pursue higher studies in related fields including management		
2.	To prepare necessary knowledge base for research and development in Mathematics		
3.	To help student's build-up a successful career in Mathematics		

# **Programme Specific Outcomes (PSO): B.Sc. (Mathematics)**

1		Enhance stude	ents' ability to	develop mat	thematical mod	dels
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2.	Develop research-oriented skills.
3.	Nurture problem solving skills, thinking, and creativity through assignments, project Work.
4.	Prepare for various competitive exams

# **Programme Outcomes (POs): B.Sc. (Mathematics)**

1.	Understand and solving of major concepts in all disciplines of mathematics.
2.	Solve the problem and also think methodically, independently and draw a logical
	conclusion.
3.	To inculcate the scientific temperament in the students and outside the scientific
	community.
4.	Create an awareness of the impact of mathematics on society and development
	outside the scientific community.
5.	Gain experience investigating the real-world problems and learn to how to apply
	Mathematical ideas and models to those problems.
6.	Understand and able to use mathematical formulae in another subject.

# **COURSE OUTCOMES (COs)**

Course Name: B. Sc.

Year/Semester: First/First Subject: Mathematics

After successful completion of three-year degree programme in **Mathematics** students should be able to;

Paper	CO	Outcomes
FY	101.1	Understand the basic concept related to Matrices and
Paper-I		solve the problem based on a system of Linear
Algebra and		equations
Trigonometry	101.2	Understand the general properties of equations and
101	B 8 5 5	Solutions of Different equations
~	101.3	Understand the basics of complex numbers and solve
X-\\	×	the problems
1 / 1	101.4	understand Group theory and general properties
FY	102.1	Using Definition, verify the values of limit and
Paper-II		continuity and solve the problem on Differentiation
102	102.2	Understand the concept of Maclaurins and Taylor's
Calculus	1	theorem
		Indentify Indeterminate forms and application of
	<	L'Hospitals Rule
	102.3	Understand the concept of partial differential
		equation, Eulers Theorem and Jacobians
	102.4	Identify the various types and methods to solve
		Integration and application of Reduction Formulae

# **Department of Zoology**

	PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):
1.	Graduates will pursue higher studies in related fields including
	management
2.	Graduates will perform as employers in private/government institutions
	rising up to top positions
3.	Graduates will become entrepreneurs.

PRO	PROGRAMME OUTCOMES (PO)			
1.	The students are expected to understand the fundamentals, principles, and recent developments in the subject area.			
2.	It is expected to inspire and boost interest of the students towards zoology as the main subject.			
3.	To impart practical skills and learn basics behind experiments.			
4.	To prepare background for advanced and applied studies in zoology.			
5.	To inculcate the scientific temperament in the students and outside the scientific community.			
6.	To inculcate the scientific temperament in the students and outside the scientific community.			
7.	Use modern techniques, decent equipments and Zoology softwares.			

S	PROGRAMME SPECIFIC OUTCOME
1.	Gain the knowledge of Zoology through theory and practicals.
2.	Use modern biological tools, Models, Charts and Equipment's.
3.	Know structure-activity relationship.
4.	Understand good laboratory practices and safety.
5.	Make aware and handle the sophisticated instruments/equipment.
6.	Develop research-oriented skills.
7.	Study and understand the different technique used in purification of
	compounds

# COURSE OUTCOMES (COs)

Course Name: B. Sc.

**Year/Semester:** First/First

**Subject: Zoology** 

After the successful completion of the course students will be able to-

Paper	CO	Outcomes	
FY	101.1	To understand general characters and classification up to	
Paper-I		classes of protozoa, structure and reproduction of	
Life and		Paramoecium, structure and life cycle of Plasmodium,	
Diversity of		parasitic Protozoans of Man (Entamoeba, Trypanosoma,	
Animals –		Giardia and Leishmania). Mode of infection and its control.	

Non-	101.2	To understand the general characters and classification up to		
chordates		classes of porifera, Structure, reproduction and development,		
(Protozoa to		Canal system in sponges, General characters and		
Annelida)		classification up to classes of Coelenterata, structure and life		
(101)		cycle of Obelia, Polymorphism in hydrozoa.		
	101.3	To Understand the Helminthes: General characters and		
		classification up to classes, Ascaris: External morphology,		
		reproductive system and life cycle, <i>Taenia solium</i> : Structure		
		and life cycle, Elementary idea of parasitic adaptations in		
		helminthes		
	101.4	To Understand the Annelida: General characters and		
		classification up to classes, Leech: Morphology, digestive		
	6.5	and urinogenital system, Trochophore larva and its		
	M	significance, Vermiculture and its importance		
FY	102.1	To understand the Atmosphere: Major zones and its		
Paper-II		importance, composition of air, Hydrosphere: Global		
Environmental		distribution of water, Physico-chemical characteristics of		
Biology		water, Lithosphere: Types of rocks, formation of soil,		
(102)	4	Renewable and non- renewable energy sources		
A//	102.2	Understand the Ecosystem - Definition and types, Detailed		
///	12	study of pond ecosystem, Food chain, food web and		
. / /	0	ecological pyramids, Energy flow in an ecosystem, Single		
<b>*</b> ///	100.0	channel, Y – shape and Universal model		
$\sim / / /$	102.3	To understand the Biodiversity and its conservation, Causes		
i-		of reduction of biodiversity, Wildlife conservation acts (1972		
1 /0	6	and 1984), Introductory study of national parks and		
KIII		sanctuaries – Tadoba, Kanha, Bharatpur and Nagzira, Hot spots of biodiversity in India		
	102.4	To understand the Sources, effect and control measures of air		
102.4		pollution, Acid rain, green house effect, ozone depletion and		
$\vee$ 11		global warming, Sources, effect and control measures of		
<b>-</b>	dH.	water pollution, Sources effect and control measures of noise		
' \ \	14.4	pollution, Toxic effect of heavy metals (lead, cadmium and		
		mercury) – Bioaccumulation and biomagnification		
F.Y.	103	Verify theoretical principles experimentally		
Zoology		Interpret the experimental data		
Practical		Improve analytical skills		
Course	/ /			
	1	then importance		
Gourse	7	• Correlate the theory and experiments and understand their importance		

# **Department of Botany**

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)			
1.	Graduates will pursue higher studies in related fields including		
	management		
2.	Graduates will perform as employee in private/government institutions		
	rising up to top positions		
3.	Graduates will become entrepreneurs.		

**PO1**.Understanding of Plant Diversity and its importance in the maintenance of ecological balance.

**PO2**. Students learn to carry out practical work, in the field and in the laboratory, interpreting plant morphology and an atomy, Plant identification, Vegetation analysis techniques.

**PO3.**Apply the knowledge of basic science, life sciences and fundamental process of plants.

**PO4**. Apply modern techniques and instruments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological studies of plants with anunderstanding of the applications in human life.

**PO5**. Apply theknowledge gained from the studies for the upliftment of society via addressing health, environmental issues, food scarcity etc.

### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

**PSO1**. Critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize the irposition in the classification systems and atphylogenetic level.

**PSO2**. Students will be able to access the primary literature, identify relevant works for aparticular topic, and evaluate the scientific content of these works

**PSO3**. Students will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms.

**PSO4**. Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life one arth.

**PSO5**.Students will be able to explain how Plants functionat gene, genome, cellular and tissue level,

**PSO6**. Students will be will be able to relate the physical features of the environment to the structure of populations, communities, and eco systems.

**PSO7.** Students will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find alivelihood via establishing miniature plant nurseries

Course Name: B. Sc.

**Year/Semester: First/First** 

**Subject: Botany** 

After the successful completion of the course students will be able to-

Paper	CO	Outcomes
FY	101.1	<ul> <li>To understand the nature of viruses,</li> </ul>
Paper-I		Ultra-structure and economic
Viruses,		importance.
Prokaryotes,Alg		<ul> <li>Understand the properties of</li> </ul>
ae		Mycoplasma and its reproduction.
And Biofertilizers		Understand general characteristics and
(101)		reproduction in bacteria.
(101)	101.2	To understand general characteristics and
		classification of algae

	101.3	<ul> <li>To understand the to understand general structure of Cyanobacteria and its reproduction.</li> <li>Understand life cycle of Chara, Vaucheria, Ectocarpus, and Batrachospermum.</li> </ul>
	101.4	<ul> <li>To understand Scope and importance of Biofertilizers.</li> <li>Understand the microbes used in biofertilizers.</li> </ul>
FY Paper-II Fungi, Plant Pathology,Liche ns, Bryophyta and Mushroom Cultivation (102)	102.1	<ul> <li>Understand the Characteristics of fungi.</li> <li>Understand the reproduction and life cycle of <i>Albugo</i>, <i>Mucor</i>, <i>Puccinia and Cercospora</i>.</li> <li>Pathogen study, control and causes of diseases: leaf curl of papaya, Citrus canker and red rot of sugarcane</li> </ul>
* ★ ¥	102.3	<ul> <li>Understand classification and general characteristics of Bryophyta.</li> <li>Life history of <i>Marchantia</i>, <i>Anthoceros and Funaria</i></li> <li>To Study the nutritional and medicinal values of edible and non-edible mushrooms. Technology of mushroom cultivation</li> </ul>
F.Y. Chemistry Practical Course	103 मसो म	<ul> <li>Study the fungal genera.</li> <li>Study the lichens, thallus structure and types of lichens.</li> <li>Plant pathological study.</li> <li>Study of bryophytes and identification of its characteristics.</li> <li>Preparation of mushroom beds.</li> </ul>

# Semester II Department of English Course Objectives and Outcomes Compulsory English

Unit I: Objective-Making students conscious about the functioning of Democracy.

Outcome-Students tried to understand the importance of democracy.

**Unit II: Objective-** Making students understand slavery and its effects.

Outcome-Students tried to understand the effects of slavery and its punishing practice.

**Unit III: Objective-**To make students understand correct usage of Tense, Transformation of sentences and Common errors.

Outcome-Students tried to solve the examples of Tense, Transformation of sentences

and Common errors..

Unit IV: Objective-To create the ability to write Curriculum Vitae.

Outcome-Students attempted to write the Curriculum Vitae.

#### Department of Marathi Course Objectives and Outcomes Programme Objectives

उदिष्टे:- 1. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरुची निर्माण करणे.

- 2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- 4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
- 5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

#### **Course Outcomes**

#### साहित्य सेतू

ध्येयः– १. भावी काळात विदयार्थ्यांमधून साहित्यनिर्मिती करणे.

- अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करुन संवादशील वातावरण निर्मिती करणे.
- 3. विभागात विविध उपक्रमांचे आयोजन करुन मराठी भाषेचा दर्जा वाढविणे
- 4. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे.
- 5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

#### **Department of Chemistry Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/ Second

**Subject: Chemistry** 

Paper	CO	Outcomes
FY Paper -I Organic Chemistry (201)	201.1	<ul> <li>To make students understand different organic compounds and the concept structure and bonding in organic compounds.</li> <li>Understand the mechanism of organic reaction.</li> </ul>
	201.2	<ul> <li>Understand the concept of stereochemistry of organic compounds.</li> </ul>

		To make the structure of Geometrical isomerism and conformational isomerism.
	201.3	Many of the daily used materials are organic compounds and majority of them are hydrocarbons therefore this topic makes the concept regarding their information
	201.4	<ul> <li>Basic of the alkane and alkynes with respect to their chemical point of view.</li> <li>To understand the aromaticity of organic compounds.</li> </ul>
F.Y. Pape-II Physical Chemistry (202)	202.1	<ul> <li>To understand the thermodynamics of chemical reactions.</li> <li>Understand free energy functions like work function, Gibb's free energy etc.</li> </ul>
*//	202.2	To understand the concept of phase equilibria.  Statement of phase rule and term. Application of phase rule
$\star$ //	202.3	Understand the concept of nuclear chemistry and molecular structure
	202.4	To Understand the concept of chemical kinetics and theories of chemical kinetics.
F.Y. Chemistry Practical course	203	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

#### Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Physics** 

Paper	CO	Outcomes			
Paper 1: Oscillations,	201.1	To understand the concept of linear and angular S.H.M., Damped harmonic oscillator			
Kinetic theory of gases and	201.2	• To understand the concept of Forced oscillation with one degree of freedom and kinetic theory of gasses.			
Thermodynamics (201)	201.3	To understand the Transport phenomenon in gases, Zeroth and First law of thermodynamics and Cornot's Theorem			
	201.4	To understand second and third law of thermodynamics and Maxwell's general relationship and its applications			

Paper 2: Gravitation,	202.1	• To understand Newton's laws of gravitation and the concept of Gravitational self-energy of the galaxy				
Astrophysics, Magnetism and Magnetostatics	202.2	• Know the constituents of universe (Solar system, Stars, Galaxies) and some physical aspects of universe				
(202)	202.3	• To understand the concepts of Dimagnetism, Paramagnetism and Ferromagnetism and their applications				
	202.4	To understand the Concept of magnetic field and to study various laws of magneto static and their applications.				
Physics Practical (203)	203	• Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.				

#### Department of Mathematics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: First/ Second

**Subject: Mathematics** 

After successful completion of three-year degree programme in **Mathematics** students should be able to;

		- Control of the Cont			
Paper	CO	Outcomes			
FY	201.1	Understand the concept of Solid Geometry			
Paper-I	202.2	Identify and solve the problems on Differential equations			
201		of first order			
Geometry,	203.3	Understand the Higher order linear differential equations			
Differential and		with constant coefficient			
Difference	204.4	Understand the basic concept of Difference equation			
<b>Equations</b>					
FY	202.1	Students learn the concept of Vector differentiation and			
Paper-II		Line Integral			
202	202.2	Learn the evaluation of area by double Integral			
4//	202.3	Apply integration to evaluate over surface and volume			
	202.4	Evaluate Improper Integrals also study the gamma and			
4		Beta functions			

#### **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Zoology** 

Paper	CO	Outcomes
FY	201.1	To understand the, Arthropoda: General characters and
Paper -I		classification up to classes, Cockroach: Mouth parts,
Life and Diversity		digestive system and reproductive system, Insects as
of Animals –		Vectors: Mosquito, Housefly, Sandfly, Tse-Tse fly,
Nonchordates		Study of crustacean larvae: Nauplius, Zoea and
(Arthropoda to		Megalopa; Social behavior in honey bees

Hamishardsta)	201.2	To understand the Mollusca: General characters and
Hemichordata)	201.2	
(201)		classification up to classes, <i>Pila</i> : Morphology,
		digestive, respiratory and reproductive system, Pearl
		formation in Mollusca, Molluscan larvae : Glochidium
		and Veliger
	201.3	To understand the Echinodermata : General characters
		and classification up to classes, Asterias: External
		features and digestive system, Water vascular system
		and locomotion in Starfish, Echinoderm larvae:
		Bipinnaria and Auricularia
	201.4	To understand Hemichordata: General characters and
		phylogeny, Balanoglossus: External features and
	. 3	digestive system, Reproduction in Balanoglossus,
		Tornaria larva, Affinities of Balanoglossus
F.Y.	202.1	To understand the Ultrastructure of prokaryotic and
Paper-II		eukaryotic cell, Plasma membrane: Structure- Fluid
Cell Biology		Mosaic Model and functions, Endoplasmic reticulum:
(202)		Types, ultrastructure and functions, Golgi complex:
		Ultrastructure and functions
7-//	202.2	To understand Ultrastructure of mitochondria,
~//	A	Oxidative phosphorylation – Glycolysis and Kreb's
		cycle, Electron Transport Chain and terminal oxidation,
L// 6	56	Lysosome: Structure, polymorphism and functions
XII	202.3	To understand the Nucleus: Ultrastructure of nuclear
1 / !0		membrane, Structure and functions of nucleolus,
		Chromosome: Structure and types, structure of
(50		nucleosome, Giant chromosomes: Lamp-brush and
		polytene chromosome
	202.4	To understand the Ribosome: Structure, types, Lake's
	1	model and functions, Somatic cell division: Cell cycle
$\times$ 11 -	-	and Mitosis, Meiosis (different phases and
T / / d	HW	significance), synaptonemal complex, Cellular ageing
		and cell death, Elementary idea of cancer and its
		causative agents
F.Y.	203	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
Practical course		Improve analytical skills
4		<ul> <li>Correlate the theory and experiments and</li> </ul>
	1	understand their importance

#### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Botany** 

Paper	CO	Outcomes
FY	201.1	<ul> <li>To make students understand fossils,</li> </ul>
Paper -I		Pseudofossils, and its importance.
Paleobotany, Pteridophytes,		Knowledge about types of fossils.
Gymnosperms and Soil		<ul> <li>Details of Geological time scale.</li> </ul>

	1	1	
Analysis (201)		•	Differentiation among the types of fossil.
	201.2	•	Study the general characteristics of Pteridophytes and its classification.
		•	Life history of <i>Selaginaella</i> . And <i>Equisetum</i> .
	201.3	•	Classify the Gymnosperms, its characteristics and economic
			importance. Understand the fossil gymnosperm.
	201.4	X	Study the life cycle of <i>Cycas</i> and <i>Pinus</i> Skill development and soil analysis.
*		•	Identification of types of soil on the basis of its color and texure.
*//	affa	व	Study the physical properties of soil. Understand the pH of soil and nitrogen availability in it.
F.Y. Pape-II	202.1	VPII.X	Study the morphological characteristics of plants.
Morphology of Angiosperms and Floriculture		A	Identification of morphological characters of plants.
(202)	3	L	Study the modification occure in root, stem and leaf.
* C	202.2	//×	Study the reproductive morphology. Study the types of inflorescence. Study the calyx, corolla and
VII -	202.3	The state of the s	Androecium.  Understand the structure of gynoecium.
<b>★</b> \\ तमस	H	25	Study the fruit and its types.
*//	202.4	•	Develop the skills of floriculture and cultivation  Method of cultivation.
F.Y. Botany	203	ना	Study of different root and stem modification and branching patterns.
Practical course			Study the types of leaf and its phyllotaxy, venation and modification.
*	×	·	Understand the flower structure and position of calyx, corolla, androecim and gynoecium.

## Semester-III Department of Chemistry COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Chemistry** 

Paper	CO	Outcomes

S.Y Paper-I Inorganic	301.1	Understand the concept of molecular orbital theory and VSEPR theory.
Chemistry (301)	301.2	Understand the properties of d and f block elements.
	301.3	<ul> <li>Understand the role of nonaqueous solvents.</li> <li>Understand concept of errors and evaluation in chemical analysis.</li> </ul>
	301.4	Understand the concept of chemistry of Lanthanides and Actinides series.
S.Y. Paper-II Organic	302.1	Understand the structure and chemical bonding in aryl, alkyl halides, and aldehydes.
Chemistry (302)	302.2	<ul> <li>Understand the structure and chemical bonding in alcohols and phenols.</li> </ul>
*//	302.3	<ul> <li>Understand the nomenclature, structure of the carbonyl group, synthesis of aldehydes and ketones</li> </ul>
*// 8	302.4	Understand chemical reaction of carboxylic acids and its derivatives.
S.Y. Chemistry Practical Course	303	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>
<del>*// </del> 7	मस	मा ज्यातागमय //*

#### Department of Physics COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Sound Waves, Applied Acoustic,	301.1	• Understand the concept of group and phase velocities, formation of standing waves and diagrammatic introduction of human ear and its responses.
Ultrasonic and Power Supply (301)	301.2	• Understand the working of transducers and their characteristics and the concept of acoustic and its applications.
	301.3	• Understand the production and applications of ultrasonic waves.
	301.4	• Understand the concept of voltage regulation and working of the half, full and bridge rectifier.
Paper 2: Physical Optics and Electromagnetic	302.1	<ul> <li>Understand the concept of interference of light through thin film</li> <li>Apply the concept of interference of light through</li> </ul>

Waves		thin film in wavelength determination.
(302)	302.2	• Understand the concept of diffraction, Resolving Power of grating and Rayleigh's criterion for resolution.
	302.3	• Understand the concept of polarization and double refraction
	302.4	<ul> <li>Understand the origin and characteristics of EM waves, Physical significance of Maxwell's equations, Characteristics impedance of dielectric and Poynting theorem.</li> </ul>
Physics Practical (303)	303	• Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.

### **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Mathematics** 

After successful completion of three-year degree programme in Mathematics students should be able to:

silould be able to,	y district	
Paper	CO	Outcomes
SY	301.1	Students understand Mean Value theorem
Paper-I	301.2	Learn about an envelope of a family of curves in the
301		plane and study the Langranges Multiplier method
Advanced	301.3	Understand the concept of sequence
Calculus,	301.4	Use Tests for convergence
Sequences &Series		030
SY	302.1	Understand the concept of Special Functions(Bessels and
Paper-II		Legendre's function)
302	302.2	Students understand the concept of Laplace Transform
Differential		and solve the problems
<b>Equation and</b>	302.3	Applications of Laplace Transform & Fourier Transform
Group	302.4	Students develop knowledge in group theory
Homomorphism		DE TITTOS

#### **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Zoology** 

Paper	CO	Outcomes
S.Y	301.1	Understand the Protochordata : General characters and classification
Paper-I		up to order, <i>Herdmania</i> : Structure, digestive system, ascidian
Life and		tadpole and retrogressive metamorphosis, <i>Amphioxus</i> : Structure,
Diversity of		digestive system, circulatory system, sense organs and
Animals -		protonephridia, Agnatha: General characters of Cyclostomata
Chordates		(Petromyzon and Myxine)
(Protochordata	301.2	Understand the Pisces: Salient features of Chondrichthyes and
to Amphibia)		Osteichthyes, Origin of paired fins in fishes, Migration and

(301)		Accessory respiratory organs in fishes, Amphibia : General
		characters and classification up to order, Parental care and Neotony
		in Amphibia
	301.3	Understand the Gametogenesis and type of eggs, Fertilization of
	0 0 2 0 0	egg, Post fertilization development of fish, Types of scales of fishes,
		Development of placoid scales
	301.4	Understand the Frog Embryology - Cleavage, blastulation and
	301.7	gastrulation, Fate map, Morphogenetic movements in gastrula of
		frog, Development of respiratory organs in frog, Development of Aortic arches of frog
C V	202.1	ĕ
S.Y.	302.1	Understand the Mendelian Principles- Dominant recessive
Paper-II		relationships, Mendelian laws, Interaction of genes- Epistasis -
Organic	1	dominant and recessive, codominance, incomplete dominance,
Zoology	46	Quantitative genetics – Polygenic traits, inbreeding and
(302)	1	outbreeding, hybrid vigor, Extracellular genome – Presence and
		functions of mitochondrial DNA, plasmids
1	302.2	Understand the concept of Cytoplasmic inheritance- <i>Kappa</i> particles
		in Paramecium, CO2 sensitivity in Drosophila, milk factor in mice,
4//	1	Linkage and crossing over – Basic concepts of linkage, types and
R//	, 3	theories, Concepts of genes – Cistron, muton and recon, Genetic
'//	2	disorders in human beings – Haemoglobin disorders – Thalassemia
. //		and Sickle cell anemia. Metabolic disorder: Phenylketonurea
1//	302.3	Understand the concept of Sex determination – ZZ, XY, XO, ZW
X// /-		pattern, Sex determination in <i>Drosiphila</i> – Genic balance theory,
1/ /	<i>y</i> -	Environmental sex determination in <i>Bonellia</i> , Chromosomal
	100	aberrations: addition, deletion, duplication and inversion, Gene
(50	-05	mutations- Spontaneous and induced mutations, mutagenic agents,
		Disorders related to chromosomal number- Turner syndrome,
1 1		Klinefelter syndrome and Down syndrome
1.1	302.4	Understand the Lethal genes – Concepts and consequences,
<b>∠</b>    -		Population genetics: Basic concepts in population genetics, Hardy
7//	144	Weinberg equilibrium and its significance, Genetic counseling –
		Introduction, purpose, hereditary diseases and disorders, Applied
		genetics - DNA fingerprinting, amniocentesis, sperm banks,
XII		karyotyping
S.Y.	303	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
Practical		
Course		Improve analytical skills
2000	1	Correlate the theory and experiments and understand their
	78	importance

#### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Botany** 

Paper	CO	Outcomes
S.Y	301.1	• Understand the study of angiosperms, Fossil
Paper-I		angiosperms, Angiosperms taxonomy.
		Understand the nomenclature.

Botany		Study the trends in taxonomy.
(301)	301.2	<ul> <li>Understand the classification system of Benthem and Hooker, Engler and Prantle.</li> </ul>
	301.3	<ul> <li>Study the types of pollinaton and its significance</li> <li>Study the structure of anther, pollen grain and male gametophyte development.</li> </ul>
		<ul><li>Study the types of ovules and female gametophyte.</li><li>Understand the fertilization process.</li></ul>
	301.4	<ul> <li>Study the skills of landscaping and gardening.</li> </ul>
S.Y. Paper-II	302.1	<ul> <li>Understand anatomical features of plants and its organs.</li> </ul>
Angiosperm		<ul> <li>Study the tissue its types and functions.</li> </ul>
anatomy and Horticulture	302.2	<ul> <li>Study the primary and secondary growth I stem and root.</li> </ul>
(302)	302.3	<ul> <li>Study the periderm growth rings, sap heartwood, leaf anatomy.</li> <li>Study the Senescence and Abscission.</li> </ul>
*//	302.4	<ul> <li>Study the techniques of horticulture, methods of propagation.</li> <li>Learn the technique of bonsai preparation.</li> </ul>
S.Y. Botany	303	Study the simplest and complex tissue from permanent micro-preparation.
Practical Course		<ul> <li>Identification of types of vascular bundle.</li> <li>Anatomy of Dicot and Monocot stem with temporary or double stained.</li> <li>Study the internal structure of dicot and monocot</li> </ul>
		leaf.

#### SEMESTER IV

**Department of Chemistry Course Outcomes (COs)** 

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Chemistry** 

Paper	CO	Outcomes
S.Y. Paper-I Inorganic Chemistry (401)	401.1	<ul> <li>Understand the properties of coordination compounds. Chelates: classification and their application and valance bond theory of complexes.</li> </ul>
	401.2	<ul> <li>Understand the concept of isomerism in coordination compounds. Concept of oxidation and reduction and balancing of redox reaction.</li> </ul>
	401.3	<ul> <li>Understand the concept of colorimetry and spectrophotometry.</li> <li>Understand the concept of separation technique like chromatography ion exchange and solvent extraction.</li> </ul>

	401.4	• Understand the concept of inorganic polymers.
S.Y. Paper-II Physical Chemistry (402)	402.1	<ul> <li>Understand solid state and their classification and their laws.</li> <li>To understand the concept of determination of crystal structure.</li> </ul>
(402)	402.2	<ul> <li>Understand electrochemistry of reversible and irreversible cells.</li> <li>Understand the concept of electrical transport and transport number.</li> </ul>
	402.3	<ul> <li>Use spectroscopy for chemical analysis.</li> <li>Understand types of spectroscopy.</li> </ul>
*	402.4	Understand the concept of quantum chemistry and wave function.
S.Y. Chemistry practical Course	403	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

#### Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Physics** 

After the success	ուս Հայ	oletion of the course students will be able to-
Paper	CO	Outcomes
Paper 1: Solid State Physics, X-ray and Laser	401.1	• Understand the basic concept of crystallography, find various lattice parameters, find Miller Indices of the given plane and draw planes from the set of Miller Indices.
(401)	401.2	<ul> <li>Understand main feature of continuous X-ray spectra and Characteristics X-ray spectra,</li> <li>Apply Moseley's law to determine wavelength of X-ray.</li> </ul>
	401.3	<ul> <li>Understand the basic concept of solid state physics.</li> <li>Apply Bragg's law for wavelength determination and simple cubic structure determination.</li> <li>Calculate Miller indices of the given plane and identify the orientation of the plane from the given set of Millar indices.</li> </ul>
	401.4	<ul> <li>Understand the concepts of LASER emission.</li> <li>Understand the construction and working of various types of LASER.</li> </ul>
Paper 2: Solid State	402.1	Understand the construction and working and characteristics of various solid state devices.
Electronics, and Molecular	402.2	• Understand the construction and working and characteristics of various FETs.

Physics	402.3	Understand the concept molecular physics.
(402)	402.4	<ul> <li>Understand and apply the Raman spectroscopy.</li> </ul>
Physics	403	• Apply and demonstrate the theoretical concepts of
Practical		Physics and to develop scientific attitude.
(403)		-

#### **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Mathematics** 

After successful completion of three-year degree programme in Mathematics students should be able to;

bilouid be dole to,		
Paper	CO	Outcomes
SY	401.1	Understand the concept of ordinary Differential Equations
Paper-I		in more than two variables
401	401.2	Use the methods to solve the linear and nonlinear partial
Partial /	4	differential equations of first order
Differential	401.3	Understand the concept of Higher Partial Differential
<b>Equations &amp;</b>	,2	Equations
Calculus of	401.4	Find the distance between the curves and understand the
Variation	70	concept of Eulers differential equation
SY	402.1	Students learn about Coplanar Forces, Virtual Work and
Paper-II		Catenary
402	402.2	Understand the velocity, Acceleration and simple
Mechanics		harmonic Motion
	402.3	Understand the concept of Lagranges Equations of motion
	402.4	Learn the problem of two bodies moving under the
X     7		influence of a mutual central force

#### **Department of Zoology**

**Course Outcomes (COs)** 

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Zoology** 

Paper	CO	Outcomes
,		
S.Y.	401.1	Understand the Reptilia- Classification based on
Paper-I		temporal vacuities, Poison apparatus, biting mechanism,
Life and Diversity		snake venom and its importance, Aves – Comparison of
of Animals –		Ratitae and Caranitae, Flight adaptations and migration,
Chordates		Mammals – General characters of Prototheria,
(Reptilia, Aves and		Metatheria and Eutheria
Mammals)	401.2	Understand the Modern theories of evolution:
(401)		Darwinism and Neo-Darwinism, Adaptations –
		Cursorial, Aquatic, Terrestrial, Fossorial and Volant,
		Introduction to genetic basis of evolution – Species
		Deme, Variation, Races in Man (Caucasoid, Negroid,
		Mongoloid and Australoid)

	1	
	401.3	Understand the Comparative account of aortic arches and
		heart in Reptiles, Birds and Mammals, Structure of hen's
		egg, Development of chick up to premitive streak stage,
		Development of extra embryonic membranes in chick
		and functions
	401.4	Understand the Frog Embryology - Cleavage,
		blastulation and gastrulation, Fate map, Morphogenetic
		movements in gastrula of frog, Development of
		respiratory organs in frog, Development of Aortic arches
		of frog
S.Y	402.1	Understand the DNA: Structure of DNA, forms of DNA,
Paper-II		properties of DNA, DNA as a genetic material, RNA:
Molecular Biology		Structure of RNA, types of RNA, RNA as a genetic
and		material, Prokaryotic and eukaryotic gene structure,
Immunology(402)	1	Recombination in Bacteria: Bacterial transformation –
M /		Griffith's experiment, Conjugation in bacteria,
7/	400.0	transduction
	402.2	Understand the concept DNA replication:
4//	<0	Semiconservative model, Meselson Stahl experiments.
7//	4	Process of replication – origin of replication, concept of
////		replication, directionality of replication, Genetic code:
1//0	-	Characteristics of genetic code, Wobble hypothesis,
*// K	0	Protein synthesis: Transcription mechanism – Initiation,
		elongation and termination of transcription. Translation –
		activation of amino acids, transfer of activated amino
10		acids to tRNA, Initiation, elongation and termination of
		polypeptide chain; inhibitors of protein synthesis, Gene
	402.3	regulation models- Lac operon and tryptophan operon
	402.3	Understand the Concepts of immunity – Innate and acquired immunity, organs of the immune system,
$\sim 1.1$	-	Antigen - Structure, diversity, functions and types of
<b>4</b> \\ 7.		antigen, Antibody- Structure, types and functions,
1 1 11	1	Antigen-antibody interaction – Precipitation and
1 1		agglutination
K//	402.4	Understand the Types of immune response: B cell
7//	704.4	response (antibody mediated), T cell response (cell
	. /	mediated), Complement system: Basic concepts of
41		complement cascades, classical, alternative and MBL
7		pathways, implications of complement system in
	1	immune defense, Cytokines- General account on
×		cytokines, Cytokine related diseases, Autoimmunity and
,		immunodeficiencies- Autoimmune diseases and their
		treatment, AIDS and other immunodeficiencies
S.Y.	403	Verify theoretical principles experimentally
Zoology practical		<ul> <li>Interpret the experimental data</li> </ul>
Course		1
		Improve analytical skills
		Correlate the theory and experiments and
		understand their importance

#### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Botany** 

Paper Paper	CO	Outcomes
		Outcomes
S.Y.	401.1	<ul> <li>Understand the brief account of cell theory.</li> </ul>
Paper-I		Comparison between eukaryotic and prokaryotic
Cell biology, Plant		cell.
Breeding,		Structure and function of cell wall, Endoplasmic
Evolution, and		reticulum, Golgi complex, plasma membrane,
Technology (401)		Ribosome and Vacuole.
	401.2	<ul> <li>Understand the structure and functions of</li> </ul>
		chloroplast, Mitochondria and Nucleus.
7/		<ul> <li>Understand the chromosome morphology,</li> </ul>
		Molecular organization of chromosomes.
4//	-0	Understand the sex chromosomes and cell
7//	4	division process.
// 1	401.3	<ul> <li>Understand plant breeding, methods of plant</li> </ul>
1// /	6	breeding.
XII		Understand the biostatistics and determine the
11 10		Mean, Mode, Median.
		<ul> <li>Understand the evolution process.</li> </ul>
(60	401.4	Understand the seed development technology
		which is used to increase a commercial value of
G 77	400.4	seeds.
S.Y.	402.1	Understand the principle of Mendelism.
Paper-II	400.0	Understand the linkage and crossing over process.
(402)	402.2	Understand the Mutation , chromosomal
(402)	78 00 0	aberrations and variation in chromosome number.
~//	402.2	Understand the DNA damage and repair process.
7\\	402.3	Study the concept of DNA and RNA.
,	4	• Understand the concept of gene, genetic code.
		Understand the process of protein synthesis and
	100.4	regulation of gene interaction.
5 88	402.4	Study the skill development.
~		Develop the skills related with plant nursery.
G 77	40.5	Understand the nursery manaegment techniques
S.Y.	403	Study the Mendel's law of segregation with help
Botany		of color beads.
practical Course		Prove the Mendel's law of independent
		assortment.
		Study the different method of vegetative
		propagation.
		Study the method of soil sterilization for plant
		nursery.

#### **SEMESTER V**

## **Department of Chemistry Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Chemistry** 

After the successful completion of the course students will be able to-

Paper	CO	Outcome
T.Y. Paper-I Organic	501.1	Understand the concept of organic compounds of nitrogen and amines.
Chemistry (501)	501.2	Understand heterocyclic compounds and their structure.
*//	501.3	<ul> <li>Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.</li> <li>Understand reaction and structure of organometallic compounds.</li> </ul>
X// 6	501.4	<ul> <li>To study Spectroscopy.</li> <li>To understand Electromagnetic and Infrared absorption spectroscopy</li> </ul>
T.Y. Paper-II Physical Chemistry	502.1	<ul> <li>Understand electrochemistry and various types of cells.</li> <li>Understand types of reversible electrodes.</li> </ul>
(502)	502.2	Understand quantum chemistry and molecular orbital theory.
<b>¥</b> /\ त	502.3	<ul> <li>Understand the concept of Photochemistry.</li> <li>To study Raman Spectroscopy</li> </ul>
	502.4	To understand colligative properties and macromolecules.
T.Y. Chemistry Practical Course	503	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

## **Department of Physics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Atomic	501.1	• Understand Vector atom Model, the concept of
Physics, Free		space quantization, Zeeman Effect and L-S and J-J
Electron Theory		coupling.
and Statistical	501.2	Apply free electron theory and band theory of

Physics (501)		solid to classify solids as conductor, semiconductor and insulator.
	501.3	Understand and apply Maxwell-Boltzmann statistics
	501.4	Understand and apply Bose-Einstein statistics and Fermi-Dirac statistics.
Paper 2: Quantum Mechanics, Nanomaterials and Nanotechnology (502)	502.1	• Understand the basics of quantum mechanics and apply it to explain the phenomena like black body radiation and Compton Effect.
	502.2	• Understand and apply Schrodinger's equation to free particle in a one and three dimension.
	502.3	Understand the basics of nanotechnology.
-4	502.4	Understand the synthesis and characterization techniques of nano materials.
Physics Practical (503)	503	<ul> <li>Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.</li> </ul>

## **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth Subject: Mathematics

After successful completion of three year degree program in Mathematics a Student should be able to;

Paper	CO	Outcomes
TY	501.1	Understand the concept of Fourier series
Paper-I	501.2	Understand the concept of Riemann-Stieltjes integral
501	501.3	Understand the concept of Analytics Functions
Analysis	501.4	Students learn about Mobius Transformation
TY	502.1	Students deal with the definition, properties and
Paper-II		examples of countable and uncountable sets and
502		understand the metric space
Metric spaces,	502.2	Understand the concept of Completeness, Compactness
Complex		and Connectedness
integration &	502.3	Understand the concept of Ring
Algebra		Analyze and demonstrate examples of ideals and
		quotient rings
	502.4	Understand the basic concept of Complex Integration
		Evaluate integrals along a path - directly from the
		definition and also via the Fundamental Theorem of
		Contour Integration and Cauchy's Theorem

#### **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Zoology** 

After th	e succes	ssful completion of the course students will be able to-
Paper	CO	Outcomes
T.Y.	501.1	Understand the Enzymes – Distribution and chemical nature of
Paper-I		enzymes, General properties of enzymes, Classification of enzymes,
General		Factors affecting enzyme activity
Mammalian	501.2	Understand the Structure and functions of digestive glands - (Salivary,
Physiology –		Gastric, Intestinal, Liver and Pancreas), Gastrointestinal hormones,
I		Digestion and absorption of proteins, carbohydrates and lipids,
(501)		Vitamins- Fat soluble and water soluble vitamins; Sources, deficiency
		and diseases
	501.3	Understand the Respiratory pigments - Types, distribution and
	7	properties, Mechanism of Respiration, Transport of O2 and CO2,
		Respiratory disorders and effects of smoking
-	501.4	Understand the Composition and functions of blood, Blood clotting –
	//	Intrinsic and extrinsic factors, blood groups and <i>Rh</i> factor, Cardiac
		cycle, E.C.G. and Blood pressure
T.Y.	502.1	Understand Site selection and construction ,Pre stocking and post
Paper-II	/ /	stocking manangement of nursery, rearing and stocking ponds, Breeding
Physical	/ /	of fishes by bund and Chinese hatcheries. Induced breeding by
Zoology	<i> </i> -	hypophysetion. New generation drugs in induced breeding, Brief study
(502)	10	of freshwater aquaculture system – Polyculture, cage culture, sewage fed
4	4	fish culture, integrated fish farming, Fish products and byproducts, Fish
,		preservation
\	502.2	Understand the Prawn culture and Pearl culture, Fabrication and setting
~ 1	١ .	up of aquarium and its maintenance, Breeding of aquarium fishes – Live
	1	bearers and egg layers, Diseases caused by fungi, bacteria, protozoa and
, ,		helminthes
	502.3	Understand the concept Chemical control: Insecticides - Pyrethroids,
	1 1	carbomate and HCN – mode of action, merits and demerits, Biological
	1.	control – Biological agents – predators and parasites; merits and
	. \	demerits, Crop pest: Life cycle, damage and control of Cotton spotted
	1	boll worm -Earias vitella ,Stored grain pest- Rice Weevil, Sitophilus
		oryzae, Animal pest: Life cycle, damage and control of – House fly –
	502.4	Musca nebulo, Stable fly – Stomoxys calcitrans
	502.4	Understand the Sericulture- Types of Silkworm. Life cycle and rearing
		of mulberry silkworm, <i>Bombyx mori</i> , Life cycle and rearing of non
		mulberry silkworm (Tasar), <i>Antheraea mylitta</i> ; Brief idea of coccon processing for silk fabric - coccon boiling, reeling, rereeling, winding,
		doubling, twisting and weaving, Apiculture – Types of honey bees. Life
		cycle, culture, movable frame hive, bee product and its economic
		importance, Lac culture – Lac insect, <i>Laccifer lacca</i> - Life cycle, Lac
		processing, Lac products and Economic Importance
T.Y.	503	Verify theoretical principles experimentally
Zoology	203	
Practical		Interpret the experimental data
Course		Improve analytical skills
		Correlate the theory and experiments and understand their
		importance

#### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Botany** 

Paper	СО	Outcomes
T.Y.	501.1	Understand water relation and its significance.
Paper-I		<ul> <li>Understand the Osmosis, Diffusion, Osmotic Pressure.</li> </ul>
Plant		<ul> <li>Understand the ascent of sap.</li> </ul>
physiology,		Understand the transpiration, phloem transport and mineral
Mineral		uptake.
Nutrition	501.2	Understand the photosynthesis process, photosynthetic
and	1	pigments.
Hydrophoni 4		<ul> <li>Understand the light and dark reaction of photosynthesis.</li> </ul>
cs (501)	//	<ul> <li>Understand the respiration and its mechanism.</li> </ul>
4		Understand the fermentation process.
4/	501.3	Understand the nitrogen fixation by symbiotic and Non-
/	/ 2	Symbiotic mechanism.
\ / /		Study the pant movements and photoperiodism.
*//		Study the circadian rhythms and Biological Clock.
	501.4	Understand the mineral nutrition, source and types.
/ /		Study the role and deficiency symptoms Macronutrients and
	(60	Micronutrients.
		Study the hydroponics, advantages and disadvantages of
		hydroponics.
T.Y.	502.1	<ul> <li>Understand the concept of Ecology.</li> </ul>
Paper-II		<ul> <li>Study the climatic, Edaphic and Physiographic factors.</li> </ul>
Plant	502.2	Study the ecosystem, components of Ecosystem.
Ecology and	\	<ul> <li>Understand the food chain, food web and ecological</li> </ul>
Organic Farming		pyramids.
(502)	1.1	Study the Autecology and Synecology.
(302)	502.3	<ul> <li>Understand the process of succession.</li> </ul>
~	1	Study the plant adaptations.
		Study the Biogeochemical cycles.
	502.4	<ul> <li>Develop the skills of organic farming.</li> </ul>
		Understand the methods of recycling of biodegradable
		kitchen, agriculture and industrial waste.
CD X7	=0.5	Study to prepare organic manure.
T.Y.	503	Determining the Frequency, Density, and Abundance of
Botany		community by Quadrate Method.
Practical Course		Determining the homogeneity of vegetation by Raunkier's  fraction are
Course		frequency.
		Study the frequency of herbaceous species in grassland to     compare the frequency distribution with Paulkiar's standard.
		compare the frequency distribution with Raunkier's standard frequency diagram.
		<ul> <li>Study the soil profile of different locations near by area.</li> </ul>
		· · · · · · · · · · · · · · · · · · ·
		Study the salinity of different water samples.

#### **SEMESTER VI**

## **Department of Chemistry Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Chemistry** 

After the successful completion of the course students will be able to-

Paper	CO	Outcomes
T.Y.	601.1	Understand Metal ligand bonding in Transition Metal
Paper-I		complexes.
Inorganic		Electronic spectra of Transition Metal Complexes.
Chemistry	601.2	Understand Magnetic Properties of Transition metal
(601)	001.2	Complexes.
×		To study thermodynamic and kinetic aspect of metal complexes.
V.	601.3	Understandorganometallic chemistry.
*//	/_	Understand properties and structure of metal carbonyls.
//	601.4	To study Bio-organic chemistry
$\star$ //	150	Understand the concept of s Hard and Soft acids and bases.
T.Y. Paper-II	602.1	Understand NMR Spectroscopy
Organic Chemistry	602.2	<ul><li>Understand Organic Synthesis via Enolates.</li><li>Carbohydrates: classification, reaction and</li></ul>
(602)		mechanisms.
*//	602.3	<ul> <li>Understand Amino acids, peptides and nucleic acids.</li> <li>To study Fats, oil and detergents.</li> </ul>
×//	602.4	Understand synthetic dyes, synthetic drugs, synthetic polymer.
T.Y.	603	Verify theoretical principles experimentally
Chemistry	/ /	Interpret the experimental data
Practical	- /	Improve analytical skills
Course		Correlate the theory and experiments and understand
	*	their importance
	95.2	

## **Department of Physics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1:	601.1	• Understand the postulates of the special theory of
Relativity,		relativity.
Nuclear Physics		Apply the concept of relativity to explain Length

and Bio Physics (601)		contraction, Time dilation, Velocity addition theorem, Variation of mass with velocity, Mass energy equivalence.
	601.2	Understand the concept of nuclear physics.
	601.3	Apply the concept of nuclear physics to explain various decay processes.
	601.4	Understand the Principle, Construction and working of different bio instruments.
Paper 2: Electronics, Fiber	602.1	Understand the operations and applications of operational amplifiers.
Optics, Communication and Digital	602.2	Understand the various basic structures of optical fibers and basic concept involved in propagation of light waves through optical fiber.
Electronics (602)	602.3	Understand the concept of amplitude modulation and frequency modulation.
*/	602.4	Understand various number systems.  Construct the truth tables for various logic gates.  Verify De Morgan's theorem
Physics Practical (603)	603	Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.

#### Department of Mathematics Course Outcomes (COs)

Course Name: B. Sc. Year/Semester: Third/Sixth Subject: Mathematics

After successful completion of three-year degree program in Mathematics Students should be able to;

Paper	CO	Outcomes
TY	601.1	Understand the concept of Group Automorphism
Paper-I	601.2	Understand definition and examples of vector spaces
601	601.3	Learn about algebra of linear transformation
Abstract	601.4	Find range, rank, kernel and nullity of matrix and also
Algebra		study about Inner product spaces
4		
TY	602.1	Study the Newtonian Mechanics and understand the
Paper-II		concept special theory of relativity
602	602.2	Learn the Lorentz transformation and consequences
Special Theory	602.3	Understand the concept of Tensors and Space -Time
of Relativity		structure
	602.4	Study the Mass Energy Equivalence, Energy momentum
		Tensor and Maxwell's Equation of Electromagnetic
		theory in Vacuum

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Zoology** 

	CO	Outcomess
Paper T.Y.		
	601.1	Understand the Types of neurons, E.M. structure of
Paper-I		neuron, Conduction of nerve impulse, Ultrastructure of
General		striated muscle, Sliding filament theory of muscle
Mammalian		contraction, Properties of muscles (Twitch, Tetanus,
Physiology - II		Tonus, Summation, All or None Principle, Muscle fatigue)
(601)	601.2	Understand Structure of uriniferous tubule, Mechanism of
		urine formation, Counter – current mechanism, Normal
		and abnormal constituents of urine; Elementary idea of
	44	dialysis
75	601.3	Understand the Structure and functions of pituitary gland,
		Structure and functions of thyroid and parathyroid gland,
		Structure and functions of adrenal gland, Structure and
		functions of pineal gland
4//	601.4	Understand the Oestrous and menstrual cycle, Male and
R//	1 8	female sex hormones, Causes of infertility in male and
'//	2	female, Contraceptives – Mechanical and hormonal; <i>In</i> -
. //		vitro fertilization
T.Y.	602.1	Understand the Concepts of sterilization: Filtration,
Paper-II	7	autoclaving, dry heat sterilization, wet sterilization and
Applied		radiation, Separation of biomolecules: Centrifugation
Zoology –II		(Sedimentation, density gradient); Chromatography (
(Biotechniques,		Elementary idea of thin layer, gel filtration and ion
Microtechnique,		exchange - Principles and applications), Electrophoresis:
Biotechnology,		Agarose gel electrophoresis, SDS-PAGE, Principles of
Bioinformatics		colorimeter and spectrophotometers
and	602.2	Understand the concept of Fixation, dehydration, clearing,
Biostatistics)	302.2	embedding & section cutting, Difficulties encountered
(602)	7	during section cutting (causes and remedies), Double
(002)		staining with Haematoxylin and Eosin, Histochemical
X//		staining with Haematoxymi and Boshi, Histochemical staining techniques for carbohydrates (Periodic acid
7 / /		schiff), proteins (Mercury-bromophenol blue) and lipids
		(Sudan black-B)
4	602.2	
	602.3	Understand the Basic concepts in recombinant DNA
	A	technology, Gene isolation method- Shotgun cloning,
		Isolation of gene- DNA manipulation enzymes: Nucleases,
		ligases, polymerases, Basic concepts of cloning vectors
		and splicing: Insertion of DNA and ligation using blunt
		ends, cohesive ends, Cloning vectors, Application of
	(02.4	biotechnology: Insulin and vaccine production
	602.4	Understand the Bioinformatics: Definition, Basic concepts
		in bioinformatics, importance and role of bioinformatics in
		life sciences, Bioinformatics databases- introduction, types
		of databases, Nucleotide sequence databases, Elementary
		idea of protein databases, Biostatistics – Tabulation of
		data, presentation of data, sampling errors, mean, mode,
		median, probability, standard error and standard deviation
T.Y.	603	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
L	1	± 1

Practical	Improve analytical skills
Course	<ul> <li>Correlate the theory and experiments and understand</li> </ul>
	their importance

## **Department of Botany Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Botany** 

After the successful complet	ion of th	e course students will be able to-		
Paper	CO	CO Outcomes		
Biochemistry,	601.1	Study the lipids, role of fatty acids, oils		
biotechnology		and waxes.		
And herbal technology		<ul> <li>Study the enzymes its classification and</li> </ul>		
Paper-I	C-	nomenclature.		
(601)	5T1	<ul> <li>Study the basic concepts of</li> </ul>		
4// 4	611	Enzymology.		
X// , *\	1	<ul> <li>Study the enzyme inhibitors.</li> </ul>		
1/2	601.2	Study the tissue culture techniques.		
1/10~	-37	<ul> <li>Study the process of sterilization.</li> </ul>		
*// / / / / / / / / / / / / / / / / / /		Study the preparation of culture media		
	601.3	Understand the techniques of genetic		
	123	engineering.		
100	(	Study the process of DNA library.		
KIL	1	Study the types of DNA library.		
	10	Study the Agrobacteria mediated gene		
1 1	1000	transfer.		
VII	601.4	<ul> <li>Develop the skills of herbal technology.</li> </ul>		
<b>+</b> // तमस	1	• Study the methods of Cultivation,		
. //	ų i	Harvesting,		
		Understand the technique of dye		
X-11		yielding of herbal plants.		
7	15	<ul> <li>Study the used of herbs in cosmetics.</li> </ul>		
T.Y.	602.1	Study the phytogeography, climatic		
Paper-II	-	regions of India.		
Phytogeography, Utilization		<ul> <li>Study the Environmental pollution.</li> </ul>		
of Plants, Techniques and		<ul> <li>Study the Renewable and Non</li> </ul>		
Pharmacognosy (602)		Renewable sources.		
		<ul> <li>Understand the conservation strategies.</li> </ul>		
	602.2	Study the morphology, utilization and		
		important chemicals constituents of the		
		plants.		
		• Understand the concept of Ethnobotany.		
	602.3	<ul> <li>Study the principle, types and</li> </ul>		
		application of microscope.		
		<ul> <li>Study the various techniques.</li> </ul>		
	602.4	<ul> <li>Understand synthetic dyes, synthetic</li> </ul>		
		drugs, synthetic polymer.		
		<ul> <li>Study the pharmacological plants</li> </ul>		
T.Y.	603	Find out the level of noise pollution of		

	<ul> <li>Study the morphology, utilization, and important chemical constituents of plants.</li> <li>Study the Ethnobotanical importance of plants.</li> <li>Study the different adulterants used with reference to drug adultration.</li> </ul>
×//	Digitally signed by JOBI GEORGE DN: =IN, o=PERSONAL, pseudonym=3a9890bc170242dc92330fd65 dc8f69e, 2.5.4.20=fa70301aa4dd11604cf952ca3e687 d677dd563b72fd75fc5c18d8053ff51967d, postalCode=441203, st=MAHARASHTRA, serialNumber=ebb27458cc918b4a76ebef2d 58e01e8Ceae03a94adfcced57f0000d3229eb d5, cn=JOBI GEORGE Date; 2023.01.18 14:47;16+05'30' Principal Bhiwapur Mahavidyalaya Bhiwapur, DistNagpur

**Botany Practical Course** 

different nearby area with the help of decimeter and compare it with tolerance

#### **Backward Class Youth Relief Committee's**

## Bhiwapur Mahavidyalaya, Bhiwapur

Dist - Nagpur, Maharashtra 441201

#### Criteria-2

### **Teaching- Learning and Evaluation**

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website.

**Academic Session 2020-21** 



# Programme Outcomes Course Outcomes

Academic Session2020-2021

Faculty of Bachelor of Arts,
Bachelor of Commerce & Bachelor
of Science

#### Bhiwapur Mahavidyalaya, Bhiwapur Course Outcomes and Programme Outcomes Index

#### **Bachelor of Arts**

	Bachelor of Arts			
Session	Course	Semester	Sr. No.	Subject
	B. A	First	1	English
			2	Marathi
			3	Political Science
			4	Economics
			5	English Literature
			6	Sociology
		4	7	History
	-		8	Marathi Literature
	V /		9	Ambedkar Thought
	7/	Second	10	English
	//	12	H	Marathi
		N.	12	Political Science
~/	/ /	6 .	13	Economics
. /	1 5		14	English Literature
+//		0	15	Sociology
2020-2021	10		16	History
- 11	1		17	Marathi Literature
1	(C)	- 1	18	Ambedkar Thought
		Third	19	English
11			20	Marathi
$\sim 11$			21	Political Science
+11	d	HALL	22	Economics
. \	\		23	English Literature
~/			24	Sociology
4		79	25	History
	//	10	26	Marathi Literature
	4/		27	Ambedkar Thought
		Fourth	28	English
	-		29	Marathi
			30	Political Science
		7	31	Economics
			32	English Literature
			33	Sociology
			34	History
			35	Marathi Literature
			36	Ambedkar Thought
		Fifth	37	English
			38	Marathi
			39	Political Science
			40	Economics Economics
			40	Economics

		41	English Literature
		42	Sociology
		43	History
		44	Marathi Literature
		45	Ambedkar Thought
	Sixth	46	English
		47	Marathi
		48	Political Science
		49	Economics
		50	English Literature
		51	Sociology
-		52	History
V		53	Marathi Literature
7/	/	54	Ambedkar Thought

## Bachelor of Commerce

Session	Course	Semester	Sr. No.	Subject
1	B. Com	First	¥ 1 🔼	English
<b>X</b> //	15		2	Marathi
1.1			3	Financial Accounting- I
	100	(	4	Business Organization
	4	- 1	5	Company Law
1			6	Business Economics- I
		Second	7	English
XII	7		8	Marathi
, \ \	/ (1	41	9	Statistics and Business
				Mathematics
		~	10	Business Management
	///		11	Secretarial Practice
		. 0	12	Business Economics- II
2	X-/	Third	13	English
			14	Marathi
2020-2021	~		15	Financial Accounting- II
	,		16	Business Communication
			1	and Management
			17	Business Law
			18	Monetary Economics-I
		Fourth	19	English
			20	Marathi
			21	Financial Accounting-III
			22	Skill Development
			23	Income Tax
			24	Monetary Economics-II
		Fifth	25	Financial Accounting-IV

		26	Cost Accounting
		27	Management Process
		28	Indian Economics-I
		29	Computerized Accounting
		30	Auditing
	Sixth	31	Financial Accounting-V
		32	Management Accounting
		33	Advanced Statistics
		34	Indirect Economics-II
	1	35	Human Resource
			Management
12	X /	36	Industrial Law

## Bachelor of Science (Physics, Chemistry, Mathematics, Zoology and Botany)

Session	Course	Semester	Sr. No.	Subject
\ / /	B.Sc.	First	1	English
*//	1		2	Marathi
	10	-3	3	Chemistry I & II
. //	J	(1-10)	4	Physics I & II
4	G-		5	Mathematics I & II
		10	6	Zoology I & II
2020-2021		700	7	Botany I & II
$\times$	_	Second	8	English
7\	( 4+	सा म	9	Marathi
			10	Chemistry I & II
~ \		~	11	Physics I & II
	///	13	12	Mathematics I & II
		. 07	13	Zoology I & II
2	* / '		14	Botany I & II
		Third	15	Chemistry I & II
	*		16	Physics I & II
	<i>y</i> .		17	Mathematics I & II
			18	Zoology I & II
			19	Botany I & II
		Fourth	20	Chemistry I & II
			21	Physics I & II
			22	Mathematics I & II
			23	Zoology I & II
			24	Botany I & II
		Fifth	25	Chemistry I & II
			26	Physics I & II

	27	Mathematics I & II
	28	Zoology I & II
	29	Botany I & II
Sixth	30	Chemistry I & II
	31	Physics I & II
	32	Mathematics I & II
	33	Zoology I & II
	34	Botany I & II

#### **Bachelor of Arts**

#### Semester - I

#### Department of English Compulsory English

#### **Course Objectives**

- To develop interest in the English language through interesting lessons.
- To understand the lives of successful entrepreneurs through life sketches.
- To understand and apply rules of grammar with the help of the prescribed grammar syllabus.
- To motivate themselves by reading and understanding the lives of great personalities.

#### **Course Outcomes**

- Developed interest in English language through interesting lessons.
- Understood the lives of successful entrepreneurs through life sketches.
- Appreciated poetry through prescribed poems.
- Applied rules of grammar with the help of prescribed grammar syllabus.
- Motivated themselves by reading and understanding the lives of great personalities.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi ;साहित्यरंग.भाग–1

#### Unit I:

प्रकरण —1.उदिष्ठ— 'पाखाला बाळक पांगुरवणे' या लीळेतील मराठी भाषेची ओळख व जाणीव विद्यार्थ्यांना करुण देणे. साध्य— विद्यार्थ्यांना लीळाचरित्रातील गद्य मराठी भाषेची ओळख व माहिती मिळाली.

प्रकरण —2.उदिष्ठ—शिक्षण पाठातूनमहात्मा फुले यांनी भारतातील शिक्षणाच्या केलेल्या पुरस्काराची माहिती देणे साध्य—भारतातील बहुजनसमाजाच्या शिक्षणाची महात्मा फुलेंनी सांगितलेली उद्दीष्टे कशी महत्वाची व उपयोगी आहेत याचे मर्म विद्यार्थ्यांना कळून आले.

प्रकरण —3. उदि्ष्ठ—स्वामी विवेकानंदानी सांगीतलेल्या व्यक्तिमत्व विकासाविषयी विद्यार्थ्यांना बोध करणे साध्य—सामर्थ्य हेच जीवन व दुर्बलता हाच मृत्यु यास्वामी विवेकानंदानी युवकांसाठी केलेले मार्गदर्शनाची जाणीव विद्यार्थ्यांनाझाली.

प्रकरण —4.उद्षिष्ठ—राष्ट्रसंत तुकडोजी महाराज यांनी सांगितलेल्या सृष्टीच्या कायदयाची व परिवर्तनाची माहिती विद्यार्थ्यांना देणे

- साध्य—'बदला किंवा मरा' हा सृष्टीचाकायदा आहे व परिवर्तन हे जीवंतपणाचे लक्षण आहे याची साक्ष विद्यार्थ्यांना पटली
- प्रकरण —5.उदिष्ठ—कोंकराची कथेतून गोखलेंनी लष्करातून पळून आलेल्या शिवरामच्या जीवनाचे चित्रण करणे. साध्य—लष्करी पेशातील कडक शिस्तीची माहिती शिवरामच्या व्यक्तिमत्वातून विद्यार्थ्यांनाझाली.

#### Unit II:

- कविता— 1.उदिष्ठ—मुकुंदराजानी माय मराठी भाषेचे सांगितलेली महत्व व वैशिष्टयांची ओळखविद्यार्थ्यांना करुण देणे साध्य—माय मराठी कवितेतून मराठी भाषेचे महत्व व मराठीची वैशिष्टये विद्यार्थ्यांना समजून आली.
- कविता—2. उदिष्ठ— संत ज्ञानेश्वरांनी सांगीतलेल्या अभंगातून विरहीणीचे महत्व विद्यार्थ्यांना पटवून देणे.
- साध्य— घनु वाजे घुणघुणा व पैल तो गे काऊ कोकताहे या अभंगातून भक्ताची भगवंताशी एकरूप होण्याची ओढ व तळमळीची जाणीव विद्यार्थ्यांना झाली.
- कविता— 3.उदिष्ठ—दंवाचे थेंब कवितेततून केशवसुतांनी रेखाटलेल्या निसर्गातील घटनांचे वर्णन विद्यार्थ्याना करुन सांगणे.
- साध्य— आई व मुलगा यांच्यातील संवादातून निसर्गातील विभिन्न घटनांविषयीचे कुतूहल याची माहिती विद्यार्थ्याना झाली.
- कविता— 4.उदिष्ठ—भंगू दे काठिन्य माझें कवितेतून परमेश्वराशी जवळीक साधण्याची कविच्या ईच्छेची विद्यार्थ्यांना जाणीव करून देणे.
  - साध्य—बा. सी. मर्ढेकरांनी परमेश्वराशी जवळीक साधण्यासाठी स्वतःच्या मर्यादा व उणिवांतून मुक्त होण्यासाठी परमेश्वराशी घातलेल्या संवादाची माहिती विद्यार्थ्यांना मिळाली
- किवता— 5.उदिष्ठ—चार शब्द कवितेतून कविने व्यक्त केलेल्या अपेक्षित परिवर्तनाची जाणीव विद्यार्थ्यांना करुन देणे. साध्य—नारायण सुर्वे यांनी कष्टकरी,कामकरींच्या स्वाभीमानातून परिवर्तन घडून येईल याची माहिती विद्यार्थ्यांना मिळाली.

#### **Unit III:**

- प्रकरण 1.उदिष्ठ— व्यावहारिक मराठीची आवश्यकता जीवन व्यवहारासाठी का आहे याची यथार्थता विद्यार्थ्यांना पटविणे.
- साध्य—जीवन व्यवहारात व्यावहारिक मराठीची उपयुक्तता असल्याचे विद्यार्थ्यांना कळले तसेच अनेक व्यवहार क्षेत्रात व्यावहारिक मराठीची उपयुक्तता असल्याचे स्पष्ट झाले.
- प्रकरण 2. उदिष्ठ-भाषिक संवाद व्यवहाराच्या मूलतत्वांची ओळख व माहिती विद्यार्थ्यांना करुन देणे.
- साध्य—भाषा हे संवादाचे माध्यम असून लेखन, वाचन , श्रवण व भाषण यातून भाषेचा संवाद व्यवहार चालतो हे कळले सोबतच भाषिक संवाद व्यवहाराच्या विविध मुलतत्वाची ओळख विद्यार्थ्यांना झाली.

#### Department of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

The Students will able;

- To understand the basic concept and ideolthe ogical orientations of political science discipline.
- To understand the processes and dynamics of Indian government and politics
- To understand the contribution of the main traditions of Indian Political Thought.
- To understand the contribution of the main traditions of Western Political Thinkers to Political Thought

#### **Course Outcomes**

 Familiarized with the basic concepts and ideological orientations of political science discipline.

- Exposed to the processes and dynamics of Indian government and politics
- Made to understand the contribution of the main traditions of Indian Political Thought.
- Made to understand the contribution of the main traditions of Western Political thinkers to political thought.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

#### Unit – I

- Objective To develop preliminary knowledge of Economic concepts for the understanding of Economics Nature, Definition, and Method of Economics Analysis.
- Outcome Students learned preliminary knowledge of Economic concepts and definitions.

#### Unit – II

- Objective To provide an orderly and objective way of thinking about Economic Demand & Supply Theory.
- Outcome- The students learned about the knowledge of Demand and Supply.

#### Unit – III

- Objective- To gain knowledge about Consumer Behavior Utility Analysis.
- Outcome- The Students gained the knowledge of Consumer Behavior and Utility Analysis

#### Unit - IV

- Objective –To explain core Economics- various factors of production.
- Outcome Students learnt about the production function.

#### Department of English Course Objectives and Course Outcomes

#### **English Literature**

#### **Course Objectives**

- To understand familiar with characteristic literary texts within a given historical, geographical, and socio- cultural context.
- To apply analytical skills to literary and cultural texts of multiple genres.
- To identify, and describe the values, and themes present in the prescribed text.
- To identify ideas, values, and themes which had made an impact on the sociocultural ethos of the society in the past and in the contemporary society.

#### **Course Outcomes**

- Students should be familiar with characteristic literary texts within a given historical, geographical, and socio-cultural context.
- Students should be able to apply analytical skills to literary and cultural texts of multiple genres.
- Students should be able to identify, and describe the values, and themes present in the prescribed text.

Students should be able to identify ideas, values, and themes which had made an impact on the socio- cultural ethos of the society in the past and in the contemporary society.

#### **Department of Sociology**

#### **Course Objectives and Course Outcomes**

#### Introduction

#### **Unit - I Understanding Sociology**

**Objective -** To make students know in detail about Understanding Sociology.

**Outcome -** Students understood the concept of Understanding Sociology.

#### Unit – II Basic Concepts in Sociology

Objective - To Make Students Aware of Basic Concepts in Sociology.

Outcome -Students understood the concept of Basic Concepts in Sociology.

#### **Unit - III Socialization**

**Objective** - To Make Students Aware of Socialization.

Outcome - Students understood the concept of Socialization.

#### Unit – IV Social Structure

Objective - To make the students know in detail about Social Structure.

Outcome - Student understood the concept of Social Structure.

#### **Department of History**

#### **Course Objectives and Course Outcomes**

After successful completion of three-year Degree Programme in History a student should be able to know;

#### **Programme Outcomes**

- ➤ PO1: History has an unprecedented significance in human life.
- > PO2: The study of history preserves culture.
- ➤ PO3: The study of history leads to Socio-Political awareness.
- > PO4: Learn about world events.
- ➤ PO5: The study of History is important for competitive examination.
- ➤ PO6: Conversational skills come and understand the importance of human society.

#### **Course Objectives**

- To know the importance of culture gives you the ability to make decisions in yourself.
- To gain the ability to make decisions while living life.
- To gain employment opportunities through competitive examinations.
- To acquire moral values, devotional movement and Sufi sect.

#### **Course Outcomes**

- Knew the importance of culture gives you the ability to make decisions in yourself
- Gained the ability to make decisions while living life
- Received employment opportunities through competitive examinations.
   Acquired moral values, devotional movement and Sufi sect

#### **Department of Marathi**

#### **Course Objectives and Course Outcomes**

#### MarathiLiterature

Unit I: माझी जन्मठेप-. वि.दा. सावरकर (आत्मचरित्र)-

उदिष्ठ— स्वातंत्र्यविर वि.दा. सावरकर यांची भारतीय स्वातंत्र्यातील भूमिका व सावरकरांचे व्यक्तिमत्व समजावून सांगणे. साध्य— स्वातंत्र्यविर सावरकरांची स्वातंत्र्यप्रेरीत भूमिका व योंगदान तसेच त्यांचे व्यक्तिमत्व याची सत्यता विद्यार्थ्यांना समजली.

#### Unit II:

प्रतिभा साधन- ना.सी. फडके

उदि्ष्ठ— साहित्याची अभिरुची व साहित्याची निर्मितीची ओळख व माहिती विद्यार्थ्यांना देणे. साध्य—साहित्य प्रकार, अभिरुची व निर्मिती व रसास्वाद याबध्दल विद्यार्थ्यांना माहिती झाली

## Semester-II Department of English Course Objectives and Course Outcomes Compulsory English

#### **Course Objectives**

- To study lessons based on the themes of humor, emotional bonding, ethics and values.
- To motivate themselves even in adverse situations by reading successful people's life sketches.
- To prioritize life's needs over wants.
- To apply grammar lessons to spoken English.
- Grasp the nuances of learning a foreign language.

#### **Course Outcomes**

- Studied lessons based on the themes of humor, emotional bonding, ethics and values.
- Motivated themselves even in adverse situations through reading their lives.
- Applied grammar lessons to spoken English.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi (साहित्यरंग.भाग–1)

#### Unit I:

- प्रकरण ६.उद्ष्टि–भारतीय लोकशाहीचे भवितव्य काय? या पाठाच्या आधारे लोकशाहीची माहिती करुन देणे.
- साध्य— डॉ. बाबासाहेब आंबेडकर यांनी भारतीय लोकशाही आणि जातीव्यवस्थेसंबंधी बहाल केलेल्या विचारांची विद्यार्थ्यांना ओळख पटली व माहिती मिळाली.
- प्रकरण 7.उदिष्ठ— गाडगेबाबांनी लेखिकेला दाखविलेल्या शाळेचा मार्ग व ज्ञानाचा प्रकाशाची रूजवणूक करणे. साध्य—सीमा साखरेंचे व्यक्तिमत्व घडण्यासाठी कर्मयोगी गाडगेबाबांनी दाखविलेला शाळेचा मार्ग व ज्ञानाचा प्रकाश कसा उपयुक्त ठरला याची महती विद्यार्थ्यांना पटली.
- प्रकरण 8.उदिष्ठ—भारतरत्न अटलबिहारी वाजपेयी यांच्या व्यक्तिमत्वाची ओळख विद्यार्थ्यांना करुन देणे. साध्य—अजातशत्रू अटलजी यांच्या आगळया वेगळया व्यक्तिचित्रणाची शरद पवार यांनी करुन दिलेली ओळख माहिती विद्यार्थ्यांना झाली.
- प्रकरण —9.उदिष्ठ—जात चोरीच्या आपत्तीमुळे कोणते संकटे येतात याची जाणीव विद्यार्थ्यांना करून देणे. साध्य—बाबुराव बागुल यांनी आपली अस्पृष्य महार ही जात लपविल्यामुळे त्यांना आलेला अनूभवाचे वर्णन विद्यार्थ्यांना समजुन आले.
- प्रकरण —10.उद्षिष्ठ— पुर्णिया या बिहार राज्यातील मागसलेल्या जिल्हयातील लोकांच्या दुःखी कष्टी जीवनाची माहिती विद्यार्थ्यांना देणे.
- साध्य— अनिल अवचट यांनी पूर्णियामधून रेखाटलेले स्यांचे बदिस्त जीवन, शाळा, नोक-यांचा प्रश्न, राजकीय परिस्थिती, मजूरांचे हलाकीचे जीवन, उपासमारी इ.ची माहिती विद्यार्थ्यांना मिळाली.

#### Unit II:

कविता— ६.उदिष्ठ—मुक्त पक्षी या कवितेतू पिंजऱ्यातील पक्षी स्वातंत्र का नाकारतो याचीमाहिती देणे. साध्य— गलामीची सवय जडल्यामले पक्षी पिंज्यातन मक्त केल्यावरही स्वातंत्र नाकारतो याची चान विद्याथ्य

साध्य— गुलामीची सवय जडल्यामुळे पक्षी पिंज्ऱ्यातून मुक्त केल्यावरही स्वातंत्र नाकारतो याची ज्ञान विद्यार्थ्यांना प्राप्त झाले.

कविता –7.उदि्ष्ठ– जीवन मरणाबध्दल बहिणाबाईंनी केलेल्या चिंतनाची सार्थकता पटवून देण.

साध्य— जन्ममृत्यु विषयी कवयित्रीने कवितेत प्रगट केलेले विचार मानवी जीवनाची सार्थकता पटवून देतात याची विद्यार्थ्यांना खात्री पटली.

कविता- ८.उदिष्ठ-राष्ट्रसंतांना गरीबाच्या झोपडीमधील सुखाची माहिती विद्यार्थ्यांना देणे

साध्य— महालातील सुखापेक्षा लहानषा झोपडीतील सुख हे महान असल्याची प्रचिती कवितेच्या भावार्थावरुन विद्यार्थ्यांना आली.

कविता— 9.उदिष्ठ—माणसाच्या मनातील मोठेपना नाहिसा होण्याची कविची इष्वराकडे केलेली मागणीचे ज्ञान विद्याथ्याना देणे.

साध्य—कविने आपल्या जीभेवरचा लोभ जळू देण्यासाठी व मी पणाचे साम्राज्य नाहीसे होण्याची कविची भावना विद्यार्थ्यांना समजली.

कविता— 10.उदिष्ठ—कुसुमाग्रजांच्या कवितेतून मानवी सामर्थ्य निसर्गावर कसे मात करते याची ओळख विद्यार्थ्यांना करून देणं.

साध्य—कवितेतील नायकाचा गंगा नदीच्या पुरामुळे संसार उघ्वस्त होऊनही सराच्या आर्षिवादाची थाप मागणारा नायक प्रतिकूल परिस्थितीवर मात करुन संसार उभा करतो याची विद्यार्थ्यांना प्रेरणा मिळाली.

#### Unit III:

प्रकरण — 3.उदिष्ठ— पत्रलेखनाचे स्वरुप, पत्राचे प्रकार, पत्रलेखाचे घटक, वैषिष्टये व पत्राचा नमूना विद्यार्थ्याना समजावून देणे.

साध्य— विद्यार्थ्यांना पत्राचे स्रुप कसे असते ,घटक कोणते, खजगी पत्रे व कार्यालयीन पत्रे कषी लिहावीत याचे कौषल्य व ज्ञान प्राप्त झाले.

प्रकरण — 4.उदि्ष्ठ—सारांषलेखन कसे करावे व सारांष लेखन करतांना कोणती काळजी घ्यावी व सारांषलेखनाचे फायदे याविषयी विद्यार्थ्यांना माहिती देणे.

साध्य— विद्यार्थ्यांना सारांषलेखन करण्याची माहिती मिळाली तसेच दिलेल्या सारांषाचे एक तृतियांष लेखन करण्याचे कौषल्य प्राप्त होऊन सारांषलेखनाचे फायदे समजले.

#### Department of Political Science Course Objectives and Course Outcomes

#### **Course objectives**

- To understand the processes and dynamics of the Indian government and politics.
- To understand the contribution of the main traditions of Indian Political Thought.
- To understand the contribution of the main traditions of Western Political Thinkers to Political Thought.

#### **Course Outcomes**

- Familiarized with the basic concepts and ideological orientations of the Political Science discipline.
- Exposed to the processes and dynamics of Indian government and politics.
- Made to understand the contribution of the main traditions of Indian Political Thought.
- Made to understand the contribution of the main traditions of Western Political thinkers to Political thought.

## Department of Economics Course Objectives and Course Outcomes Micro Economics Theory -II

Unit – I: Cost and Revenue Analysis Cost of Production:

**Objective-** To explain the Kinds of Cost and Revenue Analysis Cost of Production

Outcome – Explained theknowledge of Cost and Revenue Analysis.

Unit – II: Market Structure and Perfect Competition Market

**Objective-** To explain major types of market Structure and Identify Characteristics of Perfect Competition.

**Outcome** —Received assignments from the students those are coherent, organized, concise, grammatically correct and well-presented.

Unit – III: Monopoly and Imperfect Competition Market

**Objective-** To identify and discuss the key concepts of Monopoly and Imperfect Competition Market.

Outcome —Identified economic theory in the Monopoly and Imperfect Competition

Unit – IV: Factors Pricing and Statistics for Economics Factors Pricing:

**Objective-** To explain the contribution of Factors of production.

**Outcome** – Students learned about the factor of production.

### **English Literature Course Outcomes**

- CO6 Students will be familiar with literary texts in a given historical, geographical and cultural context
- CO7- Students should be able to apply critical theories to the reading of multiple genres of literature
- CO8- Students should be able to identify, and analyze the critical ideas and themes
- CO9- Students should be able to write analytically with the help of language competencies
- CO10- Students should be able to imbibe, ethical, moral, and cultural values

## Department of Sociology Course Objectives and Course Outcomes Themes and Perspectives

#### **Themes and Perspectives**

#### **Unit - I** Culture and Society

Objective - To Make the students know in detail about culture and society

Outcome - Students understood the concept of culture and society.

#### **Unit - II Social Deviation and Social Control**

Objective – To make the students aware of social deviation and social control.

Outcome – Students understood the concept of social deviation and social control.

#### **Unit - III Social Stratification and Social Mobility**

**Objective -** To Make Students know in detail about Social Stratification and Social Mobility.

Outcome – Students understood in detail about SocialStratification and Social Mobility.

#### **Unit - IV Concept of Gender**

Objective - To make students aware of concept of gender.

Outcome -Student understood the concept of concept of gender.

### Department of History Course Objectives and Course Outcomes

- 1) How Mughal power was established in India.
- 2) How was the administration of Sher shah Suri
- 3) Mughal carpet administration

- 4) Information aboutChhatrapati Shivaji and Mughal relationship
- 5) Why and why Panipat III

#### **Course Objectives**

- Tounderstand how the Mughal power was established in India.
- To learn information about Sher Shah Suri and the Mughal administration.
- To get information about Chhatrapati Shivaji and Mughal relationship war took place.
- To understand the Panipat Third War and the arrival of the British.

#### **Course Outcomes**

- Understood how the Mughal power was established in India.
- Learned information about Sher Shah Suri and the Mughal administration.
- Student got information about Chhatrapati Shivaji and Mughal relationship war took place.
- Understood the Panipat Third War and the arrival of the British.

#### Department of Marathi Marathi Literature Course Objectives and Course Outcomes

#### Unit I:

नटसम्राट-वि. वा. षिरवाडकर (नाटक)-

उदिष्ठ— नटसम्राट या नाटकातून मानवी जीवनातील कौटुंबिक,सामाजिक व नटस्रूाट अप्पासाहेब बेलवणकर यांचे संघर्षप्रवण जीवनाची माहिती विद्यार्थ्यांना देणे.

साध्य— वि. वा. षिरवाडकरांनी नटसम्राट नाटकात रेखाटलेल्या अप्पासाहेब बेलवणकरांच्या व्यक्तिमत्वाच्या आधरे मानवी जीवनाची षोकांतिका विद्यार्थ्यांना कळली.

#### Unit II:

साहित्यप्रकार-कादंबरी, चरित्र,आत्मचरित्र.

उद्ष्टि— कादंबरी, चरित्र,आत्मचरित्र.या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना देणे. साध्य— कादंबरी, चरित्र,आत्मचरित्र.या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना झाली.

#### B.A. Part -II Semester-III

#### **Course Objectives and Course Outcomes**

#### Department of English Compulsory English

**Unit I: Objective-**Making students aware of the importance of Honesty.

**Outcome-**Students tried to examine and applied through the various activities carried out in the class.

**Unit II: Objective-** Making students realize the beauties of nature and sublime.

**Outcome-**Students tried to apply the values of nature and the sublime.

**Unit III: Objective-** Making students understand the social evils of society and the values of Humanity.

Outcome-Students were exposed to the social evils of society through discussion.

Unit IV: Objective-Grammatically correct usage of Narration and Punctuation.

Outcome-Students solved the examples of Narration and Punctuation.

**Unit V: Objective-**To create the ability to use English for the purpose of communication.

Outcome-Students attempted to use English for the purpose of communication in the Class.

## Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi साहित्य संवाद भाग.2

#### Unit I:

प्रकरण –1.उदिष्ठ– तेराव्या षतकातील दृष्टांतपाठातील गद्य भाषाषैली, श्रीचक्रधरस्वामीचे चरित्र, महानूभाव पंथा विषयी माहिती देणे.

साध्य— दृष्टांतपाठातील गद्य भाषाषैली, श्रीचक्रधरस्वामीचे चरित्र, महानूभाव पंथाचे समाजाला दिलेले योगदान विद्यार्थ्यांना समजून आले.

प्रकरण –2.उदिष्ठं–स्त्री पुरुष तुलना या पाठातून ताराबाई षिंदे हीने पारतंत्र्यांच्या काळात स्त्रियांच्या निषबी येणाऱ्या दुर्गुणांची जाणीव करुन देणे.

साध्य- सर्व प्रकारचे दुर्गुण स्त्रियांत्च असतात या पुरुषांच्या पूर्वग्रहदूषित विचारांची विद्यार्थ्याना माहिती प्राप्त झाली.

प्रकरण –3. उदिष्ठ–यपस्वी वक्ता होण्यासाठी प्र.के.अत्रे यांनी सांगीतलेला अनूभव विद्यार्थ्यांना सांगणे.

साध्य- विद्यार्थ्यांनी यषस्वी वक्ता होण्यासाठी अव्याच्या अनुभवाचा बोध घेतला.

प्रकरण -4.उदिष्ठ-पंढरपूर व विठ्ठलाचे दर्षनाची माहिती विद्यार्थ्यांना करुन देणे.

साध्य – पंढरपूर व पांड्रगाचे संपूर्ण वर्णन तेथील भैगोलिक परिस्थितीची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण -5.उदिष्ठ-राष्ट्रसंताच्या मते षिक्षक हाच राष्ट्राचा भाग्यविधाता असल्याची खात्री विद्यार्थ्यांना करुन देणे.

साध्य- षिक्षकाचे विद्यार्थी, समाजाप्रती केलेल्या संपूर्ण कार्याची व षैक्षणिक कार्याची जाणीव विद्यार्थ्यांना कळली-

#### Unit II:

कविता—1.उदिष्ठ—संत नामदेवांनी श्रीविठ्ठलाचे वर्णन, विठ्ठलभिक्तचे व नामरमरणाचेमहात्म्य विद्यार्थ्यांना सांगणे. साध्य—अभंगााच्या निॅपनातून विठ्ठलाच्या अनंत लावण्याची षोभा, विठ्ठलभिक्तचे व नामरमरणाचे महात्म्य विद्यार्थ्यांना कळले.

कविता-2.उदिष्ट- मारोपंतानी सत्संगतीचा वर्णन केलेला महिमा सांगणे.

साध्य- सत्संगतीत समाजजिवनाला उदबोधन करण्याचे सामर्थ्य आहे याची विद्यार्थ्यांना माहिती मिळाली.

कविता-3.उदिष्ठ-भला जन्म हा तुला लाभला यातून राम जोषींनी सांगीतलेल्या मानवी जीवनाचे सार्थकत्व पटविणे.

साध्य- उपदेषपर लावणीतुन मानवी जीवनाची सार्थकता विद्यार्थ्यांना पटली.

कविता-४.उदिष्ठ-षेतकरी-कष्टकऱ्यांची जीवनगाथा व परीस्थितीचे वर्णन करणे.

साध्य-विद्यार्थी ग्रामीण भागातला असन षेतकऱ्यांच्या परीरिथतीची जाणीव झाली.

कविता- 5.उदिष्ठ- कवी अनिलांच्या विराणीतून कवी मनाच्या उदासीनतेचे दर्षन घडविणे.

साध्य-कविला लाभलेल्या दुःखामुळे कविच्या मनाला उदासिनता प्राप्त झाली याची विद्यार्थ्यांना प्रचिती आली-

#### Unit III:

प्रकरण — 1.उदिष्ठ—इतिवृत्त लेखन, प्रकार,पध्दती व लेखनाची काळजी याविषयी विद्यार्थ्यांना माहिती देणे.

साध्य – इतिवृत्तं म्हणजे सभेची नोंद, प्रकार पध्दती व लेखन करतांना घ्यावयाची काळजी याची विद्यार्थ्यांना माहिती मिळाली.

प्रकरण — २.उदिष्ठ—प्रसारमाध्यमे आणि वृत्तलेखन याविषयी विद्यार्थ्यांना माहितीचे विष्लेषण करणे.

साध्य—दृक श्राव्य प्रसारमाध्यमांच्याव्दारे बातमी, बातमीचे लेखनव वृत्तपत्रीय लेखन कसे केले जाते याची माहिती विद्यार्थ्यांना झाली.

## Department Of Political Science Course Objectives and Course Outcomes

## **Course Objectives**

- To explain the vital contemporary emerging issues of center-state relations, political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts, etc.
- To understand the strengths and weakness of Indian political processes, both in terms
  of their effectiveness in responding to public policy needs.
- To understand the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions
- To understand the basic concept and issues concerning human rights and challenges.

#### **Course Outcomes**

- Familiarized with the vital contemporary emerging issues of center-state relations, political parties, the emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts, etc.
- Analyzed the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs and retaining constitutional protections.
- Understood the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions.
- Acquainted with a basic understanding of concepts and issues concerning the Right to Information Act, Human Rights, and Challenges.

## Department of Economic Course Objectives and Course Outcomes

## **Unit – I Introduction to Macro Economics**

**Objective** – To discuss the Introduction of Macro Economics.

**Outcomes** – Students understand the concept of Macro Economics.

Unit – II **National Income** 

**Objective** – To explain the concept of National income.

**Outcome** – Students understood the various concept of National income.

Unit – III Money and Value of Money

**Objective** – To evaluate the value of money and theories of the Value of Money.

**Outcome** – Students learned the theories of Value of Money.

**Unit – IV Output and Employment** 

**Objective** – To introduce the theory of Employment.

Outcome- Students learnt thetheory of Employment.

## Dept. of English Course Objectives and Course Outcomes English Literature

Unit I: Objective-Making students conscious of the various issues of the Indian society.

Outcome-Students attempted to understand the various issues of the Indian society

Unit II: Objective- Making students realize revolution and its effects.

Outcome-Students realized equality, revolution and its effects.

Unit III: Objective- Making students understand the biography, autobiography and Criticism

Outcome- Students understood the biography, autobiography and Criticism.

Unit IV: Objective-Making students understand the Literary Terms.

Outcome-Students understood the Literary Terms and their usage

## Department of Sociology Course Objectives and Course Outcomes

## **Foundations of Social Thought**

- Unit I Emergence of Sociology as a Discipline
- **Objective** To Make the students know in detail about the emergence of sociology as a discipline.
- Outcome Students understood the concept of the emergence of sociology as a discipline Unit II Founders of Sociology I
- **Objective** Students understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer,)
- Outcome Students understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer)
  - Unit III Founders of Sociology II
- **Objective** Students understood the concept of Founders of Sociology-II (Charles of Horton Cooley, Emile Durkheim)
- Outcome Students understood the concept of Founders of Sociology-II(Charles of Horton Cooley, Emile Durkheim)
  - Unit IV Founders of Sociology III
- **Objective** Students understood the concept of Founders of Sociology-III ( Karl Marx, Max Weber)
- Outcome -Students understood the concept of Founders of Sociology-II( Karl Marx, Max Weber)

#### **Department of History**

#### **Course Objectives and Course Outcomes**

## **Course Objectives**

- To study Battle of Buxar and English policy.
- To understand Kayamdhara Methods, Ryotwari, and Lord Wellesley.
- To understand the uprising of 1857 (independent war) results.
- To understand how did nationalism emerge in India?

#### **Course Outcomes**

- Studied the Battle of Buxar and how the British implemented their policy in India
- Gained information about working methods, Kaymdhara, ryotwari and Mahalwari and Lord Wellesley deployment forces.
- The uprising of 1857 (independent war) result was known
- Learned how Nationalism emerged in India

## Department of Marathi Marathi Literature Course Objectives and Course Outcomes

Unit Iक उदिष्ठ—कुसुमाग्रजाच्या रसयात्रा कविता संग्रहाच्या आधारे विविध प्रकारच्या कवितांची ओळख व माहिती विद्यार्थ्यांना देणे.

साध्य—कुसुमाग्रजांच्या कवितासंग्रहातून सामाजिक कविता,राजकीय, राष्ट्रीय कविता, प्रेम कविता,निसर्ग कविता व तत्वज्ञानपर कवितांची माहिती विद्यार्थ्यांना झाली.

#### **Unit II:**

उदिष्ठ—काव्यषास्त्र परिचय यातून काव्यकारण व षब्दषक्ती याविषयी विद्यार्थ्यांना माहिती देणे. साध्य—विद्यार्थ्यांना काव्य निर्मितीचे कारण व षब्दाच्या अभिदा, व्यंजना व लक्षणा या षब्दषक्तीची माहिती प्राप्त झाली.

## **Semester-IV**

## Department of English Course Objectives and Course Outcomes Compulsory English

Unit I: Objective-Making students aware of the importance of faith and friendship

Outcome-Students understood the value of friendship.

Unit II: Objective- Making students realize about discipline and struggle.

**Outcome-**Students tried to apply the discipline and struggle in their lives.

**Unit III: Objective-** Making students understand the presence of the mind.

**Outcome-** Students were put through various activities to get the feel ofit.

Unit IV: Objective-Grammatically correct usage of Tense and Voice.

Outcome-Students tried to solve the examples of Tense and Voice.

**Unit V: Objective-**To create the ability to use English for the purpose of communication.

**Outcome-**Students attempted to use English for the purpose of communication in the Class.

-Students attempted to use English for the purpose of communication in the Class.

## Department of Marathi Course Objectives and Course Outcomes

## Compulsory Marathi साहित्यरंग.भाग.2

#### Unit I:

प्रकरण — 1.उदिष्ठ—आज्ञापत्राच्या आधारे राजकर्तव्ये पाठातून षिवछत्रपतींच्या कतबगारिचा बोध विद्यार्थ्यांना करुन देणे. साध्य— राजकर्तव्ये पाठातील षिवाजींच्या कार्यकर्तृत्वाची विद्यार्थ्यांनी जाणिव झाली व विद्याथ्यांनी बोध घेतला.

प्रकरण —2.उदिष्ठ—स्वराज्य व सुराज्य पाठातून लोकमान्य टिळकांच्या भारतीय स्वातंत्र्यासंबंधी योगदानाची विद्यार्थ्यांना माहिती करुन देणे.

साध्य– भारतीय स्वातंत्र्यात लोकमान्य टिळकांच्या व्यक्तिचित्रणातून निर्भयता, निःस्पृहता, ज्वलंत देषभक्ती या गुणांचा प्रत्यय विद्यार्थ्यांना आला.

प्रकरण — 3.उदिष्ठ— माध्यान्ह या पाठातील कुसुमावती देषपांडे यांचे माध्यान्हीच्या वेळेतील अनुभव विद्यार्थ्यांना सांगणे. साध्य— माध्यान्हीच्या वेळेतील समतोलपणा, गंभीरता, अभिजात सौंदर्य व बानंद या गुणांची जाणीव विद्यार्थ्यांना झाली.

प्रकरण -4.उदि्ष्ट-अव्दैताचा साक्षात्कार यातून साने गरूजींच्या संदेषाची विद्यार्थ्यांमध्ये रुजवणूक करणे.

साध्य- साने गुरूजींच्या' अव्देत भारतीय संस्कृतीचा आत्मा आहे, या तत्वाची विद्यार्थ्यांना जाणीव झाली.

प्रकरण —5.उदिष्ठ— आधार या कथेतून वि.सं. जोग यांनी रेखाटलेल्या भाऊकाकांची षोकांतिका विद्यार्थ्यांना सांगणे.

साध्य-ओंकारी, अधम संस्कृतीत वावरणाऱ्या भाऊकाकांच्या षोकांतिकेचा विद्यार्थ्यांनी बोध घेतला-

#### Unit II:

कविता— 1.उदिष्ठ— अभंगवाणीतून संत चोखमेळाकालीन सामाजिक विशमता व अन्यायकारक वागणूकीची माहिती देणे. साध्य—तेराव्या षतकातील सामाजिक परिस्थिती रूढी परंपरांची माहिती चोखामेळाच्या अभंगातून विद्यार्थ्यांना समजून आली

कविता —2.उदिष्ठ—क्रांतीचा जयजयकार कवितेतून भारताच्या स्वातंत्र्यासाठी क्रांतीकारकांनी दिलेल्या योगदानाची माहिती सांगणे.

साध्य—कुसुमाग्रजांनी व्यक्त केलेली क्रांतीकारकांच्या मनातील स्वातंत्र्यासंबंधी देषभक्तीची जाणीव विद्यार्थ्यांना झाली. कविता— 3.उदिष्ठ—सत्य या संकल्पनेचे स्वरुप सत्याच्या जातीला कवितेतून विद्यार्थ्यांना सांगणे.

साध्य-षरच्चंद्र मुकितबोध यांच्या कवितेतून संघर्शषील वृत्ती आणि विपरीत स्थितीतील उतुंग आषावाद याची माहिती विद्यार्थ्यांना मिळाली.

कविता— ४.उदिष्ठ— रातझडीचा पाऊस कवितेतून षेतातल्या निसर्गाषी कविच्या वृत्ती तादात्म्य पावण्याची साक्ष पटविणे. साध्य— प्रेमासक्त आणि निसर्गासक्त अषा दोन रुपांची सायुज्यता व पाऊसाची विद्यार्थ्यांना साक्ष पटली.

कविता— 5.उदिष्ठ—माझ्या कवितेची चव कवितेतून कविच्या काव्यनिर्मितीचे प्रयोजन विद्यार्थ्यांना सांगणे.

साध्य- इंद्रजित भालेराव यांनी व्यक्त केलेली काव्यविष्वाची भूमिका विविध षब्द प्रतिमांतून विद्यार्थ्यांनी समजून घेतला.

#### Unit III:

प्रकरण — 3.उदिष्ठ—पटकथा व संवादलेखन याबध्दलची माहिती विद्यार्थ्यांना देणे. साध्य— सिनेमात कथा,पटकथाव संवादलेखन कसे असते याची जाणीव विद्यार्थ्यांना झाली.

प्रकरण – ४.उदिष्ठ– स्मरणिकेचे संपादन व इतर संपादनकार्य व स्वरूप स्पष्ट करणे.

साध्य-स्मरणिकेचे संपादन कार्य व मासिकाचे कार्य काय असते हे विद्यार्थ्यांना कळले.

## Department Of Political Science Course Objectives and Course Outcomes

## **Course Objectives**

- To explain the vital contemporary emerging issues of center-state relations and political parties, the emergence of the new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- To understand the strengths and weakness of Indian political processes, both in terms
  of their effectiveness in responding to public policy needs.
- To understand the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions.
- To understand the basic concept and issues concerning human rights and challenges.

#### **Course Outcomes**

- Familiarized with the vital contemporary emerging issues of center-state relations, political parties, the emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- Analyzed the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs and retaining constitutional protections.
- Understood the political issues in context of wider debates about democratic life in
   India and the capacity of political institutions.
- Acquainted with a basic understanding of concept and issues concerning Right to Information Act, Human Rights and Challenges.

## Department of Economics Course Objectives and Course Outcomes

#### **Unit -I: Commercial and Central Bank Commercial Banks:**

Objective – To explain the function of the Commercial and Central Bank and why it is importance.

Outcome – Students learned the function of the Commercial and Central Bank and why it is important.

#### Unit -II: RBI and Innovation in Banking Reserve Bank of India:

Objective - Introduce RBI and innovation in Banking Sector.

Outcome – Students learnt about the structure of RBI and its function.

#### **Unit -III: Financial Market Money Market:**

Objective – To define FinancialMarket.

Outcome – Students understood the function of Financial Market.

#### **Unit –IV:** Health Economics and Statistics for Economics Health Economics:

Objective – To explain the importance of Health Economics and Statistics.

Outcome – Students understood the knowledge of Health Economics and Statistics

## Department of English Course Objectives and Course Outcomes

#### **English Literature**

Unit I: Objective-Making students conscious of the various issues of Indian society.

Outcome-Students attempted to understand the various issues of Indian society

Unit II: Objective- Making students realize revolution and its effects.

Outcome-Students realized equality, revolution, and their effects.

Unit III: Objective- Making students understand the biography, autobiography and Criticism.

Outcome- Students understood the biography, autobiography and Criticism.

Unit IV: Objective- Making students understand the Literary Terms.

Outcome- Students understood the Literary Terms and their usage.

## **Department of Sociology**

## **Course Objectives and Course Outcomes**

## **Indian Sociological Tradition**

#### Unit - I Theoretical Roots of Caste in India

**Objective** - To make the students aware of the Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

**Outcome** - Student understood the concept of Founders of Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

## Unit - II Social Change from Indian Perspective

**Objective -** To make the students aware of Social Change from Indian Perspective (M.N. Shriniwas, D.P.Mukharjee)

**Outcome -** Student understood the concept of Social Change from Indian Perspective (M.N. Shriniwas, D.P.Mukharjee)

## **Unit - III Indian Society and Contemporary Change**

**Objective -** To make the students aware of Indian Society and Contemporary Change (R.K. Mukharjee, S.C. Dube)

**Outcome -** Student understood the concept of Indian Society and Contemporary Change (R.K. Mukharjee, S.C. Dube)

#### Unit - IV Gender and Society in India

**Objective** - To Make Students Aware of Gender and Society in India (Tarabai Shinde, Jyotiba Fule and Savitribai Fule)

**Outcome -** Student understood the concept of Gender and Society in India( Tarabai Shinde, Jyotiba Fule and Savitribai Fule)

## Department of History Course Objectives and Course Outcomes

### B.A.II (IV -Sem) History of

India(1885 -1947)

## **Course Objectives**

- To study How the National Congress was formed
- To understand What was the role of Jahal and Mawal.
- To study Non-cooperation, civil disobedience movement
- To learn Indian Independence Mountaineering Scheme

#### **Course Outcomes**

- Learned about the establishment of the National Congress
- Understood the role of Jahal and Mawal
- Information was received about non-cooperation, civil disobedience movement
- Gained detailed knowledge of how India became independent

## Department of Marathi Marathi Literature Course Objectives and Course Outcomes

#### Unit I:

उदिष्ठ— कुसुमाग्रजाच्या रसयात्रा कविता संग्रहाच्या आधारे विविध प्रकारच्या कवितांची ओळख व माहिती विद्यार्थ्यांना देणे.

साध्य—कुसुमाग्रजांच्या कवितासंग्रहातून सामाजिक कविता,राजकीय, राष्ट्रीय कविता, प्रेम कविता,निसर्ग कविता व तत्वज्ञानपर कवितांची माहिती विद्यार्थ्यांना झाली.

#### Unit II:

उदि्ष्ठ—काव्यषास्त्र परिचय यातून काव्यकारण व षब्दषक्ती याविषयी विद्यार्थ्यांना माहिती देणे. साध्य— विद्यार्थ्यांना काव्य निर्मितीचे कारण व षब्दाच्या अभिदा, व्यंजना व लक्षणा या षब्दषक्तीची माहिती प्राप्त झाली.

## B. A. III Semester-V

## Department of Marathi Compulsory Marathi Course Objectives and Course Outcomes

#### Unit I:

लीळाचरित्र एकांक दृडाॅ. मदन कुळकणीं

उदिष्ठ- लीळाचरित्रांच्या एकांक ग्रंथाच्या आधारे तत्कालीन सामाजिक परिस्थितीचा आढावा घेणे.

साध्य-लीळाचरित्र एकांक ग्रंथातून लीळांच्या आधारे विद्यार्थ्यांना तत्कालीन सामाजिक, धार्मिक व राजकीय परिस्थिती तसेच एकून समाजजिवनाची ओळख विद्यार्थ्यांना झाली.

Unit II: दलित साहित्य वेदना व विद्रोह- भालचंद्र फडके

उदिष्ठ— दलित साहित्य वेदना व विद्रोह यातून दलित साहित्याच्या अभ्यासाचे महत्व साहित्यातील योगदान व महत्च विद्यार्थ्यांना पटवून देणे.

साध्य— दलित साहित्याचा उगम, चळवळ तसेच साहित्यिकांचे प्रेरणास्थान व कार्य याची जाणीव विद्यार्थ्यांना झाली. भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. कळकर्णी

उदिष्ठ— भाषाविज्ञानाचा परिचय विद्यार्थ्यांना करून देणे.

साध्य- प्रमाण भाषा आणि बोली तसेच स्पीम व पदविचार यांची माहिती विद्यार्थ्यांना झाली

## Department of Political Science Course Objectives and Course Outcomes

Course Objectives

- List the difference between scholarly and popular publication in Comparative Politics.
- To understand the issues of International and Domestic Politics and public Policy.
- To analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- To discuss the major theories and concepts of political science and its subfields.
   To relate the basics of International Relations and the new trends in the realm of International Relations.

Course Outcomes

- Write an analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the Indian model.
- Exposed to issues of International and Domestic Politics and Public Policy.
- Analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- Presented with the major theories and concepts of political science and its sub fields.
- Aware with the basics of International Relations and the new trends in the realm of international relations.

## Department of Economics Course Objectives and Course Outcomes

Unit – I Nature of Indian Economy

Objective – To introduce the basic Knowledge of the Indian Economy. Outcome -Students learnt about the Knowledge of the Indian Economy.

Unit – II Agriculture

Objective –To explain the importance of the Agriculture Sectorthe in Indian Economy. Outcome -Students learnt about the Importance of the Agriculture Sectorthe in Indian Economy.

Unit – III - Industry

Objective – To explain the Importance and Role of Industries in Economic Development
Outcome -Students learnt about the Knowledge of Industries in the Economic
Development.

Unit – IV- Employment and Poverty

Objective- To develop preliminary knowledge of Employment and Poverty Outcome -Students learnt about the preliminary knowledge of Employment and Poverty.

#### **SEM-V**

## Course Objectives and Course Outcomes English Literature Course

**Objective**: To enable students to analyze literary text.

Outcome: Students showed their ability to analyze literary text.

**Objective**: To enable students to interpret literary texts.

Outcome: Students showed their ability to interpret the literary text.

**Objective**: To enable students to understand significant developments in the history of English and Indian literature.

**Outcome**: Students became aware of significant developments in the history of English and Indian literature

**Objective**: To enable students to apply theoretical approaches to the critical reading of literary texts.

**Outcome**: Students tried to apply theoretical approaches to the critical reading of literary texts.

## Department of Sociology Course Objectives and Course Outcomes

Unit - I Indian Society, Structure and Inequality

Objective - To know in detail about Indian Society, Structure and Inequality

Outcome - Student understood the concept of Indian Society, Structure and Inequality

Unit - II Family in Contemporary India

Objective - To make the students aware of Family in Contemporary India.

Outcome -Student understood the concept of Family in Contemporary India

Unit - III Tribal Issues and Problems in India

Objective - To make the students aware of Tribal Issues and Problems in India.

Outcome – Students understood the concept of Tribal Issues and Problems in India.

Unit - IV Rural Community in India

Objective - To make the students know in details about Rural Community in India.

Outcome - Student understood the concept of Rural Community in India

## Department of History Course Objectives and Course Outcomes

### **Course Objective**

- To understand What were the causes and consequences of
- the French Revolution?
- To study How imperialism came into being
- To study World War I Treaty of Vasai
- To understand United Nations and performance

#### **Course Outcomes**

- UnderstoodThe French Revolution was also the first revolution in the world
- Studied What are the reasons for imperialism?
- Understood World War I The Treaty of Vasai
- Learned about the United Nations and its achievements and Failures

## Department of Marathi Course Objectives and Course Outcomes Marathi Literature

#### Unit I:

लीळाचरित्र एकांक दुडॉ. मदन क्ळकर्णी

उदिष्ठ— लीळाचरित्राच्या एकांक ग्रंथाच्या आधारे तत्कालीन सामाजिक परिस्थितीचा आढावा घेणे.

साध्य-लीळाचरित्र एकांक ग्रंथातून लीळांच्या आधारे विद्यार्थ्यांना तत्कालीन सामाजिक, धार्मिक व राजकीय परिस्थिती तसेच एक्न समाजजिवनाची ओळख विद्यार्थ्यांना झाली.

Unit IIक दलित साहित्य वेदना व विद्रोह- भालचंद्र फडके

उद्षिष्ठ— दलित साहित्य वेदना व विद्रोह यातून दलित साहित्याच्या अभ्यासाचे महत्व साहित्यातील योगदान व महत्व विद्यार्थ्यांना पटवून देणे.

साध्य— दलित साहित्याचा उगम, चळवळ तसेच साहित्यिकांचे प्रेरणास्थान व कार्य याची जाणीव विद्यार्थ्यांना झाली. भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. कळकर्णी

उदिष्ठ— भाषाविज्ञानाचा परिचय विद्यार्थ्यांना करून देणे.

साध्य- प्रमाण भाषा आणि बोली तसेच स्पीम व पदविचार यांची माहिती विद्यार्थ्यांना झाली.

#### **SEMESTER-VI**

## Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi

#### Unit I:

प्रकरण — 6.उदिष्ठ—चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करुन देणे. साध्य— महाभारतातील द्रौपदीच्या मनातील गूढ वगुंतागुंतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्रापत झाली.

प्रकरण - 7.उदिष्ठ-पक्षीगान पाठातून पक्ष्यांच्या सौंदर्याचे दर्षन घडविणे..

साध्य-पक्षीगान मधून विविधक्षी, पक्ष्यांची घरटी, त्यांची पिल्ले यांची माहिती व ओळख विद्यार्थ्यांना झाली.

प्रकरण – ८.उदिष्ठ–अन्वरषा फकीर या मुस्लीम व्यक्तीमत्वाची ओळख विद्यार्थ्यांना करून देणे.

साध्य-लहान मुले, स्त्रीया, माणसे व आजुंबाजूच्या गावातील जनतेसाठी उपयुक्त असे अन्वरषा फकीराचे व्यक्तिमत्व असल्याचे विद्यार्थ्यांना कळून आले. प्रकरण -9.उदिष्ठ- दाभोळकराच्या अंधश्रध्दा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करुन देणे.

साध्य-वैज्ञानिक दृथ्प्टकोण व षास्त्रीय विचार पध्दतीने अंधश्रध्दा निर्मूलन करण्याचे घ्येय दाभोळकरांचे होते याची माहिती विद्यार्थ्यांना झाली.

प्रकरण -10.उदिष्ठ-महिला ग्रामपंचायतीच्या निवडनूकीचे चित्रण विद्यार्थ्यांना सांगणे.

साध्य- ग्रामीण भागातील ग्रामपंचायत मधील निवडणुकीची माहिती व परिस्थितीची जाणीव विद्यार्थ्यांना आली.

#### **Unit II:**

कविता- 6.उदिष्ठ-ही निळी पांढरी कवितेतील षरद ऋतूतील दुपारचे वर्णन करुन देणे.

साध्य-इंदिरा संतानी केलेलीषरद ऋत्तील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

कविता -7.उदिष्ठ-दोन ज्योती यातून कविने वर्णन केलेल्या दोन ज्योतीचा उलघडा करणे.

साध्य—एक दुःखाची ज्योत लाल असते व दुसरी दुःखाची ज्योत काळी असून तीचे दुःख कायम टिकणारे असते याची जाणीव विद्यार्थ्यांना झाली.

कविता— ८.उदिष्ठ—पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थ्यांना उलघडून दाखविणे .

साध्य-ग्रेस कवीने रेखाटलेले स्त्री वेदनेचे स्वरुप व स्त्री मनाच्या भावना याविषयीविद्यार्थ्यांना माहिती मिळाली.

कविता- 9.उदिष्ठ-प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रन करुन जाणीव करून देणे.

साध्य-मानवी समाजरचनेत माणूसपण विसरत चालला असून पीडितांना न्याय मिळत नसल्याची साक्ष विद्यार्थ्यांना पटली.

कविता— 10.उदिष्ठ— टाहारा कवितेतून आदिवासी समाजाला कसा पुढारी हवा याची माहिती विद्यार्थ्यांना देणे. साध्य—कवितेत वर्णन केलेला आदिवासिंचा पुढारी कविला हवा असल्याची जाणीव विद्यार्थ्यांना झाली.

#### **Unit III:**

प्रकरण — 3.उदि्ष्ठ—ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे.

साध्य— ग्रंथपरीक्षण करताना परिक्षणाची पहीली पायरी ग्रंथवाचन होय त्यानंतर इतर बाबींक्डे लक्ष्य द्यावे याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण - 4.उद्घ-इंटरनेट आणि मराठी भाषा व साहित्य याची माहिती विद्यार्थ्यांना करुन देणे.

साध्य— संगणक संवाद,मराठी संकेतस्थळे, इंटरनेटवरील मराठी दैनिके, व मायबोली या संकेतस्थळावरील लेख, कविता, व इतर मराठी साहित्याची माहिती विद्यार्थ्यांना झाली

## Compulsory English Course Objectives and Course Outcomes

**Objective**: To enable students to read fluently with proper pronunciation and comprehend the prose.

Outcome: Students read fluently with proper pronunciation and comprehended the prose

**Objective**: to make students enable to understand and enjoy one act play

Outcome: Students understood and enjoyed one-act- play.

**Objective:** To enable students to understand the poets and their prescribed poetry.

**Outcome-** Students understood the theme of the poems and had knowledge about the prescribed poets.

**Objective**: To enable students to have knowledge of applied skills like composing an Email, Curriculum vitae, paragraph with the help of given hints/points.

**Outcome**: Students had knowledge of applied skills like composing an Email, Curriculum vitae, paragraph with the help of given hints/points.

**Objective**: To enrich conversational skills of students **Outcome**: Conversational skill of students improved

## Department Of Political Science Course Objectives and Course Outcomes

Course Objectives

- List the difference between scholarly and popular publication in Comparative Politics.
- To understand the issues of International and Domestic Politics and public Policy.

- To analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- To discuss the major theories and concepts of political science and its subfields.
- To relate the basics of International Relations and the new trends in the realm of International Relations.

#### Course Outcomes

- Write an analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the Indian model
- Exposed to issues of International and Domestic Politics and Public Policy
- Analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- Presented with the major theories and concepts of political science and its sub fields.
- Aware with the basics of International Relations and the new trends in the realm of international relations.

## Department of Economics Course Objectives and Course Outcomes

Unit -I: Economic Development and Growth

- Objective- To develop the ability to explain the core economic Sector of Economic Development and Growth.
- Outcome Students learnt and accepted the Knowledge of Economic
   Development and Growth.

Unit –II: Planning and Policy

- Objective To introduce the theory of Planning and Policy.
- Outcome Students learnt the theory of Planning and Policy

Unit -III: Public Finance

- Objective- To develop preliminary knowledge of Public Finance.
- Outcome Students learnt preliminary knowledge of Public Finance.

Unit –IV: International Trade

- Objective- To explain the theory of International Trade.
- Outcome –Students learnt about the theory of International Trade.

## Department of Sociology Course Objectives and Course Outcomes Current Social Problems in India

## Unit - I Education in Contemporary

Objective - To make the students in detail about Education in Contemporary India.

Outcome - Students understood the concept of Education in Contemporary India.

#### Unit - II Displacement and Rehabilitation

Objective – To make the students aware of Displacement and Rehabilitation.

Outcome – Students understood the concept of Displacement and Rehabilitation.

#### Unit - III Intolerance, Riot Crime

Objective - To make students know in detail about Intolerance, Riot Crime.

Outcome - Students understood the concept of Intolerance, Riot Crime.

### **Unit IV** Corruption

Objective - To make students aware of Corruption.

Outcome -Students understood the concept of Corruption.

## Department of History Course Objectives and Course Outcomes

## **Course Objectives**

- To Study what were Russia's five-year plans?
- To understand Hitler Mussolini's foreign policy.
- To understand the Causes of World War II.
- To study the United Nations the and performance of Suez Canal.

#### **Course Outcomes**

- Learned about Russia's Five-Year Plan
- Learned about Hitler Mussolini's foreign policy in detail.
- Learned the reasons for the Second World War.
- Received information about the United Nations .
- Understood the performance of the Suez Canal, NATO SEATO, Warsaw Pact.

## Department of Marathi Course Objectives and Course Outcomes Marathi Literature

#### Unit I:

गरूडझेप- भरत आंधळे

उदिष्ठ गरूड झेप मधील लेखकानी नोकरीसाठी ध्येयवेडा प्रवास कसा केला याची माहिती देऊन विद्यार्थ्यांना प्रेरीत करणे

साध्य— भरत आंधळेच्या पैक्षणिक प्रगतीचा व स्पर्धा परीक्षेच्या कार्याचा आढावा घेऊन विद्यार्थ्यांनी गरुडझेप आत्मकथनातून पेरणा घेतली.

प्राचीन मराठी वाड.मयाचा इतिहास- ल.रा. निषराबादकर.

उदि्ष्ठ— प्राचीन मराठी वांड्.मयाचा इतिहासाच्या आधार संतसाहित्य, पंडिती साहित्य,षाहिरी साहित्य, बखर वांड्.मय या साहित्याची माहिती विद्यार्थ्यांना देणे

साध्य— संतसाहित्य, पंडिती साहित्य,षाहिरी साहित्य, बखर वाड्.मय या साहित्याची माहिती विद्यार्थ्यांना झाली. भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. क्ळकर्णी

उदिष्ठ- भाषाविज्ञानाचा परिचय विद्यार्थ्यांना करून देणे.

साध्य- मराठी मुळाक्षरे, स्वन व स्वनांतरे यांची माहिती विद्यार्थ्यांना झाली.

## **Bachelor of Commerce**

#### **Course Objectives and Course Outcomes**

## Semester -I Compulsory English

#### **Course Objective**

Students will be able -

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders
- To understand financial and business acumen through basic research skills for business
- To understand and value inclusivity in human nature
- To prioritize the importance of human life and wealth
- To understand horror stories with elements of surprise and irony
- To understand expansive and imaginative concepts
- To understand the meanings of motivation and indomitable spirit
- To take up tasks and not to worry about the end result for the larger benefit of Human kind
- To understand that tranquil temperament is the most potent weapon one can have against diversity
- To understand grammar and apply it in their writing skills

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Startup founders
- Understood financial and business acumen through basic research skills for business
- Understood and value inclusivity in human nature
- Understood prioritize the importance of human life and wealth
- Understood horror stories with elements of surprise and irony
- Understood expansive and imaginative concepts
- Understood the meanings of motivation and indomitable spirit
- Understood tasks and not to worry about the end result for the larger benefit of Human kind
- Understood that tranquil temperament is the most potent weapon one can have against diversity
- Understood grammar and apply it in their writing skills

#### **Department of Marathi**

## **Course Objectives and Course Outcomes**

- उदिष्टे:- 1. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरुची निर्माण करणे.
  - 2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
  - 3. विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
  - 4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
  - 5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे
- ध्येय:- 1. भावी काळात विदयार्थ्यांमधून साहित्यनिर्मिती करणे.
  - 2. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करुन संवादशील वातावरण निर्मिती करणे.
  - 3. विभागात विविध उपक्रमांचे आयोजन करुन मराठी भाषेचा दर्जा वाढविणे.
  - 4. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे.
  - 5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

## By the end of this course, the students will be able to:

- CO1 भारतीय लोकशाहीचे मूल्य विदयार्थ्यांमध्ये रुजविणे.
- CO2 ग्रामीण जनजिवन व शेतीनिष्ठेशी विदयार्थ्यांची नाळ जोळणे.
- CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.
- CO4 शाहू महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
- CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.
- CO6 विदयार्थ्यामध्ये आधूनिक मूल्य रुजविणे
- CO7 विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण करणे.
- CO8 विदयार्थ्यामध्ये सर्जनशीलता निर्माण करणे.

## Financial Accounting Course Objectives and Course Outcomes

#### Unit No. I - Financial Accounting.

- Objective- To make the students understand Financial Accounting. Meaning, Principles& Problem.
  - Outcome -Students understood the following topics. Financial Accounting.
     Meaning, Objective, Principles & Problem.
- Unit No 2- Hire Purchase Account.
  - Objective To make the students understand Hire Purchase Account Meaning, Method & Problems.
  - Outcome- Students understood the following topics Hire Purchase Account Meaning, Method & Problems.
- Unit No 3- Final Account of Co-Operative Societies.
  - Objective To make the students to understand the Final AccountCo-Operative Societies .Introduction, Type, Co-operative Legislation and Problems.
  - Outcome- Students understood the following topics

Final Account of Co-Operative Societies

Introduction, Type, Co-Operative Legislation and Problems

Unit No 4- Join Venture Accounts.

- Objective- To make the students understand Join Venture Accounts Meaning, Method and Problem.
- Outcome Students understood the following topics
   Join Venture Accounts Meaning, Method and Problems.

## . BUSINESS ORGANISATION Course Objectives and Course Outcomes

#### **Objectives**

- To make the students understand the concept, objective, importance of business.
- To acquaint the students with various forms of Business organization and their functioning.
- To make the students understand the concept, functions of Organization and types of Organization.
- To make the students understand the Internal constituents of the Business Organization KeyManageriall Personnel, Chairman, Chief executive officer, E-Commerce, E-business and E-banking.

#### **Outcomes**

- Students understood the concept, objective and importance of business.
- Acquainted the students with various forms of Business organization and their functioning.
- Understood the concept, functions of Organization and types of Organization.
- Understood Internal constituents of the Business Organization Key managerial Personnel, Chairman, Chief executive officer, E-Commerce, E-business and E-banking.

## **Company Law**

## **Course Objectives and Course Outcomes**

Unit No. I - Background of New Company

- Objective To make the students understandthe Background of New Company Act 2013, Corporate Personality & Kinds of Company.
- Outcome Students understood the following topics. Background of New Company Act 2013, Corporate Personality & Kinds of Company.

Unit No 2- Memorandum of Association, Article of Association and Prospectus.

- Objective To make the students understand the Memorandum of Association, Article of Association and Prospectus.
- Outcome Students understood the Memorandum of Association, Article of Association and Prospectus.

Unit No 3- Shares and Share Capital

- Objective- To make the studentsunderstand Shares and Share Capital.
- Outcome- Students understood the following topics Shares and Share Capital. Unit No 4- Membership in a company, Director.
  - Objective To make the students understand Membership in a company, Director.
  - Outcome- Students understood the following topics Membership in a company, Director.

## **Business Economics- I Course Objectives and Course Outcomes**

#### Unit I-

Nature and Scope of Business Economics:

Objective- To make the students understand the concept of Business Economics.

Outcomes-Students get well understood the following topics:

Business Economics.

Unit II-

Theory of Consumption:

Objective- To make the students understand the Law of Demand, Elasticity of Demand & Demand forecasting.

Outcomes-Students get well understood the following topics:

Law of Demand, Elasticity of Demand & Demand forecasting.

Unit III-

Theory of Production:

Objective- To make the students understand the Theory of Production.

Outcomes- Students get well understood the Theory of Production.

Unit IV-

Theory of Cost and Revenue:

Objective- Students should be aware of the Theory of Cost and Revenue.

Outcomes-Students get well understood Theory of Cost and Revenue.

## Semester-II Compulsory English Course Objectives and Course Outcomes

## **Course Objectives**

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- To understand financial and business acumen through basic research skills for business.
- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.
- To take up tasks and not to worry about the end result for the larger benefit of Humankind.
- To understand that tranquil temperament is the most potent weapon one can have against diversity.
- To understand grammar and apply it in their writing skills.

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- Understood financial and business acumen through basic research skills for business.
- Understood and valued inclusivity in human nature.

- Understood prioritizing the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.
- Understood the tasks and not to worry about the end result for the larger benefit of Human kind.
- Understood that tranquil temperament is the most potent weapon one can have against diversity.
- Understood grammar and apply it to their writing skills.

## Department of Marathi Course Objectives and Course Outcomes

## By the end of this course, the students will be able to:

- CO1 भारतीय लोकशाहीचे मूल्य विदयार्थ्यांमध्ये रुजविणे.
- CO2 ग्रामीण जनजिवन व शेतीनिष्ठेशी विदयार्थ्यांची नाळ जोळणे.
- CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.
- CO4 शाह् महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
- CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.
- CO6 विदयार्थ्यामध्ये आधूनिक मूल्य रुजविणे
- CO7 विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण करणे.
- CO8 विदयार्थ्यामध्ये सर्जनशीलता निर्माण करणे.

## Statistics and Business Mathematics Course Objectives and Course Outcomes

## Unit No. I - Statistics & Measures of Central Tendency

- Objective To make the students understand the Background of Statistics & Measures of Central Tendency.
- Outcome Students understood the following topics. Statistics & Measures of Central Tendency.

#### Unit No 2- Dispersion.

- Objective To make the students understand Dispersion.
- Outcome Students understood the following topics Dispersion.

#### Unit No 3- Skewness

- Objective To make the students understand Skewness.
- Outcome Students understood the following topics Skewness.

## Unit No 4- Business Mathematics

- Objective- To make the studentsunderstand Business Mathematics.
- Outcome Students understood the following topics.

#### **BUSINESS MANAGEMENT**

#### **Course Objectives and Course Outcomes**

### **Course Objectives**

- To make the students understand the Meaning, types of management, Principles, function of Business Management.
- To make the students know about Planning and Decision Making.
- To make the students know about Delegation of Authority and coordination& Controlling.
- To expose the students for the applicability of recent trends in management practices.
- To make students familiar with the modern management practices being used by the corporate world.

#### **Course Outcomes**

- Understood the Meaning, types of management, Principles, and function of Business Management.
- Knew about Planning and Decision Making.
- Students knew about Delegation of Authority and coordination& Controlling.
- Exposed the students for the applicability of recent trends in management practices.
- Understood and became familiar with the modern management practices being used by the corporate world.

#### **Secretarial Practice**

## **Course Objectives and Course Outcomes**

## Unit No. I - Incorporation of Company

- Objective To make the students understand the Incorporation of Company, Directors of Company.
- Outcome Students understood the following topics Incorporation of Company, Directors of Company.
- Unit No 2- Company Meeting, Company Agenda & Voting and Resolution.
  - Objective To make the students understand the Company Meeting, Company Agenda & Voting and Resolution.
  - Outcome- Understood the Company Meeting, Company Agenda & Voting and Resolution.
- Unit No 3- Report Writings, Secretarial audit & E-Governance and E-Filing
  - Objective To make the students understand Report Writings, Secretarial Audit &E-Governance and E-Filing.
  - Outcome Students get well understood the following topics Report
     Writings, Secretarial audit & E-Governance and E-Filing.
- Unit No 4- Key Management Personnel, Appointment of Director & Management Remuneration.
  - Objective To Make the students understand Key Management Personnel,
     Appointment of Director & Management Remuneration.
  - Outcome Students understood the following topics
     Key Management Personnel, Appointment of Director &
     Management Remuneration.

## **Business Economics II Course Objectives and Course Outcomes**

#### Unit I-

#### **Market Structure**

**Objective-** To make the students understand the Market structure.

**Outcome-**Students understood the Market Structure.

#### Unit II-

#### **Perfect & Imperfect Competition Markets**

Objective- Students should become aware of Perfect & Imperfect Competition.

Outcome-Students understood Perfect& Imperfect Competition.

#### Unit III-

#### **Theories of Distribution**

Objective- Students should become aware of the Theory of Distribution.

Outcome-Students understood & they applied their knowledge.

#### Unit IV-

#### **Business cycles & National Income**

Objective- Students should become aware of Business cycles & National Income.

Outcome-Students understood Business cycles & National Income.

# Semester-III Compulsory English Course Objectives and Course Outcomes

#### **Course Objective**

Students will be able -

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders
- To understand financial and business acumen through basic research skills for business
- To understand and value inclusivity in human nature
- To prioritize the importance of human life and wealth
- To understand horror stories with elements of surprise and irony
- To understand expansive and imaginative concepts
- To understand the meanings of motivation and indomitable spirit
- To take up tasks and not to worry about the end result for the larger benefit of Human kind

- To understand that tranquil temperament is the most potent weapon one can have against diversity
- To understand grammar and apply it in their writing skills

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Startup founders
- Understood financial and business acumen through basic research skills for business
- Understood and value inclusivity in human nature
- Understood prioritize the importance of human life and wealth
- Understood horror stories with elements of surprise and irony
- Understood expansive and imaginative concepts
- Understood the meanings of motivation and indomitable spirit
- Understood tasks and not to worry about the end result for the larger benefit of Human kind
- Understood that tranquil temperament is the most potent weapon one can have against diversity
- Understood grammar and apply it in their writing skills

## Department of Marathi Course Objectives and Course Outcomes

## By the end of this course, the students will be able to:

- CO1 मातृभाषेची आवड व जाणीव निर्माण करणे
- CO2 प्राचिन मराठीचे वैशिष्ट्रे स्पष्ट करणे.
- CO3 विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.
- CO4 संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोकशाहीचा पुरस्कार करणे.
- CO5 स्त्री विषयक जाणिव जागृती करणे.
- CO6 वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे.

## Financial Accounting-II Course Objectives and Course Outcomes

#### Unit I-

## **Consignment Accounts**

**Objective-** Students should be aware of the topic of Consignment Accounts.

**Outcomes-**Students understood &solved the problems.

**Unit II-**

#### **Hire Purchase:**

**Objective-** Students should be aware of the topic of Hire Purchase.

Outcomes-Students understood &solved the problems.

#### **Unit III-**

#### **Capital Structure & Issues of Shares.**

**Objective-** Students should be aware of the topic of Capital Structure & Issues of Shares.

Outcomes-Students understood &solved the problemsof Issues of Shares.

**Unit IV-**

## **Final Accounts of Joint Stock Companies**

Objective- Students should be aware of topic of Final Accounts of Joint Stock Company.

**Outcomes-** Students understood & solved the problems.

## **Business Communication & Management Course Objectives and Course Outcomes**

Unit No. I - Meaning, Definition and concept of Communication, objective of Communication

Objective - To make the students understand the Meaning, Definition and concept of Communication, objective of Communication

Outcome - The students understood the Meaning, Definition and concept of Communication, the objective of Communication

Unit No 2- Business Communication.

Objective - To make the studentsunderstand the Business Communication.

Outcome- The students understood Business Communication.

Unit No 3- Technology and Business Communication

Objective - To make the studentsunderstand Technology and Business Communication.

Outcome- Students understood the following topics;

Technology and Business Communication.

Unit No 4- M.S. Office Aided Communication.

Objective - To make the students understand M.S. Office-Aided Communication.

Outcome - Students understood the following topics;

M.S. Office Aided Communication.

#### **Business Law**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

 Students will be able to understand various provisions of the related Acts the course gives the knowledge regarding The Indian Contract Act, 1872, The Sales of Goods Act, 1930, The Indian partnership Act 1932, Negotiable Instruments Act 1881.

- To make the students gain knowledge of various legal aspects of the business.
- To make the students understand laws that affect mercantile transactions.
- Students will be able to understand court interpretations of laws like, Prevention of Money Laundering Act-2002, Consumer Protection Act – 2002

#### **Course Outcomes**

- Student understood various provisions of the related Acts the course gives the knowledge regarding The Indian Contract Act, 1872, The Sales of Goods Act, 1930, The Indian partnership Act 1932, Negotiable Instruments Act 1881.
- Students gained knowledge of various legal aspects of the business.
- Students understood laws that affect mercantile transactions.
- Students understood court interpretations of laws like, the Prevention of Money
   Laundering Act-2002, Consumer Protection Act 2002

### **Monetary Economics-I**

## **Course Objectives and Course Outcomes**

Unit I-

Money

Objective- To make the students underst and the concept of Ethe volution of Money & Functions of Money.

Outcome-Students understood the concept of the Evolution of Money & Functions of Money.

Unit II-

Inflation & Deflation

Objective- To make the students understand the concept of inflation and deflation.

Outcome-Students developed their knowledge about inflation and deflation.

Unit III-

Money Market & Policies

Objective- To make the students understand the concept of the Money Market and Monetary Policy.

Outcome-Students understood & they applied their knowledge.

Unit IV-

**Public Finance** 

Objective- To make the students understand the concept of Public Finance.

Outcome-Students applied & developed the knowledge.

## Semester-IV Compulsory English

## **Course Objectives and Course Outcomes**

## Course Objectives

#### Students will be able -

- To understand and value inclusivity in human nature
- To prioritize the importance of human life and wealth
- To understand horror stories with elements of surprise and irony
- To understand expansive and imaginative concepts
- To understand the meanings of motivation and indomitable spirit
- To take up tasks and not to worry about the end result for the larger benefit of Human kind
- To understand grammar and apply it in their writing skills

#### Course Outcomes

- Understood and value inclusivity in human nature
- Understood prioritize the importance of human life and wealth
- Understood horror stories with elements of surprise and irony
- Understood expansive and imaginative concepts
- Understood the meanings of motivation and indomitable spirit
- Understood tasks and not to worry about the end result for the larger benefit of Human kind
- Understood grammar and apply it in their writing skills

## Department of Marathi Course Objectives and Course Outcomes

## By the end of this course, the students will be able to:

- CO1 मातुभाषेची आवड व जाणीव निर्माण करणे
- CO2 प्राचिन मराठीचे वैशिष्टे स्पष्ट करणे.
- CO3 विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.
- CO4 संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोकशाहीचा पुरस्कार करणे.
- CO5 स्त्री विषयक जाणिव जागृती करणे.
- CO6 वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे.

## Financial Accounting III Course Objectives and Course Outcomes

#### Unit I-

## **Final Accounts of Banking Companies**

**Objective**-Students should become aware of the topic of Final Accounts of Banking Companies.

Outcome-Students understood and solved the Problems.

#### Unit II-

#### **Final Accounts of General Insurance Companies**

**Objective-** Students should become aware of the topic of Final Accounts of General Insurance Companies.

Outcome-Student understood and solved the Problems

#### Unit III-

#### Valuation of Goodwill

Objective- Students should become aware of the topic of the Valuation of Goodwill.

Outcome-Student understood and solved the Problems.

#### Unit IV-

### **Liquidation of Company**

**Objective-** Students should become aware of the topic of the Liquidation of Company.

Outcome-Student understood & solved the Problems

## Skill Development Course Objectives and Course Outcomes

- Unit No. I Introduction- Basic Personality, Human Growth and Behavior and Motivation.
  - Objective To make the students understand the Introduction- Basic Personality, Human Growth and Behavior and Motivation.
  - Outcome The students understood the Introduction- Basic Personality, Human Growth and Behavior and Motivation.

Unit No 2- Communication Skill and Personality Development.

- Objective To make the students understand Communication Skills and Personality Development.
- Outcome The students understood the Communication Skills and Personality Development.

Unit No 3- Techniques in Personality Development.

- Objective To make the studentsunderstand Techniques in Personality Development.
- Outcome Students understood the following topics Techniques in Personality Development.

Unit No 4- Entrepreneurial Skill Development.

- Objective To make the students understand Entrepreneurial Skill Development.
- Outcome- Students understood Entrepreneurial Skill Development.

#### **Income Tax**

#### **Course Objectives and Course Outcomes**

### **Course Objectives**

- To make the students understand the basic concepts involved in the Income Tax act and the basics of income tax.
- To make the students understand the Taxable Salary and tax liability.
- Students get exposure to provisions of taxation of house property.
- To make the students understand Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and 80U. Students get exposure to provisions of taxation of Income from other sources.
- They learn the procedure of filing tax returns, Advance tax and tax refunds.

#### **Course Outcomes**

- Understood the basic concepts involved in Income Tax act and also the basics of income tax.
- Understood the Taxable Salary and tax liability.
- Students got exposure to provisions of taxation of house property.
- Understood Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and 80U. Students get exposure to provisions of taxation of Income from other sources.

They learn the procedure of filing tax returns, Advance tax and tax refunds.

## Monetary Economics-II Course Objectives and Course Outcomes

#### Unit I-

#### **Commercial Bank**

Objective-To make the students understand the functions of Commercial Bank.

Outcome-Students understood the functions of Commercial Bank.

#### Unit II-

## E-Banking and Core Banking

**Objective-** To make the studentsunderstand -Banking and Core Banking.

**Outcome-**Students developed their knowledge.

#### **Unit III-**

## **Banks and Customers Relationship and Service**

**Objective-** To make the studentsunderstand the Banks Customers Relationship and Service.

Outcome-Students understood & applied their knowledge.

#### **Unit IV-**

#### **Central Bank**

**Objective-** To make the students to understand the Central Bank.

**Outcome-**Students developed the knowledge about Central Bank.

## Semester-V Financial Accounting-IV Course Objectives and Course Outcomes

Unit No. I - Amalgamations & Absorption of Companies.

Objective - To make the students understand Amalgamations & Absorption.

Outcome - Students understood the topics like Amalgamations & Absorption.

Unit No 2- Reorganization & reconstruction of Companies.

Objective - To make the studentsunderstand the Reorganization& reconstruction problem.

Outcome - Students understood the concepts of the Reorganization & reconstruction problems.

Unit No 3- Valuation of Shares

Objective - To make the students understand Valuation of Shares Problems.

Outcome- Studentsunderstood the Valuation of Shares Problems.

Unit No 4- Double Account system

Objective - To make the students understand Double Account system.

Outcome - Students understood the Double Account system.

## Management Process Course Objectives and Course Outcomes

#### Unit I-

Management and Administration

Objective- To make the students understand meaning and difference of Management and Administration.

Outcome-Students applied the knowledge of Management and Administration.

#### Unit II-

Managerial Development & Group Dynamics

Objective- To make the students to understand the Managerial Development & Group Dynamics

Outcome-Students understood the knowledge of Managerial Development & Group Dynamics.

Unit III-

Managerial Style

Objective- To make the students understand the Managerial Style.

Outcome-Students developed the knowledge of Managerial Style.

Unit IV-

Motivation:

Objective- To make the students understand the Motivation.

Outcome- Students understood the meaning of Motivation and their types.

## Indian Economics Course Objectives and Course Outcomes

Unit I-

Indian Economy& Planning:

Objective- To make the students understand the Indian Economy & Planning.

Outcomes-Students will be able to understand Indian Economy & Planning.

Unit II-

Indian Economy& Policy:

Objective- To make the students understand the Indian Economy & Policy.

Outcomes-Students will be able to understand Indian Economy & Policy.

Unit III-

Population& Unemployment:

Objective- To make the students understand the population & Unemployment

Outcomes-Students will be able to understand the population &Unemployment

Unit IV-

India's Public Finance:

Objective- To make the students understand Public Revenue and Public Expenditure.

Outcomes-Students will be able to understand the Public Revenue and Public Expenditure.

## Computerize Accounting Course Objectives and Course Outcomes

Objective - To make the students understand Introduction of Computerize Accounting, Advantage, Need and Accounting Groups.

Outcome - Students understood the following topics;

Introduction of Computerize Accounting, Advantage, Need and Accounting Groups.

Unit No 2- Accounting Software's.

Objective - To make the students understand Accounting Software.

Outcome - Students understood the topic- Accounting Software.

Unit No 3- Accounts Info Menu, Accounts Groups.

Objective - To make the studentsunderstand the Accounts Info Menu, Accounts Groups-Create Group, Ledger Accounts, Voucher & Features of Account Voucher.

Outcome - Students understood the following topics-

Accounts Info Menu, Accounts Groups-

Create Group, Ledger Accounts, Voucher & Features of Account

Voucher.

Unit No 4- Inventory Info, Features of Inventory Info. Configure.

Objective - To make the students understand the Inventory Info, Features of the Inventory

Info. Configure.

Outcome - Students understood the following topics-

Inventory Info, Features of Inventory Info. Configure.

## **Auditing Course Objectives and Course Outcomes**

## -Course Objectives

- To make the Students learn a lot about the basics of audit and auditing, internal and external check, periodic audits, internal audit external audit, continuous audit, cost audit, management audit and annual audit.
  - To make the Students learn the Audit Planning and Audit Documentation and Evidence.
  - To make the studentsunderstand standard on Auditing, Vouching & Verification Vouching, Verification of Assets and Liabilities.
  - A glimpse into company audit gives an idea of appointing a company auditor, and the Procedure of audit in a company etc. along with the rules of company and corporate audit.

#### **Course Outcomes**

- Students learnt a lot about basics of audit and auditing, internal and external check, periodic audit, internal audit external audit, continuous audit, cost audit, management audit and annual audit.
  - Students learnt Audit Planning and Audit Documentation and Evidence.
  - Students understood the standard on Auditing, Vouching & Verification
     Vouching, Verification of Assets and Liabilities.
  - A glimpse into company audit gave an idea of appointing a company auditor, and the Procedure of audit in a company etc.along with the rules of the company and corporate audit.

#### **Semester-VI**

## Financial Accounting-V Course Objectives and Course Outcomes

Unit No. I - Accounting of Holding Company.

- Objective To make the students understand Accounting of Holding Company
- Outcome Students understood the following topics Accounting of Holding Company.

Unit No. 2 - Insurance Claims.

- Objective To make the students understand the Insurance Claims.
- Outcome Students understood the following topics Insurance Claims.

Unit No. 3 - Investment Accounts.

- Objective To make the studentsunderstand Investment Accounts.
- Outcome Students understood the topic- Investment Accounts.

Unit No. 4 - Profit Prior to Incorporation.

- Objective To make the students understand the Profit Prior to Incorporation.
- Outcome Students understood the topic- Profit Prior to Incorporation.

#### **Management Accounting**

#### **Course Objectives and Course Outcomes**

### **Course Objectives**

- To make the students get a clear idea about the concept, objectives, importance and benefits of management accounting along with the basic advantages and significance of various techniques of management accounting and Break-Even Point Analysis.
- A good idea of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organizations.
- Students get a clear idea of Ratio Analysis like- Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Classification of Ratio, Liquid Ratio, Inventory Turnover Ratio, Debtors and Creditors Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, Earnings per Share Ratio.
- To make the students understand and get a clear idea of the Fund Flow Statement.

#### **Course Outcomes**

- Student got a clear idea about the concept, objectives, importance and benefits of management accounting along with the basic advantages and significance of various techniques of management accounting and Break-Even Poing Analysis.
- Understood good ideas of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organizations.
- Students understood clear idea of Ratio Analysis like- Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Classification of Ratio, Liquid Ratio, Inventory Turnover Ratio, Debtors and Creditors Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, Earnings per share Ratio.
- Understood and got clear idea of Fund Flow Statement

## Advanced Statistics Course Objectives and Course Outcomes

Objective - To make the students understand the Accounting of Correlation

Outcome - Students understood the following topics. Correlation Company

Unit No. 2 - Regression.

Objective- To make the students understand Regression.

Outcome - Students understood the Regression.

Unit No. 3 - Index Number.

Objective - To make the students to understand Index Number.

Outcome - Students understood the following topics Index Number.

Unit No. 4 - Time Series Analysis.

Objective - To make the students understand Time Series Analysis.

Outcome- Students understood the Time Series Analysis.

## Indian Economics-II Course Objectives and Course Outcomes

#### Unit I

## **Indian Agriculture**

**Objective**- To make the students understand the Indian Agriculture.

**Outcome-**Students applied the knowledge.

#### **Unit II**

#### **Indian Industry**

Objective- To make the students understand the Indian Industry.

Outcome-Students created the knowledge.

#### **Unit III**

## India's Service Sector and International Trade

**Objective-** To make the students understand the India's International Trade.

Outcome-Students developed the knowledge.

#### **Unit IV**

#### **Contribution of Indian Economic Thinkers**

**Objective**- To make the students understand the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar Lohiya.)

**Outcome-**Students understood the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar Lohiya.)

## **Human Resource Management Course Objectives and Course Outcomes**

#### Unit I-

#### Introduction

**Objective-** To make the students understand the concept of Human Resources Management & Human Resource Manager.

**Outcome-**Students understood the concept of Human Resources Management & Human Resource Manager.

#### Unit II-

#### Recruitment, selection and training

**Objective-** To make the students understand the Recruitment, selection and training

Outcome-Students understood the Recruitment, selection and training

#### **Unit III-**

#### Labor welfare and collective bargaining

**Objective**- To make the students to understand the Labor welfare and collective bargaining.

Outcome-Students understood the Labor welfare and collective bargaining.

**Unit IV-**

## **Human Resource Planning and Accounting**

**Objective-** To make the students understand the Human Resource Planning and Accounting.

Outcome-Students understood Human Resource Planning and Accounting.

## **Industrial Law**

## **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To make the students to understand The Indian Factories Act, 1948 and The Industrial Disputes Act, 1947.
- Learners learn Laws Relating to Wages, Laws Relating to Bonus and Gratuity, Laws Relating to Employee's State Insurance and Provident Fund and Laws Relating to Workmen Compensation and Maternity Benefits.
- To make the students to understand Child Labour Act, 1986, Trade Union Act, 1926, International Labour Organisation – ILO and Contract Labour Act, 1971.
- Students will be able to understand the meaning and nature of Industrial Estate,
   Technology Park, SEZ and Co-operative Industrial Estate.
- Learners learn Intellectual Property Rights Law in India and Environment Protection Act, 1986.

#### **Course Outcomes**

- Understood The Indian Factories Act, 1948 and The Industrial Disputes Act,
   1947
- Learned Laws Relating to Wages, Laws Relating to Bonus and Gratuity, Laws Relating to Employee's State Insurance and Provident Fund and Laws Relating to Workmen Compensation and Maternity Benefits.
- Understood Child Labour Act, 1986, Trade Union Act, 1926, International Labour Organisation – ILO and Contract Labour Act, 1971.
- Understood the meaning and nature of Industrial Estate, Technology Park, SEZ and Co-operative Industrial Estate.
- Learners learnt Intellectual Property Rights Law in India and Environment Protection Act, 1986.

## **Bachelor of Science (B.Sc.)**

## Semester-I Departmentof English Compulsory English

## **Course Objectives and Course Outcomes**

Unit I: Objective-Making students' conscious about the functioning of Democracy.

Outcome-Students tried to understand the importance of democracy.

Unit II: Objective- Making students understand slavery and its effects.

Outcome-Students tried to understand the effects of slavery and its punishing practice.

**Unit III: Objective-**to make students understand correct usage of Tense, Transformation of sentences and Common errors.

**Outcome-**Students tried to solve the examples of Tense, Transformation of sentences and Common errors.

Unit IV: Objective-To create the ability of writing Curriculum Vitae.

**Outcome-**Students attempted to write the Curriculum Vitae.

Unit I: Objective-Making students conscious of slavery, education, and compassion.

Outcome-Students understood the issues related with slavery, education and struggle in life.

**Unit II: Objective-** Making students understand about Self- reliance, Indian Freedom and words of wisdom.

Outcome- students understood about Self- reliance, Indian Freedom and words of Wisdom.

**Unit III**: **Objective-**To make students understand the value of struggle, Kindness and honesty.

Outcome- students understood the value of struggle, Kindness and honesty

Unit IV: Objective-To create the ability of writing and comprehension.

Outcome-Students attempted to write and comprehend the passage.

## Department of Marathi Course Objectives and Course Outcomes

## **Course Objectives**

उदिष्टे:- १. मराठी भाषेविषयी विदयार्थ्यामध्ये अभिरूची निर्माण करणे

- २. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- ३. विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- ४. साहित्यातून मानवतावादी दृष्टिकोण रूजविणे.
- ४. साहित्यातन समाजातील प्रश्नांना वाचा फोडन त्यांचे निराकरण करणे.

ध्येय:- १. भावी काळात विदयार्थ्यामधून साहित्यनिर्मिती करणे.

- २. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करून संवादशील वातावरण निर्मिती करणे.
- विभागात विविध उपक्रमांचे आयोजन करून मराठी भाषेचा दर्जा वाढविणे.
- ४. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे.
- ५. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

#### **Course Outcomes**

साहित्य सेतू

- CO1 विदयार्थ्यानमध्ये साहित्य विषयक आवड निर्माण करणे
- CO2 वाचन संस्कृतीचा पुरस्कार करणे
- CO3 भारतीय संविधानाचे महत्व समजावन सांगणे
- CO4मानवी मृल्यांची जपणूक करणे
- CO5 कविता लंखनाचे तंत्र अवगत करणे
- CO6 पर्यावरण विषयक जागती निर्माण करणे
- CO7 व्यावहारीक मराठीचे महत्व समजावून सांगणे

## Department of Chemistry Programme Educational Objectives (PEOS)

- PEO1: Graduates will pursue higher studies in related fields including management
- **PEO2:** Graduates will perform as employee in private/government institutions rising up to top positions
- **PEO3:** Graduates will become entrepreneurs.
- **PEO4:** Graduates will prepare for various competitive examinations.

### **Programme Specific Outcomes (PSOS)**

- **PSO-1:** Gain the knowledge of Chemistry through theory and practical.
- **PSO-2:** To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.
- **PSO-3:** Identify chemical formulae and solve numerical problems.
- PSO-4: Use modern chemical tools, Models, Chem-draw, Charts and Equipment's.
- **PSO-5:** Know structure-activity relationship
- **PSO-6:** Understand good laboratory practices and safety.
- **PSO-7**: Make aware and handle the sophisticated instruments/equipment.
- **PSO-8:** Develop research-oriented skills.
- **PSO-9:** Study and understand the different techniques used in purification of compounds

### **Programme Outcomes (POs)**

- The students are expected to understand the fundamentals, principles, and recent developments in the subject area.
- It is expected to inspire and boost interest of the students towards chemistry as the main subject.
- To impart practical skills and learn basics behind experiments
- To prepare background for advanced and applied studies in chemistry.
- To inculcate the scientific temperament in the students and outside the scientific community.
- To inculcate the scientific temperament in the students and outside the scientific community.
- Use modern techniques, decent equipment and Chemistry software

## **Course Outcomes (COs)**

Course Name: B. Sc. Year/Semester: First/First Subject: Chemistry

After the successful completion of the course students will be able to-

Paper	co	Outcomes
FY	101.1	To understand the basic structure of
Paper-I		atom.
Inorganic		• Understand shape of orbitals.
Chemistry		Understand periodic properties such as
(101)	((3)	atomic and ionic radii, ionization
		energy, electron affinity etc.
	101.2	T 1
1 1	101.2	<ul> <li>To understand the concept of covalent bond.</li> </ul>
∠\\ _		
	1441 f	<ul> <li>To understand the bond parameters and various types of types of hybridization.</li> </ul>
		<ul> <li>To understand the ionic structures with</li> </ul>
		respect to NaCl and CsCl.
X- / /	20	respect to tract and eser.
_ / / /	101.3	<ul> <li>Understand s block element and their</li> </ul>
	\ 9/.	properties such as electronic
7		configuration, atomic and ionic radii,
		I.P. etc.
	1	Understand chemical properties of the
		noble gases, preparation, structures,
		bonding and applications.
	101.4	To understand the P block element.
		Comparative study of groups 15,16, 17
		with respective their properties.
		<ul> <li>Understand the Hydrides, Oxides,</li> </ul>
		Peroxyacids, Hydrides.
FY	102.1	Understand the common
Paper-II		thermodynamics terms. Types of
Physical		systems and varies thermodynamics
Chemistry		processes.
(102)		<ul> <li>State and path functions and their</li> </ul>

	102.2	<ul> <li>differentiation.</li> <li>Understand the first law of thermodynamics.</li> </ul>
	102.2	<ul> <li>Understand gas equation and laws.</li> <li>Understand qualitative discussion of the Maxwell-Boltzmann distribution.</li> <li>Understand ideal gas and real gases behaviors.</li> </ul>
	102.3	<ul> <li>Understand the Intermolecular forces, structure of liquid, structural difference between solid, liquid and gases.</li> <li>Properties of liquid like surface tension, viscosity, refractive index.</li> </ul>
*//	102.4	<ul> <li>Understand the concept of different types of surface phenomenon and catalytic property, like Adsorption mechanism of adsorption, factor affecting adsorption. Difference between adsorption and absorption, etc.</li> <li>Understand types of catalysis and enzymes.</li> </ul>
F.Y. Chemistry Practical Course	103	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

### **Department of Physics**

### **Programme Educational objectives (PEOS)**

- **PEO1:** Graduates will pursue higher studies in related fields including management
- **PEO2:** Graduates will perform as employee in private/government institutions rising up to top positions
- **PEO3:** Graduates will become entrepreneurs.
- **PEO4:** Graduates will prepare for various competitive examinations.

#### **Programme Specific Objectives (PSOS)**

- **PSO-1:** Gain the knowledge of Physics through theory and experiments.
- **PSO-2:** Understand good laboratory practices and safety.
- **PSO-3:** Develop research-oriented skills.
- **PSO-4:** Make aware and handle the sophisticated instruments/equipments.

#### **Programme Outcomes (POs)**

- Bachelor of Science offers theoretical as well as practical knowledge about different subject areas.
- This course forms the basis of science for coherent understanding of the academic field to pursue multi and interdisciplinary science careers in future. These subject areas include Physics, Chemistry, Mathematics and Botany and Zoology.
- Able to plan and execute experiments or investigations, analyze and interpret data information collected using appropriate methods
- It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace through research.
- Think critically; follow innovations and developments in science and technology.

#### **Course Outcomes (COs)**

Course Name: B. Sc. Year/Semester: First/First

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Properties of Matter and Mechanics	101.1	• Understand the mechanical behavior of the material and the fundamental terminology like Stress, Strain, Poisson's ratio, Hooks law, bending moment and modulus of elasticity
(101)	101.2	<ul> <li>Understand the concept of viscosity.</li> <li>Apply Poiseuille's Equation, Bernoulli's Theorem, Stoke's law and the concept of terminal velocity.</li> </ul>
*//	101.3	Understand the concept of surface tension and surface energy, Newton's laws of motion and to resolve the components of velocity and acceleration in different coordinate system.
4	101.4	Understand the System of particles and conservation laws.
Paper 2: Electrostatics, Time varying	102.1	• Understand the concept of Electrostatic force, Electric field, Electric potential, Electric dipole, Electric dipole moment.
fields & Electric Currents (102)	102.2	<ul> <li>Understand the concept of polarization and capacitors with and without dielectric.</li> <li>Apply Gauss law to parallel plate capacitor.</li> </ul>
	102.3	<ul> <li>To understand the concept of electromagnetic induction and transformer.</li> <li>Apply equation of continuity and Kirchhoff's law to rise and decay of current in LR, CR and LCR circuits.</li> </ul>
	102.4	<ul> <li>To apply complex number in solving an a.c. circuit.</li> <li>Apply j- operator in LR, CR and LCR circuit.</li> <li>Understand the concept of Resonance</li> <li>Calculate I, Z, Φ and fr.</li> </ul>
Physics Practical	103	Apply and demonstrate the theoretical concepts of Physics

(103)	and to develop scientific attitude.	
	Interpret the experimental data	

#### **Department of Mathematics**

#### Programme Educational Objectives (PEOs): B.Sc. (Mathematics)

1.	Graduates will pursue higher studies in related fields including management
2.	To prepare necessary knowledge base for research and development in Mathematics
3.	To help student's build-up a successful career in Mathematics

#### **Programme Specific Outcomes (PSO): B.Sc. (Mathematics)**

1.	Enhance students' ability to develop mathematical models
2.	Develop research-oriented skills.
3.	Nurture problem solving skills, thinking, and creativity through assignments, project
	Work.
4.	Prepare for various competitive exams

#### **Programme Outcomes (POs): B.Sc. (Mathematics)**

1.	Understand and solving of major concepts in all disciplines of mathematics.
2.	Solve the problem and also think methodically, independently and draw a logical
1	conclusion.
3.	To inculcate the scientific temperament in the students and outside the scientific
	community.
4.	Create an awareness of the impact of mathematics on society and development outside
1	the scientific community.
5.	Gain experience investigating the real-world problems and learn to how to apply
	Mathematical ideas and models to those problems.
6.	Understand and able to use mathematical formulae in another subject.

#### **COURSE OUTCOMES (COs)**

Course Name: B. Sc.

Year/Semester: First/First Subject: Mathematics

After successful completion of three-year degree programme in **Mathematics** students should be able to;

Paper	CO	Outcomes
FY	101.1	Understand the basic concept related to Matrices and
Paper-I		solve the problem based on a system of Linear
Algebra and		equations
Trigonometry	101.2	Understand the general properties of equations and
101		Solutions of Different equations
	101.3	Understand the basics of complex numbers and solve
		the problems

	101.4	understand Group theory and general properties
FY	102.1	Using Definition, verify the values of limit and
Paper-II		continuity and solve the problem on Differentiation
102	102.2	Understand the concept of Maclaurins and Taylor's
Calculus		theorem
		Indentify Indeterminate forms and application of
		L'Hospitals Rule
	102.3	Understand the concept of partial differential
		equation, Eulers Theorem and Jacobians
	102.4	Identify the various types and methods to solve
		Integration and application of Reduction Formulae

### Department of Zoology

	PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):		
1./	Graduates will pursue higher studies in related fields including management		
2.	Graduates will perform as employers in private/government institutions rising up to top positions		
3.	Graduates will become entrepreneurs.		

PRO	PROGRAMME OUTCOMES (PO)		
1.	The students are expected to understand the fundamentals, principles, and recent developments in the subject area.		
2.	It is expected to inspire and boost interest of the students towards zoology as the main subject.		
3.	To impart practical skills and learn basics behind experiments.		
4.	To prepare background for advanced and applied studies in zoology.		
5.	To inculcate the scientific temperament in the students and outside the scientific community.		
6.	To inculcate the scientific temperament in the students and outside the scientific community.		
7.	Use modern techniques, decent equipments and Zoology softwares.		

S	PROGRAMME SPECIFIC OUTCOME		
1.	Gain the knowledge of Zoology through theory and practicals.		
2.	Use modern biological tools, Models, Charts and Equipment's.		
3.	Know structure-activity relationship.		
4.	Understand good laboratory practices and safety.		
5.	Make aware and handle the sophisticated instruments/equipment.		
6.	Develop research-oriented skills.		
7.	Study and understand the different technique used in purification of		
	compounds		

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### COURSE OUTCOMES (COs)

Course Name: B. Sc. Year/Semester: First/First

**Subject: Zoology** 

Paper	CO	Outcomes
FY	101.1	To understand general characters and classification up to
Paper-I	10111	classes of protozoa, structure and reproduction of
Life and		Paramoecium, structure and life cycle of Plasmodium,
Diversity of		parasitic Protozoans of Man (Entamoeba, Trypanosoma,
Animals –		Giardia and Leishmania ). Mode of infection and its control.
Non-	101.2	To understand the general characters and classification up to
chordates		classes of porifera, Structure, reproduction and development,
(Protozoa to	Y_	Canal system in sponges, General characters and
Annelida)		classification up to classes of Coelenterata, structure and life
(101)	//	cycle of Obelia, Polymorphism in hydrozoa.
	101.3	To Understand the Helminthes: General characters and
4/		classification up to classes, <i>Ascaris</i> : External morphology,
4//	· A	reproductive system and life cycle, <i>Taenia solium</i> : Structure
//	12	and life cycle, Elementary idea of parasitic adaptations in
. / /	DY	helminthes
*//	101.4	To Understand the Annelida: General characters and
	0	classification up to classes, Leech: Morphology, digestive
		and urinogenital system, Trochophore larva and its
1 1	7	significance, Vermiculture and its importance
FY	102.1	To understand the Atmosphere: Major zones and its
Paper-II		importance, composition of air, Hydrosphere: Global
Environmental		distribution of water, Physico-chemical characteristics of
Biology		water, Lithosphere: Types of rocks, formation of soil,
(102)	dH	Renewable and non- renewable energy sources
' \ \	102.2	Understand the Ecosystem - Definition and types, Detailed
		study of pond ecosystem, Food chain, food web and
X/ '		ecological pyramids, Energy flow in an ecosystem, Single
7 /	100.0	channel, Y – shape and Universal model
	102.3	To understand the Biodiversity and its conservation, Causes
7	- / /	of reduction of biodiversity, Wildlife conservation acts (1972
		and 1984), Introductory study of national parks and
	1	sanctuaries – Tadoba, Kanha, Bharatpur and Nagzira, Hot spots of biodiversity in India
	102.4	To understand the Sources, effect and control measures of air
	102.4	pollution, Acid rain, green house effect, ozone depletion and
		global warming, Sources, effect and control measures of
		water pollution, Sources effect and control measures of noise
		pollution, Toxic effect of heavy metals (lead, cadmium and
		mercury) – Bioaccumulation and biomagnification
F.Y.	103	Verify theoretical principles experimentally
Zoology		<ul> <li>Interpret the experimental data</li> </ul>
Practical		<ul> <li>Improve analytical skills</li> </ul>
Course		· •
		Correlate the theory and experiments and understand  their investments.
		their importance

#### **Department of Botany**

PROGRA	MME EDUCATIONAL OBJECTIVES (PEOs)
1.	Graduates will pursue higher studies in related fields including
	management
2.	Graduates will perform as employee in private/government institutions
	rising up to top positions
3.	Graduates will become entrepreneurs.
4.	Graduates will prepare for various competitive examinations.

- **PO1**.Understanding of Plant Diversityand its importance in the maintenance of ecological balance.
- **PO2**. Students learn to carry out practical work, in the field and in the laboratory, interpreting plantmorphologyandanatomy, Plant identification, Vegetation analysis techniques.
- **PO3**. Apply the knowledge of basic science, life sciences and fundamental process of plants.
- **PO4**. Apply modern techniques and instruments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological studies of plants with anunderstanding theapplications in human life.
- **PO5**. Apply theknowledge gained from the studies for the upliftment of society via addressinghealth, environmental issues, food scarcityetc.

#### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

- **PSO1**. Critical evaluation of ideas and arguments by collecting relevant information about the plants,so as to recognize their position in the classification systems and atphylogenetic level.
- **PSO2**. Students will be able to access the primary literature, identify relevant works for aparticular topic, and evaluate the scientific content of these works
- **PSO3**. Students will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms.
- **PSO4**. Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth.
- **PSO5**.Students will be able to explain how Plants functionat gene, genome, cellular and tissue level.
- **PSO6**. Students will be will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.
- **PSO7.** Students will be able to conceive the idea of artificial propagation of plants via vegetativemethods and to find alivelihood via establishing miniature plant nurseries

Course Name: B. Sc. Year/Semester: First/First

**Subject: Botany** 

Paper CO Outcomes  FY 101.1 • To understand the nature of viruse Ultra-structure and economic importance.  Prokaryotes,Alg • Understand the properties of	es,
Paper-I Viruses, Prokaryotes,Alg  Ultra-structure and economic importance.  • Understand the properties of	,
Viruses, Prokaryotes,Alg  Understand the properties of	
• Understand the properties of	
Mycoplasma and its reproduction	
And Understand general characteristics	
reproduction in bacteria	s and
101.2 • To understand general characteris	tics and
classification of algae	and and
To understand the to understand g	ranaral
structure of Cyanobacteria and its	
reproduction.	
101.3 • Understand life cycle of Chara,	
Vaucheria ,Ectocarpus, and	
Batrachospermum.	1
Distribution of the control of the c	. \
101.4 • To understand Scope and importa	nce of
Biofertilizers.	
Understand the microbes used in	1 1
biofertilizers.	
FY 102.1 • Understand the Characteristics of	fungi.
Paper-II • Understand the reproduction and	10 - 10
Fungi, Plant cycle of Albugo, Mucor, Puccinia	
Pathology, Liche Cercospora.	
ns, Bryophyta  102.2  Pathogen study, control and cause	es of
and Mushroom diseases: leaf our of papaya City	
Cultivation (102) canker and red rot of sugarcane	
102.3 • Understand classification and ger	neral
characteristics of Bryophyta.	
Life history of Marchantia, Antho	oceros
and Funaria	)
To Study the nutritional and medi	cinal
values of edible and non-edible	
mushrooms. Technology of mush	room
cultivation	
<b>F.Y.</b> • Study the fungal genera.	
• Study the lichens, thallus structure	e and
Practical Course types of lichens.	
Plant pathological study.	
Study of bryophytes and identification	ation of
its characteristics.	
Preparation of mushroom beds.	

#### Semester II

#### Department of English Course Objectives and Outcomes Compulsory English

**Unit I: Objective-**Making students conscious about the functioning of Democracy.

**Outcome-**Students tried to understand the importance of democracy.

**Unit II: Objective-** Making students understand slavery and its effects.

**Outcome-**Students tried to understand the effects of slavery and its punishing practice.

**Unit III: Objective-**To make students understand correct usage of Tense, Transformation of sentences and Common errors.

**Outcome-**Students tried to solve the examples of Tense, Transformation of sentences and Common errors..

Unit IV: Objective-To create the ability to write Curriculum Vitae.

Outcome-Students attempted to write the Curriculum Vitae.

#### **Department of Marathi**

#### **Course Objectives and Outcomes**

#### **Programme Objectives**

उदिष्टे:- 1. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरुची निर्माण करणे.

- 2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- 3. विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
- 5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

#### **Course Outcomes**

#### साहित्य सेतू

ध्येय:- 1. भावी काळात विदयार्थ्यांमधून साहित्यनिर्मिती करणे.

- 2. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करुन संवादशील वातावरण निर्मिती करणे.
- 3. विभागात विविध उपक्रमांचे आयोजन करुन मराठी भाषेचा दर्जा वाढविणे.
- 4. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे.
- 5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

### **Department of Chemistry Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/ Second

**Subject: Chemistry** 

Paper	CO	Outcomes
FY Paper -I Organic Chemistry (201)	201.1	<ul> <li>To make students understand different organic compounds and the concept structure and bonding in organic compounds.</li> <li>Understand the mechanism of organic reaction.</li> </ul>
(201)	201.2	<ul> <li>Understand the concept of stereochemistry of organic compounds.</li> <li>To make the structure of Geometrical isomerism and conformational isomerism.</li> </ul>
*//	201.3	Many of the daily used materials are organic compounds and majority of them are hydrocarbons therefore this topic makes the concept regarding their information
*	201.4	<ul> <li>Basic of the alkane and alkynes with respect to their chemical point of view.</li> <li>To understand the aromaticity of organic compounds.</li> </ul>
F.Y. Pape-II Physical Chemistry (202)	202.1 744	<ul> <li>To understand the thermodynamics of chemical reactions.</li> <li>Understand free energy functions like work function, Gibb's free energy etc.</li> </ul>
*/	202.2	To understand the concept of phase equilibria.     Statement of phase rule and term. Application of phase rule
	202.3	Understand the concept of nuclear chemistry and molecular structure
	202.4	To Understand the concept of chemical kinetics and theories of chemical kinetics.
F.Y. Chemistry Practical course	203	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

# **Department of Physics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Physics** 

After the successful completion of the course students will be able to-

Paper	CO	Outcomes
Paper 1:	201.1	• To understand the concept of linear and angular
Oscillations,		S.H.M., Damped harmonic oscillator
Kinetic theory of	201.2	To understand the concept of Forced oscillation with
gases and		one degree of freedom and kinetic theory of gasses.
Thermodynamics	201.3	• To understand the Transport phenomenon in gases,
(201)		Zeroth and First law of thermodynamics and Cornot's
	1	Theorem
	201.4	To understand second and third law of thermodynamics
		and Maxwell's general relationship and its applications
Paper 2:	202.1	To understand Newton's laws of gravitation and the
Gravitation,		concept of Gravitational self-energy of the galaxy
Astrophysics,	202.2	• Know the constituents of universe (Solar system, Stars,
Magnetism and	6	Galaxies) and some physical aspects of universe
Magnetostatics	202.3	• To understand the concepts of Dimagnetism,
(202)	26	Paramagnetism and Ferromagnetism and their
<b>X</b> ///		applications
11 2	202.4	To understand the Concept of magnetic field and to
11/3		study various laws of magneto static and their
		applications.
Physics Practical	203	Apply and demonstrate the theoretical concepts of
(203)		Physics and to develop scientific attitude.

### Department of Mathematics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: First/ Second Subject: Mathematics

After successful completion of three-year degree programme in **Mathematics** students

should be able to;

Paper	CO	Outcomes
FY	201.1	Understand the concept of Solid Geometry
Paper-I	202.2	Identify and solve the problems on Differential equations
201		of first order
Geometry,	203.3	Understand the Higher order linear differential equations
Differential and		with constant coefficient
Difference	204.4	Understand the basic concept of Difference equation
<b>Equations</b>		2
FY	202.1	Students learn the concept of Vector differentiation and
Paper-II		Line Integral
202	202.2	Learn the evaluation of area by double Integral
	202.3	Apply integration to evaluate over surface and volume
	202.4	Evaluate Improper Integrals also study the gamma and
		Beta functions

### **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Zoology** 

		ion of the course students will be able to-
Paper	CO	Outcomes
FY _	201.1	To understand the, Arthropoda: General characters and
Paper -I		classification up to classes, Cockroach: Mouth parts,
Life and Diversity		digestive system and reproductive system, Insects as
of Animals –		Vectors: Mosquito, Housefly, Sandfly, Tse-Tse fly,
Nonchordates		Study of crustacean larvae : Nauplius, Zoea and
(Arthropoda to		Megalopa; Social behavior in honey bees
Hemichordata)	201.2	To understand the Mollusca: General characters and
(201)		classification up to classes, <i>Pila</i> : Morphology,
		digestive, respiratory and reproductive system, Pearl
1		formation in Mollusca, Molluscan larvae : Glochidium
1 / /	201.2	and Veliger
1-//	201.3	To understand the Echinodermata: General characters
7//		and classification up to classes, <i>Asterias</i> : External
//	1	features and digestive system, Water vascular system
1///	20	and locomotion in Starfish, Echinoderm larvae:
X//L	201.4	Bipinnaria and Auricularia
11 10	201.4	To understand Hemichordata: General characters and
		phylogeny, Balanoglossus: External features and
(50	=0.6	digestive system, Reproduction in Balanoglossus,
F.Y.	202.1	Tornaria larva, Affinities of Balanoglossus  To understand the Ultrestructure of prekervetic and
Paper-II	202.1	To understand the Ultrastructure of prokaryotic and eukaryotic cell, Plasma membrane: Structure-Fluid
Cell Biology		Mosaic Model and functions, Endoplasmic reticulum:
(202)		Types, ultrastructure and functions, Golgi complex:
(202)	746	Ultrastructure and functions
1 1	202.2	To understand Ultrastructure of mitochondria,
~	202.2	Oxidative phosphorylation – Glycolysis and Kreb's
JF-\\		cycle, Electron Transport Chain and terminal oxidation,
, , ,		Lysosome: Structure, polymorphism and functions
	202.3	To understand the Nucleus: Ultrastructure of nuclear
		membrane, Structure and functions of nucleolus,
		Chromosome: Structure and types, structure of
	1	nucleosome, Giant chromosomes: Lamp-brush and
		polytene chromosome
	202.4	To understand the Ribosome: Structure, types, Lake's
		model and functions, Somatic cell division: Cell cycle
		and Mitosis, Meiosis (different phases and
		significance), synaptonemal complex, Cellular ageing
		and cell death, Elementary idea of cancer and its
		causative agents
F.Y.	203	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
Practical course		Improve analytical skills
		<ul> <li>Correlate the theory and experiments and</li> </ul>
		• • •
		understand their importance

### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Botany** 

Paper	CO	Outcomes
FY	201.1	To make students understand fossils,
Paper -I	201.1	, and the second
Paleobotany, Pteridophytes,		Pseudofossils, and its importance.
Gymnosperms and Soil		Knowledge about types of fossils.
Analysis (201)		Details of Geological time scale.
1		Differentiation among the types of fossil.
		<ul> <li>Study the general characteristics of</li> </ul>
	201.2	Pteridophytes and its classification.
<b>X</b>		<ul> <li>Life history of Selaginaella. And</li> </ul>
		Equisetum.
. ///	201.3	Classify the Gymnosperms, its
4// 0	1	characteristics and economic importance.
7// ^	611	<ul> <li>Understand the fossil gymnosperm.</li> </ul>
112	-73/4	• Study the life cycle of <i>Cycas</i> and <i>Pinus</i>
L// 126	201.4	Skill development and soil analysis.
XII		<ul> <li>Identification of types of soil on the basis</li> </ul>
1 10	-3	of its color and texure.
		<ul> <li>Study the physical properties of soil.</li> </ul>
J (50	(C3	Understand the pH of soil and nitrogen
7 -	1	availability in it.
F.Y.	202.1	
Pape-II	202.1	Study the morphological characteristics of
Morphology of	7	plants.
Angiosperms and	4	Identification of morphological characters
Floriculture		of plants.
(202)		Study the modification occure in root,
7//	202.2	stem and leaf.
	202.2	• Study the reproductive morphology.
4//	-// 12	Study the types of inflorescence.
7		Study the calyx, corolla and Androecium.
	202.3	<ul> <li>Understand the structure of gynoecium.</li> </ul>
		<ul> <li>Study the fruit and its types.</li> </ul>
	202.4	Develop the skills of floriculture and
		cultivation
		Method of cultivation.
F.Y.	203	Study of different root and stem
Botany		modification and branching patterns.
Practical course		• Study the types of leaf and its phyllotaxy,
		venation and modification.
		<ul> <li>Understand the flower structure and</li> </ul>
		position of calyx, corolla, androecim and
		gynoecium.

# Semester-III Department of Chemistry COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Chemistry** 

After the successful completion of the course, students will be able to-

Paper	CO	Outcomes
S.Y Paper-I Inorganic	301.1	Understand the concept of molecular orbital theory and VSEPR theory.
Chemistry (301)	301.2	Understand the properties of d and f block elements.
*	301.3	<ul> <li>Understand the role of nonaqueous solvents.</li> <li>Understand concept of errors and evaluation in chemical analysis.</li> </ul>
*//	301.4	Understand the concept of chemistry of Lanthanides and Actinides series.
S.Y. Paper-II Organic	302.1	Understand the structure and chemical bonding in aryl, alkyl halides, and aldehydes.
Chemistry (302)	302.2	Understand the structure and chemical bonding in alcohols and phenols.
*     4	302.3	Understand the nomenclature, structure of the carbonyl group, synthesis of aldehydes and ketones
*// 3	302.4	Understand chemical reaction of carboxylic acids and its derivatives.
S.Y. Chemistry Practical Course	303	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

# Department of Physics COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Sound	301.1	• Understand the concept of group and phase velocities,
Waves, Applied		formation of standing waves and diagrammatic
Acoustic,		introduction of human ear and its responses.
Ultrasonic and	301.2	• Understand the working of transducers and their
Power Supply		characteristics and the concept of acoustic and its

(301)		applications.
• Understand the production and application waves.		• Understand the production and applications of ultrasonic waves.
	301.4	• Understand the concept of voltage regulation and working of the half, full and bridge rectifier.
Paper 2: Physical Optics and	302.1	• Understand the concept of interference of light through thin film
Electromagnetic Waves  • Apply the concept of interference of light through film in wavelength determination.		• Apply the concept of interference of light through thin film in wavelength determination.
(302)	302.2	• Understand the concept of diffraction, Resolving Power of grating and Rayleigh's criterion for resolution.
	302.3	• Understand the concept of polarization and double refraction
*	302.4	<ul> <li>Understand the origin and characteristics of EM waves, Physical significance of Maxwell's equations, Characteristics impedance of dielectric and Poynting theorem.</li> </ul>
Physics Practical (303)	303	• Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.

# **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

**Year/Semester: Second/Third** 

**Subject: Mathematics** 

After successful completion of three-year degree programme in Mathematics students should be able to:

should be able to,		
Paper	CO	Outcomes
SY	301.1	Students understand Mean Value theorem
Paper-I	301.2	Learn about an envelope of a family of curves in the
301	4 4	plane and study the Langranges Multiplier method
Advanced	301.3	Understand the concept of sequence
Calculus,	301.4	Use Tests for convergence
Sequences &		113 -R
Series		O TIII
SY	302.1	Understand the concept of Special Functions(Bessels and
Paper-II		Legendre's function)
302	302.2	Students understand the concept of Laplace Transform
Differential		and solve the problems
<b>Equation and</b>	302.3	Applications of Laplace Transform & Fourier Transform
Group	302.4	Students develop knowledge in group theory
Homomorphism		7

# **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Zoology** 

Paper	CO	Outcomes
S.Y	301.1	Understand the Protochordata : General characters and classification

	ı	
Paper-I		up to order, <i>Herdmania</i> : Structure, digestive system, ascidian
Life and		tadpole and retrogressive metamorphosis, <i>Amphioxus</i> : Structure,
Diversity of		digestive system, circulatory system, sense organs and
Animals -		protonephridia, Agnatha : General characters of Cyclostomata
Chordates		(Petromyzon and Myxine)
(Protochordata	301.2	Understand the Pisces: Salient features of Chondrichthyes and
`	301.2	
to Amphibia)		Osteichthyes, Origin of paired fins in fishes, Migration and
(301)		Accessory respiratory organs in fishes, Amphibia : General
		characters and classification up to order, Parental care and Neotony
		in Amphibia
	301.3	Understand the Gametogenesis and type of eggs, Fertilization of
		egg, Post fertilization development of fish, Types of scales of fishes,
		Development of placoid scales
	301.4	Understand the Frog Embryology - Cleavage, blastulation and
	301.4	
9		gastrulation, Fate map, Morphogenetic movements in gastrula of
		frog, Development of respiratory organs in frog, Development of
		Aortic arches of frog
S.Y.	302.1	Understand the Mendelian Principles- Dominant recessive
Paper-II		relationships, Mendelian laws, Interaction of genes- Epistasis -
Organic		dominant and recessive, codominance, incomplete dominance,
Zoology		Quantitative genetics – Polygenic traits, inbreeding and
(302)		outbreeding, hybrid vigor, Extracellular genome – Presence and
/_/	NC	functions of mitochondrial DNA, plasmids
X//	302.2	Understand the concept of Cytoplasmic inheritance- <i>Kappa</i> particles
	302.2	in <i>Paramecium</i> , CO2 sensitivity in <i>Drosophila</i> , milk factor in mice,
-		Linkage and crossing over – Basic concepts of linkage, types and
1 /6	b	
K   G		theories, Concepts of genes – Cistron, muton and recon, Genetic
		disorders in human beings – Haemoglobin disorders – Thalassemia
		and Sickle cell anemia. Metabolic disorder: Phenylketonurea
	302.3	Understand the concept of Sex determination – ZZ, XY, XO, ZW
XII.		pattern, Sex determination in <i>Drosiphila</i> – Genic balance theory,
711	UH.	Environmental sex determination in <i>Bonellia</i> , Chromosomal
\ \ \		aberrations: addition, deletion, duplication and inversion, Gene
		mutations- Spontaneous and induced mutations, mutagenic agents,
X//		Disorders related to chromosomal number- Turner syndrome,
7 /		Klinefelter syndrome and Down syndrome
	302.4	Understand the Lethal genes – Concepts and consequences,
4	302.7	Population genetics: Basic concepts in population genetics, Hardy
	1	
3 24		Weinberg equilibrium and its significance, Genetic counseling –
	1	Introduction, purpose, hereditary diseases and disorders, Applied
		genetics - DNA fingerprinting, amniocentesis, sperm banks,
		karyotyping
S.Y.	303	<ul> <li>Verify theoretical principles experimentally</li> </ul>
Zoology		Interpret the experimental data
Practical		Improve analytical skills
Course		± • • • • • • • • • • • • • • • • • • •
		Correlate the theory and experiments and understand their
		importance
İ	1	

#### **Department of Botany Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Botany** 

After the successful completion of the course students will be able to-

Paper	CO	Outcomes
S.Y	301.1	• Understand the study of angiosperms, Fossil
Paper-I		angiosperms, Angiosperms taxonomy.
		<ul> <li>Understand the nomenclature.</li> </ul>
		<ul> <li>Study the trends in taxonomy.</li> </ul>
Botany		* X X
(301)	301.2	• Understand the classification system of Benthem
		and Hooker, Engler and Prantle.
	301.3	<ul> <li>Study the types of pollinaton and its significance</li> </ul>
X-	//	• Study the structure of anther, pollen grain and male
1/		gametophyte development.
- A		<ul> <li>Study the types of ovules and female gametophyte.</li> </ul>
7-//		Understand the fertilization process.
~//	301.4	Study the skills of landscaping and gardening.
S.Y.	302.1	Understand anatomical features of plants and its
Paper-II	20	organs.
Angiosperm		<ul> <li>Study the tissue its types and functions.</li> </ul>
anatomy and	302.2	Study the primary and secondary growth I stem and
Horticulture	5	root.
(302)	302.3	Study the periderm growth rings, sap heartwood,
		leaf anatomy.
1 1		Study the Senescence and Abscission.
$\sim 1.1$	302.4	Study the techniques of horticulture, methods of
#//	dII	propagation.
, , ,	(1-1	Learn the technique of bonsai preparation.
S.Y.	303	Study the simplest and complex tissue from
Botany		permanent micro-preparation.
Practical		<ul> <li>Identification of types of vascular bundle.</li> </ul>
Course		<ul> <li>Anatomy of Dicot and Monocot stem with</li> </ul>
4	/	temporary or double stained.
		Study the internal structure of dicot and monocot
		leaf.

# SEMESTER IV Department of Chemistry Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Chemistry** 

results the succession of the course statements will be used to		
Paper	CO	Outcomes
S.Y. Paper-I	401.1	Understand the properties of coordination compounds. Chelates: classification and their

Inorganic		application and valance bond theory of complexes.
Chemistry (401)	401.2	Understand the concept of isomerism in coordination compounds. Concept of oxidation and reduction and balancing of redox reaction.
	401.3	<ul> <li>Understand the concept of colorimetry and spectrophotometry.</li> <li>Understand the concept of separation technique like chromatography ion exchange and solvent extraction.</li> </ul>
	401.4	Understand the concept of inorganic polymers.
S.Y. Paper-II Physical Chemistry (402)	402.1	<ul> <li>Understand solid state and their classification and their laws.</li> <li>To understand the concept of determination of crystal structure.</li> </ul>
*	402.2	<ul> <li>Understand electrochemistry of reversible and irreversible cells.</li> <li>Understand the concept of electrical transport and transport number.</li> </ul>
	402.3	<ul><li>Use spectroscopy for chemical analysis.</li><li>Understand types of spectroscopy.</li></ul>
1 6	402.4	Understand the concept of quantum chemistry and wave function.
S.Y. Chemistry practical Course	403	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

### Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Solid State Physics, X-ray and Laser	401.1	• Understand the basic concept of crystallography, find various lattice parameters, find Miller Indices of the given plane and draw planes from the set of Miller Indices.
(401)	401.2	<ul> <li>Understand main feature of continuous X-ray spectra and Characteristics X-ray spectra,</li> <li>Apply Moseley's law to determine wavelength of X-ray.</li> </ul>
	401.3	<ul> <li>Understand the basic concept of solid state physics.</li> <li>Apply Bragg's law for wavelength determination and simple cubic structure determination.</li> </ul>

		• Calculate Miller indices of the given plane and identify the orientation of the plane from the given set of Millar indices.
	401.4	<ul> <li>Understand the concepts of LASER emission.</li> <li>Understand the construction and working of various</li> </ul>
		types of LASER.
Paper 2:	402.1	<ul> <li>Understand the construction and working and</li> </ul>
Solid State		characteristics of various solid state devices.
Electronics, and	402.2	• Understand the construction and working and
Molecular		characteristics of various FETs.
Physics	402.3	Understand the concept molecular physics.
(402)	402.4	Understand and apply the Raman spectroscopy.
Physics	403	Apply and demonstrate the theoretical concepts of
Practical	-	Physics and to develop scientific attitude.
(403)		

#### **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Mathematics** 

After successful completion of three-year degree programme in Mathematics students should be able to;

Paper	CO	Outcomes
SY G	401.1	Understand the concept of ordinary Differential Equations
Paper-I		in more than two variables
401	401.2	Use the methods to solve the linear and nonlinear partial
Partial		differential equations of first order
Differential	401.3	Understand the concept of Higher Partial Differential
<b>Equations &amp;</b>	dH	Equations
Calculus of	401.4	Find the distance between the curves and understand the
Variation		concept of Eulers differential equation
X \ \		
SY	402.1	Students learn about Coplanar Forces, Virtual Work and
Paper-II		Catenary
402	402.2	Understand the velocity, Acceleration and simple
Mechanics		harmonic Motion
	402.3	Understand the concept of Lagranges Equations of motion
	402.4	Learn the problem of two bodies moving under the
	-	influence of a mutual central force

#### **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Zoology** 

Paper	CO	Outcomes
S.Y.	401.1	Understand the Reptilia- Classification based on temporal

	1	
Paper-I		vacuities, Poison apparatus, biting mechanism, snake
Life and Diversity		venom and its importance, Aves – Comparison of Ratitae
of Animals –		and Caranitae, Flight adaptations and migration, Mammals
Chordates		– General characters of Prototheria, Metatheria and Eutheria
(Reptilia, Aves and	401.2	Understand the Modern theories of evolution: Darwinism
Mammals)		and Neo-Darwinism, Adaptations – Cursorial, Aquatic,
(401)		Terrestrial, Fossorial and Volant, Introduction to genetic
(101)		basis of evolution – Species Deme, Variation, Races in Man
		± ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
	401.2	(Caucasoid, Negroid, Mongoloid and Australoid)
	401.3	Understand the Comparative account of aortic arches and
		heart in Reptiles, Birds and Mammals, Structure of hen's
		egg, Development of chick up to premitive streak stage,
	k - 2	Development of extra embryonic membranes in chick and
	M	functions
	401.4	Understand the Frog Embryology - Cleavage, blastulation
		and gastrulation, Fate map, Morphogenetic movements in
1		gastrula of frog, Development of respiratory organs in frog,
4/		Development of Aortic arches of frog
S.Y.	402.1	Understand the DNA: Structure of DNA, forms of DNA,
Paper-II	102,3	properties of DNA, DNA as a genetic material, RNA:
Molecular Biology	A	Structure of RNA, types of RNA, RNA as a genetic
and		material, Prokaryotic and eukaryotic gene structure,
	2	Recombination in Bacteria: Bacterial transformation –
Immunology(402)		
	402.2	Griffith's experiment, Conjugation in bacteria, transduction
	402.2	Understand the concept DNA replication: Semiconservative
11/3		model, Meselson Stahl experiments. Process of replication –
		origin of replication, concept of replication, directionality of
		replication, Genetic code: Characteristics of genetic code,
		Wobble hypothesis, Protein synthesis: Transcription
		mechanism – Initiation, elongation and termination of
$\forall II -$		transcription. Translation – activation of amino acids,
<b>T</b> \\ d	44	transfer of activated amino acids to tRNA, Initiation,
, , , , , , , , ,		elongation and termination of polypeptide chain; inhibitors
		of protein synthesis, Gene regulation models- Lac operon
X//		and tryptophan operon
7//	402.3	Understand the Concepts of immunity – Innate and acquired
	702.3	immunity, organs of the immune system, Antigen -
4		
<b>X</b>		Structure, diversity, functions and types of antigen,
5 24		Antibody- Structure, types and functions, Antigen-antibody
	402.4	interaction – Precipitation and agglutination
	402.4	Understand the Types of immune response: B cell response
		(antibody mediated), T cell response (cell mediated),
		Complement system: Basic concepts of complement
		cascades, classical, alternative and MBL pathways,
		implications of complement system in immune defense,
		Cytokines- General account on cytokines, Cytokine related
		diseases, Autoimmunity and immunodeficiencies-
		Autoimmune diseases and their treatment, AIDS and other
		immunodeficiencies
S.Y.	403	Verify theoretical principles experimentally
Zoology practical	703	
Course		<ul> <li>Interpret the experimental data</li> </ul>
Course		<ul> <li>Improve analytical skills</li> </ul>
		<ul> <li>Correlate the theory and experiments and understand</li> </ul>
	l	

tl	neir importance
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### **Department of Botany** Course Outcomes (COs)

Course Name: B. Sc.

**Year/Semester: Second/Fourth** 

Subject: Botany
After the success

After the successfu	l compl	etion of the course students will be able to-
Paper	CO	Outcomes
S.Y. Paper-I Cell biology, Plant Breeding, Evolution, and Technology (401)	401.1	<ul> <li>Understand the brief account of cell theory. Comparison between eukaryotic and prokaryotic cell.</li> <li>Structure and function of cell wall, Endoplasmic reticulum, Golgi complex, plasma membrane, Ribosome and Vacuole.</li> </ul>
Teemology (401)	401.2	<ul> <li>Understand the structure and functions of chloroplast, Mitochondria and Nucleus.</li> <li>Understand the chromosome morphology, Molecular organization of chromosomes.</li> <li>Understand the sex chromosomes and cell division process.</li> </ul>
* (F)	401.3	<ul> <li>Understand plant breeding, methods of plant breeding.</li> <li>Understand the biostatistics and determine the Mean, Mode, Median.</li> <li>Understand the evolution process.</li> </ul>
S.Y.	401.4	Understand the seed development technology which is used to increase a commercial value of seeds.
Paper-II	402.1	<ul> <li>Understand the principle of Mendelism.</li> <li>Understand the linkage and crossing over process.</li> <li>Understand the Mutation, chromosomal</li> </ul>
(402)	402.3	<ul> <li>aberrations and variation in chromosome number.</li> <li>Understand the DNA damage and repair process.</li> </ul>
	402.3	<ul> <li>Study the concept of DNA and RNA.</li> <li>Understand the concept of gene, genetic code.</li> <li>Understand the process of protein synthesis and regulation of gene interaction.</li> </ul>
	402.4	<ul> <li>Study the skill development.</li> <li>Develop the skills related with plant nursery.</li> <li>Understand the nursery manaegment techniques</li> </ul>
S.Y. Botany practical Course	403	<ul> <li>Study the Mendel's law of segregation with help of color beads.</li> <li>Prove the Mendel's law of independent assortment.</li> <li>Study the different method of vegetative propagation.</li> <li>Study the method of soil sterilization for plant nursery.</li> </ul>

# SEMESTER V Department of Chemistry Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Chemistry** 

After the successful completion of the course students will be able to-

Paper	CO	Outcome
T.Y. Paper-I Organic	501.1	<ul> <li>Understand the concept of organic compounds of nitrogen and amines.</li> </ul>
Chemistry (501)	501.2	Understand heterocyclic compounds and their structure.
*/	501.3	<ul> <li>Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.</li> <li>Understand reaction and structure of organometallic compounds.</li> </ul>
*//	501.4	<ul> <li>To study Spectroscopy.</li> <li>To understand Electromagnetic and Infrared absorption spectroscopy</li> </ul>
T.Y. Paper-II Physical Chemistry	502.1	<ul> <li>Understand electrochemistry and various types of cells.</li> <li>Understand types of reversible electrodes.</li> </ul>
(502)	502.2	Understand quantum chemistry and molecular orbital theory.
*// =	502.3	<ul> <li>Understand the concept of Photochemistry.</li> <li>To study Raman Spectroscopy</li> </ul>
	502.4	To understand colligative properties and macromolecules.
T.Y. Chemistry Practical Course	503	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

# **Department of Physics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Atomic	501.1	Understand Vector atom Model, the concept of space
Physics, Free		quantization, Zeeman Effect and L-S and J-J
Electron Theory		coupling.
and Statistical	501.2	Apply free electron theory and band theory of solid

Physics (501)		to classify solids as conductor, semiconductor and insulator.
	501.3	Understand and apply Maxwell-Boltzmann statistics
	501.4	• Understand and apply Bose-Einstein statistics and Fermi-Dirac statistics.
Paper 2: Quantum Mechanics, Nanomaterials and	502.1	• Understand the basics of quantum mechanics and apply it to explain the phenomena like black body radiation and Compton Effect.
Nanotechnology (502)	502.2	• Understand and apply Schrodinger's equation to free particle in a one and three dimension.
	502.3	Understand the basics of nanotechnology.
	502.4	Understand the synthesis and characterization techniques of nano materials.
Physics Practical (503)	503	<ul> <li>Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.</li> </ul>

#### **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth Subject: Mathematics

After successful completion of three year degree program in Mathematics a Student should

be able to;

Paper	CO	Outcomes
TY	501.1	Understand the concept of Fourier series
Paper-I	501.2	Understand the concept of Riemann-Stieltjes integral
501	501.3	Understand the concept of Analytics Functions
Analysis	501.4	Students learn about Mobius Transformation
TY	502.1	Students deal with the definition, properties and
Paper-II		examples of countable and uncountable sets and
502		understand the metric space
Metric spaces,	502.2	Understand the concept of Completeness, Compactness
Complex		and Connectedness
integration &	502.3	Understand the concept of Ring
Algebra		Analyze and demonstrate examples of ideals and
		quotient rings
8	502.4	Understand the basic concept of Complex Integration
		Evaluate integrals along a path - directly from the
		definition and also via the Fundamental Theorem of
		Contour Integration and Cauchy's Theorem

# **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Zoology** 

Paper	CO	Outcomes
T.Y.	501.1	Understand the Enzymes – Distribution and chemical nature of

Doman I		anaximas Canaval manarties of anaximas Classification of anaximas
Paper-I		enzymes, General properties of enzymes, Classification of enzymes,
General	<b>504.0</b>	Factors affecting enzyme activity
Mammalian	501.2	Understand the Structure and functions of digestive glands -
Physiology –		(Salivary, Gastric, Intestinal, Liver and Pancreas), Gastrointestinal
I		hormones, Digestion and absorption of proteins, carbohydrates and
(501)		lipids, Vitamins- Fat soluble and water soluble vitamins; Sources,
		deficiency and diseases
	501.3	Understand the Respiratory pigments - Types, distribution and
		properties, Mechanism of Respiration, Transport of O2 and CO2,
		Respiratory disorders and effects of smoking
	501.4	Understand the Composition and functions of blood, Blood clotting
		– Intrinsic and extrinsic factors, blood groups and <i>Rh</i> factor, Cardiac
		cycle, E.C.G. and Blood pressure
T.Y.	502.1	Understand Site selection and construction ,Pre stocking and post
Paper-II		stocking manangement of nursery, rearing and stocking ponds,
Physical	1 /	Breeding of fishes by bund and Chinese hatcheries. Induced
Zoology		breeding by hypophysetion. New generation drugs in induced
(502)	//	breeding, Brief study of freshwater aquaculture system –
4/		Polyculture, cage culture, sewage fed fish culture, integrated fish
7/		farming, Fish products and byproducts, Fish preservation
'//	502.2	Understand the Prawn culture and Pearl culture, Fabrication and
. / /		setting up of aquarium and its maintenance, Breeding of aquarium
1//	$\mathcal{L}$	fishes – Live bearers and egg layers, Diseases caused by fungi,
A//		bacteria, protozoa and helminthes
//	502.3	Understand the concept Chemical control: Insecticides -
. [ ]	I	Pyrethroids, carbomate and HCN – mode of action, merits and
		demerits, Biological control – Biological agents – predators and
		parasites; merits and demerits, Crop pest: Life cycle, damage and
		control of Cotton spotted boll worm -Earias vitella ,Stored grain
		pest- Rice Weevil, Sitophilus oryzae, Animal pest: Life cycle,
XII		damage and control of – House fly – <i>Musca nebulo</i> , Stable fly –
V / /		Stomoxys calcitrans
	502.4	Understand the Sericulture- Types of Silkworm. Life cycle and
4		rearing of mulberry silkworm, <i>Bombyx mori</i> , Life cycle and rearing
4		of non mulberry silkworm (Tasar), Antheraea mylitta; Brief idea of
7 7	//	coccon processing for silk fabric - coccon boiling, reeling, rereeling,
125.4	1	winding, doubling, twisting and weaving, Apiculture – Types of
	- /	honey bees. Life cycle, culture, movable frame hive, bee product and
	7	its economic importance, Lac culture – Lac insect, Laccifer lacca -
<b>70.</b> 77	<b>F</b> 0.2	Life cycle, Lac processing, Lac products and Economic Importance
T.Y.	503	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
Practical		Improve analytical skills
Course		Correlate the theory and experiments and understand their
		importance
		_

#### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Botany** 

D	CO	0.4
Paper	CO	Outcomes
T.Y.	501.1	Understand water relation and its significance.
Paper-I		• Understand the Osmosis, Diffusion, Osmotic Pressure.
Plant		<ul> <li>Understand the ascent of sap.</li> </ul>
physiology,		<ul> <li>Understand the transpiration, phloem transport and</li> </ul>
Mineral		mineral uptake.
Nutrition	501.2	• Understand the photosynthesis process, photosynthetic
and	, 1	pigments.
Hydrophoni	_/	<ul> <li>Understand the light and dark reaction of</li> </ul>
cs (501)	//	photosynthesis.
		<ul> <li>Understand the respiration and its mechanism.</li> </ul>
1		• Understand the fermentation process.
4/	501.3	Understand the nitrogen fixation by symbiotic and
//	1	Non-Symbiotic mechanism.
\ / /		Study the pant movements and photoperiodism.
* / /		Study the circadian rhythms and Biological Clock.
	501.4	Understand the mineral nutrition, source and types.
///	1	<ul> <li>Study the role and deficiency symptoms</li> </ul>
W / (	G	Macronutrients and Micronutrients.
		Study the hydroponics, advantages and disadvantages
'		of hydroponics.
T.Y.	502.1	Understand the concept of Ecology.
Paper-II		<ul> <li>Study the climatic, Edaphic and Physiographic factors.</li> </ul>
Plant	502.2	Study the ecosystem, components of Ecosystem.
Ecology and	202.2	<ul> <li>Understand the food chain, food web and ecological</li> </ul>
Organic		pyramids.
Farming		<ul> <li>Study the Autecology and Synecology.</li> </ul>
(502)	502.3	<ul> <li>Understand the process of succession.</li> </ul>
	202.0	<ul> <li>Study the plant adaptations.</li> </ul>
7	-	<ul> <li>Study the Prant adaptations.</li> <li>Study the Biogeochemical cycles.</li> </ul>
	502.4	
	302.7	<ul><li>Develop the skills of organic farming.</li><li>Understand the methods of recycling of biodegradable</li></ul>
		kitchen, agriculture and industrial waste.
		<ul> <li>Study to prepare organic manure.</li> </ul>
T.Y.	503	<ul> <li>Study to prepare organic manure.</li> <li>Determining the Frequency, Density, and Abundance</li> </ul>
Botany	203	of community by Quadrate Method.
Practical Practical		<ul> <li>Determining the homogeneity of vegetation by</li> </ul>
Course		Raunkier's frequency.
		<ul> <li>Study the frequency of herbaceous species in</li> </ul>
		grassland to compare the frequency distribution with
		Raunkier's standard frequency diagram.
		<ul> <li>Study the soil profile of different locations near by</li> </ul>
		area.
		• Study the salinity of different water samples.

#### SEMESTER VI Department of Chemistry Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Chemistry** 

Paper	CO	Outcomes
T.Y. Paper-I Inorganic Chemistry	601.1	<ul> <li>Understand Metal ligand bonding in Transition Metal complexes.</li> <li>Electronic spectra of Transition Metal Complexes.</li> </ul>
(601)	601.2	<ul> <li>Understand Magnetic Properties of Transition metal Complexes.</li> <li>To study thermodynamic and kinetic aspect of metal complexes.</li> </ul>
*/	601.3	<ul> <li>Understandorganometallic chemistry.</li> <li>Understand properties and structure of metal carbonyls.</li> </ul>
*//	601.4	<ul> <li>To study Bio-organic chemistry</li> <li>Understand the concept of s Hard and Soft acids and bases.</li> </ul>
T.Y. Paper-II	602.1	Understand NMR Spectroscopy
Organic Chemistry (602)	602.2	<ul> <li>Understand Organic Synthesis via Enolates.</li> <li>Carbohydrates: classification, reaction and mechanisms.</li> </ul>
*//	602.3	Understand Amino acids, peptides and nucleic acids. To study Fats, oil and detergents.
*//	602.4	Understand synthetic dyes, synthetic drugs, synthetic polymer.
T.Y. Chemistry Practical Course	603	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

# **Department of Physics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Physics** 

After the successful completion of the course students will be able to-

Paper	CO	Outcomes
Paper 1:	601.1	Understand the postulates of the special theory of
Relativity,		relativity.
Nuclear Physics		Apply the concept of relativity to explain Length
and Bio Physics		contraction, Time dilation, Velocity addition theorem,
(601)		Variation of mass with velocity, Mass energy
		equivalence.
	601.2	<ul> <li>Understand the concept of nuclear physics.</li> </ul>
	601.3	Apply the concept of nuclear physics to explain various
A-		decay processes.
1/	601.4	Understand the Principle, Construction and working of
		different bio instruments.
Paper 2:	602.1	• Understand the operations and applications of
Electronics, Fiber		operational amplifiers.
Optics,	602.2	• Understand the various basic structures of optical fibers
Communication	20	and basic concept involved in propagation of light
and Digital	1	waves through optical fiber.
Electronics (602)	602.3	Understand the concept of amplitude modulation and
11/7		frequency modulation.
	602.4	Understand various number systems.
		<ul> <li>Construct the truth tables for various logic gates.</li> </ul>
		Verify De Morgan's theorem
Physics Practical	603	Apply and demonstrate the theoretical concepts of
(603)		Physics and to develop scientific attitude.

# **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Sixth Subject: Mathematics

After successful completion of three-year degree program in Mathematics Students should

be able to;

Paper	CO	Outcomes
TY	601.1	Understand the concept of Group Automorphism
Paper-I	601.2	Understand definition and examples of vector spaces
601	601.3	Learn about algebra of linear transformation
Abstract	601.4	Find range, rank, kernel and nullity of matrix and also
Algebra		study about Inner product spaces
TY	602.1	Study the Newtonian Mechanics and understand the
Paper-II		concept special theory of relativity
602	602.2	Learn the Lorentz transformation and consequences
Special Theory	602.3	Understand the concept of Tensors and Space -Time
of Relativity		structure

602.4	Study the Mass Energy Equivalence, Energy momentum
	Tensor and Maxwell's Equation of Electromagnetic
	theory in Vacuum

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Zoology** 

After the success	sful compl	etion of the course students will be able to-
Paper	CO	Outcomess
T.Y.	601.1	Understand the Types of neurons, E.M. structure of neuron,
Paper-I		Conduction of nerve impulse, Ultrastructure of striated
General		muscle, Sliding filament theory of muscle contraction,
Mammalian		Properties of muscles (Twitch, Tetanus, Tonus, Summation,
Physiology - II		All or None Principle, Muscle fatigue)
(601)	601.2	Understand Structure of uriniferous tubule, Mechanism of
'/		urine formation, Counter – current mechanism, Normal and
- A /	/ /	abnormal constituents of urine; Elementary idea of dialysis
7 / /	601.3	Understand the Structure and functions of pituitary gland,
~//	1	Structure and functions of thyroid and parathyroid gland,
//	1	Structure and functions of adrenal gland, Structure and
1/	NC	functions of pineal gland
<b>X</b> //	601.4	Understand the Oestrous and menstrual cycle, Male and
	O-	female sex hormones, Causes of infertility in male and
		female, Contraceptives – Mechanical and hormonal; <i>In-vitro</i>
) ( e	-	fertilization
T.Y.	602.1	Understand the Concepts of sterilization: Filtration,
Paper-II		autoclaving, dry heat sterilization, wet sterilization and
Applied		radiation, Separation of biomolecules: Centrifugation
Zoology –II		(Sedimentation, density gradient); Chromatography (
(Biotechniques,	d H 4	Elementary idea of thin layer, gel filtration and ion exchange
Microtechnique,		- Principles and applications), Electrophoresis: Agarose gel
Biotechnology,		electrophoresis, SDS-PAGE, Principles of colorimeter and
Bioinformatics		spectrophotometers
and	602.2	Understand the concept of Fixation, dehydration, clearing,
Biostatistics)		embedding & section cutting, Difficulties encountered during
(602)	/ /	section cutting (causes and remedies), Double staining with
		Haematoxylin and Eosin, Histochemical staining techniques
		for carbohydrates (Periodic acid schiff), proteins (Mercury-
		bromophenol blue) and lipids (Sudan black-B)
	602.3	Understand the Basic concepts in recombinant DNA
		technology, Gene isolation method- Shotgun cloning,
		Isolation of gene- DNA manipulation enzymes: Nucleases,
		ligases, polymerases, Basic concepts of cloning vectors and
		splicing: Insertion of DNA and ligation using blunt ends,
		cohesive ends, Cloning vectors, Application of
		biotechnology: Insulin and vaccine production
	602.4	Understand the Bioinformatics: Definition, Basic concepts in
		bioinformatics, importance and role of bioinformatics in life
		sciences, Bioinformatics databases- introduction, types of
		databases, Nucleotide sequence databases, Elementary idea
		of protein databases, Biostatistics – Tabulation of data,
	l	or protein authorises, prosumentes i usununon or auth,

		presentation of data, sampling errors, mean, mode, median, probability, standard error and standard deviation
T.Y. Zoology Practical Course	603	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>
Zoology Practical	603	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand</li> </ul>

### **Department of Botany Course Outcomes (COs)**

Course Name: B. Sc. Year/Semester: Third/Sixth

Subject: Botany
After the successful completion of th

After the successful complete	ion of the	e course students will be able to-			
Paper	CO	Outcomes			
Biochemistry,	601.1	• Study the lipids, role of fatty acids, oils			
biotechnology	1.	and waxes.			
And herbal technology	1 1	<ul> <li>Study the enzymes its classification and</li> </ul>			
Paper-I		nomenclature.			
(601)	-37	<ul> <li>Study the basic concepts of Enzymology.</li> </ul>			
*//		Study the enzyme inhibitors.			
	601.2	Study the tissue culture techniques.			
	-2	Study the process of sterilization.			
L / C+	(C)	Study the preparation of culture media			
<b>*</b>   4	601.3	Understand the techniques of genetic			
	1	engineering.			
	-	<ul> <li>Study the process of DNA library.</li> </ul>			
VII		<ul> <li>Study the types of DNA library.</li> </ul>			
<b>★</b> // <b>11</b> 4	1	Study the Agrobacteria mediated gene			
. //		transfer.			
	601.4	Develop the skills of herbal technology.			
X- / /	2	• Study the methods of Cultivation,			
7 / /	15	Harvesting,			
	97.	Understand the technique of dye yielding			
7-//	-	of herbal plants.			
		<ul> <li>Study the used of herbs in cosmetics.</li> </ul>			
T.Y.	602.1	Study the phytogeography, climatic			
Paper-II		regions of India.			
Phytogeography, Utilization		Study the Environmental pollution.			
of Plants, Techniques and		Study the Renewable and Non Renewable			
Pharmacognosy (602)		sources.			
		<ul> <li>Understand the conservation strategies.</li> </ul>			
	602.2	Study the morphology, utilization and			
		important chemicals constituents of the			
		plants.			
		<ul> <li>Understand the concept of Ethnobotany.</li> </ul>			
	602.3	Study the principle, types and application			
		of microscope.			
		Study the various techniques.			
	602.4	Understand synthetic dyes, synthetic drugs,			
	00217	- Charlema symmetre ayes, symmetre arags,			

		synthetic polymer.  • Study the pharmacological plants
T.Y. Botany Practical Course	603	<ul> <li>Find out the level of noise pollution of different nearby area with the help of decimeter and compare it with tolerance limit</li> <li>Study the morphology, utilization, and</li> </ul>
	_	<ul> <li>Study the horphology, utilization, and important chemical constituents of plants.</li> <li>Study the Ethnobotanical importance of plants.</li> <li>Study the different adulterants used with reference to drug adultration.</li> </ul>



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#### Principal

Bhiwapur Mahavidyalaya

Bhiwapur, Dist.-Nagpur

### **Backward Class Youth Relief Committee's**

# Bhiwapur Mahavidyalaya, Bhiwapur

Dist - Nagpur, Maharashtra 441201

### Criteria-2

## **Teaching- Learning and Evaluation**

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website.

**Academic Session 2021-22** 



# Programme Outcomes Course Outcomes

**Academic Session 2021-2022** 

Faculty of Bachelor of Arts,
Bachelor of Commerce & Bachelor
of Science

### Bhiwapur Mahavidyalaya, Bhiwapur Course Outcomes and Programme Outcomes Index

#### **Bachelor of Arts**

	1	Bachelor of Arts			
Session	Course	Semester	Sr. No.	Subject	
	B. A	First	1	English	
			2	Marathi	
			3	Political Science	
			4	Economics	
			5	English Literature	
		V 5	6	Sociology	
	-		7	History	
	V /		8	Marathi Literature	
			9	Ambedkar Thought	
	//	Second	10	English	
		NI.	11.14	Marathi	
~/	/ /	6 .	12	Political Science	
. /			13	Economics	
<b>*</b> //		6	14	English Literature	
$\sim 11$	10		15	Sociology	
2021-2022			16	History	
1	(50	- 6	17	Marathi Literature	
			18	Ambedkar Thought	
1.1		Third	19	English	
~11		_	20	Marathi	
<b>₹</b> \\ त	441	21	Political Science		
	1	3 3 3 3	22	Economics	
~ \			23	English Literature	
4		19	24	Sociology	
		( ' ()	25	History	
	4/		26	Marathi Literature	
			27	Ambedkar Thought	
	-	Fourth	28	English	
			29	Marathi	
			30	Political Science	
			31	Economics	
			32	English Literature	
			33	Sociology	
			34	History	
			35	Marathi Literature	
			36	Ambedkar Thought	
		Fifth	37	English	
			38	Marathi	
			39	Political Science	

	40	Economics
	41	English Literature
	42	Sociology
	43	History
	44	Marathi Literature
	45	Ambedkar Thought
Sixth	46	English
	47	Marathi
	48	Political Science
	49	Economics
	50	English Literature
	51	Sociology
4	52	History
-	53	Marathi Literature
1//	54	Ambedkar Thought
1/2	achelor of (	(5)
Consider Courses Compagne	C- Na	C-1-1-14

Session	Course	Semester	Sr. No.	Subject
<b>^</b> //	B. Com	First	三 1	English
11			2	Marathi
	100	(	3	Financial Accounting- I
	4	- 7	4	Business Organization
11			5	Company Law
		-	6	Business Economics- I
*//		Second		English
, /	/ /1		8	Marathi
			9	Statistics and Business
*		20	10	Mathematics
		16	10	Business Management
			11	Secretarial Practice
	*		12	Business Economics- II
		Third	13	English
	4		14	Marathi
2021-2022	9		15	Financial Accounting- II
			16	Business Communication
				and Management
			17	Business Law
			18	Monetary Economics-I
		Fourth	19	English
			20	Marathi
			21	Financial Accounting-III
			22	Skill Development
			23	Income Tax
			24	Monetary Economics-II

Fifth	25	Financial Accounting-IV
	26	Cost Accounting
	27	Management Process
	28	Indian Economics-I
	29	Computerized Accounting
	30	Auditing
Sixth	31	Financial Accounting-V
	32	Management Accounting
	33	Advanced Statistics
N.	34	Indirect Economics-II
7	35	Human Resource
4		Management
 1	36	Industrial Law

Bachelor of Science (Physics, Chemistry, Mathematics, Zoology and Botany)

Session	Course	Semester	Sr. No.	Subject
*//	B.Sc.	First	1	English
$\sim$ $/$ $/$	10	-3	2	Marathi
	I		3	Chemistry I & II
	G	C	4	Physics I & II
		(0	5	Mathematics I & II
1.1		-	6	Zoology I & II
2021-2022			7	Botany I & II
7/1	( 44	Second	8	English
\			9	Marathi
1			10	Chemistry I & II
		13	11	Physics I & II
		. 07	12	Mathematics I & II
7	*/		13	Zoology I & II
			14	Botany I & II
	*	Third	15	Chemistry I & II
	<i>y</i>		16	Physics I & II
			17	Mathematics I & II
			18	Zoology I & II
			19	Botany I & II
		Fourth	20	Chemistry I & II
			21	Physics I & II
			22	Mathematics I & II
			23	Zoology I & II
			24	Botany I & II
		Fifth	25	Chemistry I & II

	26	Physics I & II
	27	Mathematics I & II
	28	Zoology I & II
	29	Botany I & II
Sixth	30	Chemistry I & II
	31	Physics I & II
	32	Mathematics I & II
	33	Zoology I & II
	34	Botany I & II

#### **Bachelor of Arts**

#### Semester - I

#### Department of English Compulsory English

#### **Course Objectives**

- To develop interest in the English language through interesting lessons.
- To understand the lives of successful entrepreneurs through life sketches.
- To understand and apply rules of grammar with the help of the prescribed grammar syllabus.
- To motivate themselves by reading and understanding the lives of great personalities.

#### **Course Outcomes**

- Developed interest in English language through interesting lessons.
- Understood the lives of successful entrepreneurs through life sketches.
- Appreciated poetry through prescribed poems.
- Applied rules of grammar with the help of prescribed grammar syllabus.
- Motivated themselves by reading and understanding the lives of great personalities.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi ;साहित्यरंग.भाग–1

#### Unit I:

प्रकरण —1.उदिष्ठ— 'पाखाला बाळक पांगुरवणे' या लीळेतील मराठी भाषेची ओळख व जाणीव विद्यार्थ्यांना करुण देणे.

साध्य- विद्यार्थ्यांना लीळाचरित्रातील गद्य मराठी भाषेची ओळख व माहिती मिळाली.

प्रकरण —2.उदिष्ठ—िक्षण पाठातूनमहात्मा फुले यांनी भारतातील िक्षणाच्या केलेल्या पुरस्काराची माहिती देणे साध्य—भारतातील बहुजनसमाजाच्या िक्षणाची महात्मा फुलेंनी सांगितलेली उद्दीष्टे क"री महत्वाची व उपयोगी आहेत याचे मर्म विद्यार्थ्यांना कळून आले.

प्रकरण —3.उदिष्ठ—स्वामी विवेकानंदानी सांगीतलेल्या व्यक्तिमत्व विकासाविषयी विद्यार्थ्यांना बोध करणे साध्य—सामर्थ्य हेच जीवन व दुर्बलता हाच मृत्यु यास्वामी विवेकानंदानी युवकांसाठी केलेले मार्गद"ांनाची जाणीव विद्यार्थ्यांनाझाली.

प्रकरण —4.उदिष्ठ—राष्ट्रसंत तुकडोजी महाराज यांनी सांगितलेल्या सुष्टीच्या कायदयाची व परिवर्तनाची माहिती

विद्यार्थ्यांना देणे.

- साध्य—'बदला किंवा मरा' हा सृष्टीचाकायदा आहे व परिवर्तन हे जीवंतपणाचे लक्षण आहे याची साक्ष विद्यार्थ्यांना पटली.
- प्रकरण —5.उदि्ष्ठ—कोंकराची कथेतून गोखलेंनी लष्करातून पळून आलेल्या िंगवरामच्या जीवनाचे चित्रण करणे. साध्य—लष्करी पे"ाातील कडक िंगस्तीची माहिती िंगवरामच्या व्यक्तिमत्वातून विद्यार्थ्यांनाझाली.

#### **Unit II:**

- कविता— 1.उदिष्ठ—मुकुंदराजानी माय मराठी भाषेचे सांगितलेली महत्व व वैिं ष्टियांची ओळखविद्यार्थ्यांना करुण देणे साध्य—माय मराठी कवितेतून मराठी भाषेचे महत्व व मराठीची वैिं ष्टिये विद्यार्थ्यांना समजून आली.
- कविता-2. उदिष्ठ- संत ज्ञाने"वरांनी सांगीतलेल्या अभंगातून विरहीणीचे महत्व विद्यार्थ्यांना पटवून देणे.
- साध्य— घनु वाजे घुणघुणा व पैल तो गे काऊ कोकताहे या अभंगातून भक्ताची भगवंता"ी एकरूप होण्याची ओढ व तळमळीची जाणीव विद्यार्थ्यांना झाली.
- कविता— 3.उदिष्ठ—दंवाचे थेंब कवितेततून के"।वसुतांनी रेखाटलेल्या निसर्गातील घटनांचे वर्णन विद्यार्थ्याना करुन सांगणे.
- साध्य— आई व मुलगा यांच्यातील संवादातून निसर्गातील विभिन्न घटनांविषयीचे कुतूहल याची माहिती विद्यार्थ्याना झाली
- कविता— 4.उदिष्ठ—भंगू दे काठिन्य माझें कवितेतून परमें वरा"।। जवळीक साधण्याची कविच्या ईच्छेची विद्यार्थ्यांना जाणीव करून देणे.
  - साध्य—बा. सी. मर्ढेकरांनी परमें वरा "ी जवळीक साधण्यासाठी स्वतःच्या मर्यादा व उणिवांतून मुक्त होण्यासाठी परमें वरा "ी घातलेल्या संवादाची माहिती विद्यार्थ्यांना मिळाली
- किवता— 5.उदिष्ठ—चार शब्द कवितेतून कविने व्यक्त केलेल्या अपेक्षित परिवर्तनाची जाणीव विद्यार्थ्यांना करुन देणे. साध्य—नारायण सुर्वे यांनी कष्टकरी,कामकरींच्या स्वाभीमानातून परिवर्तन घडून येईल याची माहिती विद्यार्थ्यांना मिळाली.

#### Unit III:

- प्रकरण 1.उदिष्ठ— व्यावहारिक मराठीची आव"यकता जीवन व्यवहारासाठी का आहे याची यथार्थता विद्यार्थ्यांना पटविणे.
- साध्य—जीवन व्यवहारात व्यावहारिक मराठीची उपयुक्तता असल्याचे विद्यार्थ्यांना कळले तसेच अनेक व्यवहार क्षेत्रात व्यावहारिक मराठीची उपयुक्तता असल्याचे स्पष्ट झाले.
- प्रकरण 2.उदिष्ठ—भाषिक संवाद व्यवहाराच्या मूलतत्वांची ओळख व माहिती विद्यार्थ्यांना करुन देणे. साध्य—भाषा हे संवादाचे माध्यम असून लेखन, वाचन , श्रवण व भाषण यातून भाषेचा संवाद व्यवहार चालतो हे कळले सोबतच भाषिक संवाद व्यवहाराच्या विविध मुलतत्वाची ओळख विद्यार्थ्यांना झाली.

#### Department of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

The Students will able;

- To understand the basic concept and ideolthe ogical orientations of political science discipline.
- To understand the processes and dynamics of Indian government and politics
- To understand the contribution of the main traditions of Indian Political Thought.
- To understand the contribution of the main traditions of Western Political Thinkers to Political Thought

#### **Course Outcomes**

- amiliarized with the basic concepts and ideological orientations of political science discipline.
- Exposed to the processes and dynamics of Indian government and politics
- Made to understand the contribution of the main traditions of Indian Political Thought.
- Made to understand the contribution of the main traditions of Western Political thinkers to political thought.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

#### Unit – I

- Objective To develop preliminary knowledge of Economic concepts for the understanding of Economics Nature, Definition, and Method of Economics Analysis.
- Outcome Students learned preliminary knowledge of Economic concepts and definitions.

#### Unit – II

- Objective To provide an orderly and objective way of thinking about Economic Demand & Supply Theory.
- Outcome- The students learned about the knowledge of Demand and Supply.

#### Unit - III

- Objective- To gain knowledge about Consumer Behavior Utility Analysis.
- Outcome- The Students gained the knowledge of Consumer Behavior and Utility Analysis

#### Unit – IV

- Objective –To explain core Economics- various factors of production.
- Outcome Students learnt about the production function.

### Department of English Course Objectives and Course Outcomes

#### **English Literature**

#### **Course Objectives**

- To understand familiar with characteristic literary texts within a given historical, geographical, and socio- cultural context.
- To apply analytical skills to literary and cultural texts of multiple genres.
- To identify, and describe the values, and themes present in the prescribed text.
- To identify ideas, values, and themes which had made an impact on the sociocultural ethos of the society in the past and in the contemporary society.

#### **Course Outcomes**

- Students should be familiar with characteristic literary texts within
  historical, geographical, and socio- cultural context.
- Students should be able to apply analytical skills to literary and cultural texts of multiple genres.
- Students should be able to identify, and describe the values, and themes present in the prescribed text.
- Students should be able to identify ideas, values, and themes which had made an impact on the socio- cultural ethos of the society in the past and in the contemporary society.

#### **Department of Sociology**

#### **Course Objectives and Course Outcomes**

#### Introduction

#### **Unit - I Understanding Sociology**

Objective - To make students know in detail about Understanding Sociology

Outcome - Students understood the concept of Understanding Sociology.

#### **Unit – II Basic Concepts in Sociology**

**Objective -** To Make Students Aware of Basic Concepts in Sociology.

Outcome -Students understood the concept of Basic Concepts in Sociology.

#### **Unit - III Socialization**

Objective - To Make Students Aware of Socialization.

Outcome - Students understood the concept of Socialization.

#### Unit – IV Social Structure

Objective - To make the students know in detail about Social Structure.

Outcome - Student understood the concept of Social Structure.

#### **Department of History**

#### **Course Objectives and Course Outcomes**

After successful completion of three-year Degree Programme in History a student should be able to know;

#### **Programme Outcomes**

- ➤ PO1: History has an unprecedented significance in human life.
- ➤ PO2: The study of history preserves culture.
- ➤ PO3: The study of history leads to Socio-Political awareness.
- ➤ PO4: Learn about world events.
- ➤ PO5: The study of History is important for competitive examination.
- ➤ PO6: Conversational skills come and understand the importance of human society.

#### **Course Objectives**

- To know the importance of culture gives you the ability to make decisions in yourself.
- To gain the ability to make decisions while living life.
- To gain employment opportunities through competitive examinations.
- To acquire moral values, devotional movement and Sufi sect.

#### **Course Outcomes**

- Knew the importance of culture gives you the ability to make decisions in yourself
- Gained the ability to make decisions while living life
- Received employment opportunities through competitive examinations.
   Acquired moral values, devotional movement and Sufi sect

#### **Department of Marathi**

#### **Course Objectives and Course Outcomes**

#### Marathi Literature

Unit I: माझी जन्मठेप-. वि.दा. सावरकर (आत्मचरित्र)-

उदिष्ठ— स्वातंत्र्यविर वि.दा. सावरकर यांची भारतीय स्वातंत्र्यातील भूमिका व सावरकरांचे व्यक्तिमत्व समजावून सांगणे. साध्य— स्वातंत्र्यविर सावरकरांची स्वातंत्र्यप्रेरीत भूमिका व योंगदान तसेच त्यांचे व्यक्तिमत्व याची सत्यता विद्यार्थ्यांना समजली.

#### Unit II:

प्रतिभा साधन- ना.सी. फडके

उदि्ष्ठ— साहित्याची अभिरुची व साहित्याची निर्मितीची ओळख व माहिती विद्यार्थ्यांना देणे. साध्य—साहित्य प्रकार, अभिरुची व निर्मिती व रसास्वाद याबध्दल विद्यार्थ्यांना माहिती झाली.

# Semester-II Department of English Course Objectives and Course Outcomes Compulsory English

#### **Course Objectives**

- To study lessons based on the themes of humor, emotional bonding, ethics and values.
- To motivate themselves even in adverse situations by reading successful people's life sketches.
- To prioritize life's needs over wants.
- To apply grammar lessons to spoken English.
- Grasp the nuances of learning a foreign language.

#### **Course Outcomes**

- Studied lessons based on the themes of humor, emotional bonding, ethics and values.
- Motivated themselves even in adverse situations through reading their lives.

Applied grammar lessons to spoken English.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi (साहित्यरंग.भाग–1)

#### Unit I:

प्रकरण – ६.उदिष्ठ-भारतीय लोक" ॥हीचे भवितव्य काय? या पाठाच्या आधारे लोक" ॥हीची माहिती करुन देणे.

साध्य— डॉ. बाबासाहेब आंबेडकर यांनी भारतीय लोक"ाही आणि जातीव्यवस्थेसंबंधी बहाल केलेल्या विचारांची विद्यार्थ्यांना ओळख पटली व माहिती मिळाली.

प्रकरण — 7.उदिष्ठ— गाडगेबाबांनी लेखिकेला दाखिवलेल्या शाळेचा मार्ग व ज्ञानाचा प्रका"ााची रूजवणूक करणे. साध्य—सीमा साखरेंचे व्यक्तिमत्व घडण्यासाठी कर्मयोगी गाडगेबाबांनी दाखिवलेला शाळेचा मार्ग व ज्ञानाचा प्रका"ा कसा उपयुक्त उरला याची महती विद्यार्थ्यांना पटली.

प्रकरण — 8.उदिष्ठ—भारतरत्न अटलबिहारी वाजपेयी यांच्या व्यक्तिमत्वाची ओळख विद्यार्थ्यांना करुन देणे. साध्य—अजात"ात्रू अटलजी यांच्या आगळया वेगळया व्यक्तिचित्रणाची शरद पवार यांनी करुन दिलेली ओळख माहिती विद्यार्थ्यांना झाली.

प्रकरण —9.उदिष्ठ—जात चोरीच्या आपत्तीमुळे कोणते संकटे येतात याची जाणीव विद्यार्थ्यांना करुन देणे. साध्य—बाबुराव बागुल यांनी आपली अस्पृष्य महार ही जात लपविल्यामुळे त्यांना आलेला अनूभवाचे वर्णन विद्यार्थ्यांना समजून आले.

प्रकरण —10.उदिष्ठ— पुर्णिया या बिहार राज्यातील मागसलेल्या ज्ल्हियातील लोकांच्या दुःखी कष्टी जीवनाची माहिती विद्यार्थ्यांना देणे.

साध्य— अनिल अवचट यांनी पूर्णियामधून रेखाटलेले स्थिांचे बदिस्त जीवन, शाळा, नोक-यांचा प्र"न, राजकीय परिस्थिती, मजूरांचे हलाकीचे जीवन, उपासमारी इ.ची माहिती विद्यार्थ्यांना मिळाली.

#### Unit II:

कविता— 6.उदि्ष्ठ—मुक्त पक्षी या कवितेतू पिंजऱ्यातील पक्षी स्वातंत्र का नाकारतो याचीमाहिती देणे.

साध्य— गुलामीची सवय जडल्यामुळे पक्षी पिंज्ऱ्यातून मुक्त केल्यावरही स्वातंत्र नाकारतो याची ज्ञान विद्यार्थ्यांना प्राप्त झाले.

कविता -7.उद्ष्ट- जीवन मरणाबध्दल बहिणाबाईंनी केलेल्या चिंतनाची सार्थकता पटवून देण.

साध्य— जन्ममृत्यु विषयी कवयित्रीने कवितेत प्रगट केलेले विचार मानवी जीवनाची सार्थकता पटवून देतात याची विद्यार्थ्यांना खात्री पटली.

कविता– ८.उदिष्ठ–राष्ट्रसंतांना गरीबाच्या झोपडीमधील सुखाची माहिती विद्यार्थ्यांना देणे

साध्य— महालातील सुखापेक्षा लहानषा झोपडीतील सुख हे महान असल्याची प्रचिती कवितेच्या भावार्थावरुन विद्यार्थ्यांना आली.

कविता— 9.उदिष्ठ—माणसाच्या मनातील मोठेपना नाहिसा होण्याची कविची इष्वराकडे केलेली मागणीचे ज्ञान विद्याथ्याना देणे.

साध्य—कविने आपल्या जीभेवरचा लोभ जळू देण्यासाठी व मी पणाचे साम्राज्य नाहीसे होण्याची कविची भावना विद्यार्थ्यांना समजली.

कविता— 10.उदिष्ठ—कुसुमाग्रजांच्या कवितेतून मानवी सामर्थ्य निसर्गावर कसे मात करते याची ओळख विद्यार्थ्यांना करून देणं.

साध्य-कवितेतील नायकाचा गंगा नदीच्या पुरामुळे संसार उघ्वस्त होऊनही सराच्या आर्षिवादाची थाप मागणारा नायक प्रतिकूल परिस्थितीवर मात करुन संसार उभा करतो याची विद्यार्थ्यांना प्रेरणा मिळाली.

#### Unit III:

प्रकरण — 3.उदिष्ठ— पत्रलेखनाचे स्वरुप, पत्राचे प्रकार, पत्रलेखाचे घटक, वैषिष्टये व पत्राचा नमूना विद्यार्थ्याना समजावून देणे.

साध्य— विद्यार्थ्यांना पत्राचे स्रुप कसे असते ,घटक कोणते, खजगी पत्रे व कार्यालयीन पत्रे कषी लिहावीत याचे कौषल्य व ज्ञान प्राप्त झाले.

प्रकरण — 4.उदि्ष्ठ—सारांषलेखन कसे करावे व सारांष लेखन करतांना कोणती काळजी घ्यावी व सारांषलेखनाचे फायदे याविषयी विद्यार्थ्यांना माहिती देणे.

साध्य— विद्यार्थ्यांना सारांषलेखन करण्याची माहिती मिळाली तसेच दिलेल्या सारांषाचे एक तृतियांष लेखन करण्याचे कौषल्य प्राप्त होऊन सारांषलेखनाचे फायदे समजले.

#### Department of Political Science Course Objectives and Course Outcomes

#### **Course objectives**

- To understand the processes and dynamics of the Indian government and politics.
- To understand the contribution of the main traditions of Indian Political Thought.
- To understand the contribution of the main traditions of Western Political Thinkers to Political Thought.

#### **Course Outcomes**

- Familiarized with the basic concepts and ideological orientations of the Political Science discipline.
- Exposed to the processes and dynamics of Indian government and politics.
- Made to understand the contribution of the main traditions of Indian Political Thought.
- Made to understand the contribution of the main traditions of Western Political thinkers to Political thought.

# Department of Economics Course Objectives and Course Outcomes Micro Economics Theory -II

Unit – I: Cost and Revenue Analysis Cost of Production:

Objective- To explain the Kinds of Cost and Revenue Analysis Cost of Production

**Outcome** –Explained theknowledge of Cost and Revenue Analysis.

Unit – II: Market Structure and Perfect Competition Market

**Objective-** To explain major types of market Structure and Identify Characteristics of Perfect Competition.

**Outcome** —Received assignments from the students those are coherent, organized, concise, grammatically correct and well-presented.

Unit – III: Monopoly and Imperfect Competition Market

**Objective-** To identify and discuss the key concepts of Monopoly and Imperfect Competition Market.

**Outcome** —Identified economic theory in the Monopoly and Imperfect Competition Unit – IV: Factors Pricing and Statistics for Economics Factors Pricing:

**Objective-** To explain the contribution of Factors of production.

**Outcome** – Students learned about the factor of production.

### **English Literature Course Outcomes**

- CO6 Students will be familiar with literary texts in a given historical, geographical and cultural context
- CO7- Students should be able to apply critical theories to the reading of multiple genres of literature
- CO8- Students should be able to identify, and analyze the critical ideas and themes
- CO9- Students should be able to write analytically with the help of language competencies
- CO10- Students should be able to imbibe, ethical, moral, and cultural values

# Department of Sociology Course Objectives and Course Outcomes Themes and Perspectives

#### **Themes and Perspectives**

#### **Unit - I** Culture and Society

**Objective -** To Make the students know in detail about culture and society

Outcome - Students understood the concept of culture and society.

#### **Unit - II Social Deviation and Social Control**

Objective – To make the students aware of social deviation and social control.

Outcome – Students understood the concept of social deviation and social control.

#### **Unit - III Social Stratification and Social Mobility**

**Objective -** To Make Students know in detail about Social Stratification and Social Mobility.

Outcome – Students understood in detail about SocialStratification and Social Mobility.

#### **Unit - IV Concept of Gender**

**Objective** - To make students aware of concept of gender.

Outcome -Student understood the concept of concept of gender.

#### Department of History Course Objectives and Course Outcomes

- 1) How Mughal power was established in India.
- 2) How was the administration of Sher shah Suri
- 3) Mughal carpet administration

- 4) Information aboutChhatrapati Shivaji and Mughal relationship
- 5) Why and why Panipat III

#### **Course Objectives**

- Tounderstand how the Mughal power was established in India.
- To learn information about Sher Shah Suri and the Mughal administration.
- To get information about Chhatrapati Shivaji and Mughal relationship war took place.
- To understand the Panipat Third War and the arrival of the British.

#### **Course Outcomes**

- Understood how the Mughal power was established in India.
- Learned information about Sher Shah Suri and the Mughal administration.
- Student got information about Chhatrapati Shivaji and Mughal relationship war took place.
- Understood the Panipat Third War and the arrival of the British.

#### Department of Marathi Marathi Literature Course Objectives and Course Outcomes

#### Unit I:

नटसम्राट-वि. वा. षिरवाडकर (नाटक)-

उदिष्ठ— नटसम्राट या नाटकातून मानवी जीवनातील कौटुंबिक,सामाजिक व नटस्रूाट अप्पासाहेब बेलवणकर यांचे संघर्षप्रवण जीवनाची माहिती विद्यार्थ्यांना देणे.

साध्य— वि. वा. षिरवाडकरांनी नटसम्राट नाटकात रेखाटलेल्या अप्पासाहेब बेलवणकरांच्या व्यक्तिमत्वाच्या आधरे मानवी जीवनाची 'गेकांतिका विद्यार्थ्यांना कळली.

#### Unit II:

साहित्यप्रकार–कादंबरी, चरित्र,आत्मचरित्र.

उदि्ष्ठ— कादंबरी, चरित्र,आत्मचरित्र.या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना देणे. साध्य— कादंबरी, चरित्र,आत्मचरित्र.या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना झाली..

#### B.A. Part -II Semester-III

#### **Course Objectives and Course Outcomes**

#### Department of English Compulsory English

**Unit I: Objective-**Making students aware of the importance of Honesty.

**Outcome-**Students tried to examine and applied through the various activities carried out in the class.

**Unit II: Objective-** Making students realize the beauties of nature and sublime.

**Outcome-**Students tried to apply the values of nature and the sublime.

**Unit III: Objective-** Making students understand the social evils of society and the values of Humanity.

Outcome-Students were exposed to the social evils of society through discussion.

Unit IV: Objective-Grammatically correct usage of Narration and Punctuation.

**Outcome-**Students solved the examples of Narration and Punctuation.

Unit V: Objective-To create the ability to use English for the purpose of communication.

Outcome-Students attempted to use English for the purpose of communication in the Class.

#### Department of Marathi Course Objectives and Course Outcomes Compulsory Marathi साहित्य संवाद.भाग.2

#### Unit I:

प्रकरण –1.उदिष्ठ– तेराव्या षतकातील दृष्टांतपाठातील गद्य भाषाषैली, श्रीचक्रधरस्वामीचे चरित्र, महानूभाव पंथा विषयी माहिती देणे.

साध्य– दृष्टांतपाठातील गद्य भाषाषैली, श्रीचक्रधरस्वामीचे चरित्र, महानूभाव पंथाचे समाजाला दिलेले योगदान विद्यार्थ्यांना समजून आले.

प्रकरण –2.उदिष्ठं–स्त्री पुरुष तुलना या पाठातून ताराबाई षिंदे हीने पारतंत्र्यांच्या काळात स्त्रियांच्या निषबी येणाऱ्या दुर्गुणांची जाणीव करुन देणे.

साध्य— सर्व प्रकारचे दुर्गुण स्त्रियांतच असतात या पुरुषांच्या पूर्वग्रहदूषित विचारांची विद्यार्थ्याना माहिती प्राप्त झाली.

प्रकरण –3. उदिष्ठ–यषस्वी वक्ता होण्यासाठी प्र.के.अत्रे यांनी सांगीतलेला अनूभव विद्यार्थ्याना सांगणे.

साध्य- विद्यार्थ्यांनी यषस्वी वक्ता होण्यासाठी अव्याच्या अनुभवाचा बोध घेतला.

प्रकरण -4.उदिष्ठ-पंढरपूर व विठ्ठलाचे दर्षनाची माहिती विद्यार्थ्यांना करुन देणे.

साध्य – पंढरपूर व पांडुरंगाचे संपूर्ण वर्णन तेथील भैगोलिक परिस्थितीची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण –5.उदिष्ठ–राष्ट्रसंताच्या मते षिक्षक हाच राष्ट्राचा भाग्यविधाता असल्याची खात्री विद्यार्थ्यांना करुन देणे.

साध्य- षिक्षकाचे विद्यार्थी, समाजाप्रती केलेल्या संपूर्ण कार्याची व षैक्षणिक कार्याची जाणीव विद्यार्थ्यांना कळली.

#### Unit II:

कविता—1.उदिष्ठ—संत नामदेवांनी श्रीविठ्ठलाचे वर्णन, विठ्ठलभक्तिचे व नामस्मरणाचेमहात्म्य विद्यार्थ्यांना सांगणे. साध्य—अभंगााच्या निपनातून विठ्ठलाच्या अनंत लावण्याची षोभा, विठ्ठलभक्तिचे व नामस्मरणाचे महात्म्य विद्यार्थ्यांना कळले.

कविता-2.उद्ष्ट- मारोपंतानी सत्संगतीचा वर्णन केलेला महिमा सांगणे.

साध्य- सत्संगतीत समाजजिवनाला उदबोधन करण्याचे सामर्थ्य आहे याची विद्यार्थ्यांना माहिती मिळाली.

कविता-3.उदिष्ठ-भला जन्म हा तुला लाभला यातून राम जोषींनी सांगीतलेल्या मानवी जीवनाचे सार्थकत्व पटविणे.

साध्य- उपदेषपर लावणीतन मानवी जीवनाची सार्थकता विद्यार्थ्यांना पटली.

कविता-४.उदिष्ट-षेतकरी-कष्टकऱ्यांची जीवनगाथा व परीस्थितीचे वर्णन करणे.

साध्य-विद्यार्थी ग्रामीण भागातला असून षेतकऱ्यांच्या परीस्थितीची जाणीव झाली.

कविता- 5.उद्ष्ट- कवी अनिलांच्या विराणीतून कवी मनाच्या उदासीनतेचे दर्षन घडविणे.

साध्य-कविला लाभलेल्या दुःखामूळे कविच्या मनाला उदासिनता प्राप्त झाली याची विद्यार्थ्यांना प्रचिती आली.

#### Unit III:

प्रकरण – 1.उदिष्ठ–इतिवृत्त लेखन, प्रकार,पध्दती व लेखनाची काळजी याविषयी विद्यार्थ्यांना माहिती देणे.

साध्य —इतिवृत्त म्हणजे सभेची नोंद, प्रकार पध्दती व लेखन करतांना घ्यावयाची काळजी याची विद्यार्थ्यांना माहिती मिळाली.

प्रकरण — २.उदिष्ट—प्रसारमाध्यमे आणि वृत्तलेखन याविषयी विद्यार्थ्यांना माहितीचे विष्लेषण करणे.

साध्य—दृक श्राव्य प्रसारमाध्यमांच्याव्दारे बातमी, बातमीचे लेखनव वृत्तपत्रीय लेखन कसे केले जाते याची माहिती विद्यार्थ्यांना झाली

#### Department Of Political Science Course Objectives and Course Outcomes

#### **Course Objectives**

- To explain the vital contemporary emerging issues of center-state relations, political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts, etc.
- To understand the strengths and weakness of Indian political processes, both in terms
  of their effectiveness in responding to public policy needs.
- To understand the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions
- To understand the basic concept and issues concerning human rights and challenges.

#### **Course Outcomes**

- Familiarized with the vital contemporary emerging issues of center-state relations, political parties, the emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts, etc.
- Analyzed the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs and retaining constitutional protections.
- Understood the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions.
- Acquainted with a basic understanding of concepts and issues concerning the Right to Information Act, Human Rights, and Challenges.

#### Department of Economic Course Objectives and Course Outcomes

**Unit – I Introduction to Macro Economics** 

**Objective** – To discuss the Introduction of Macro Economics.

**Outcomes** – Students understand the concept of Macro Economics.

Unit – II **National Income** 

**Objective** – To explain the concept of National income.

**Outcome** – Students understood the various concept of National income.

Unit – III Money and Value of Money

**Objective** – To evaluate the value of money and theories of the Value of Money.

**Outcome** – Students learned the theories of Value of Money.

Unit – IV **Output and Employment** 

**Objective** – To introduce the theory of Employment.

**Outcome**- Students learnt thetheory of Employment.

#### Dept. of English Course Objectives and Course Outcomes English Literature

Unit I: Objective-Making students conscious of the various issues of the Indian society.

Outcome-Students attempted to understand the various issues of the Indian society

Unit II: Objective- Making students realize revolution and its effects.

Outcome-Students realized equality, revolution and its effects.

Unit III: Objective- Making students understand the biography, autobiography and Criticism

Outcome- Students understood the biography, autobiography and Criticism.

Unit IV: Objective-Making students understand the Literary Terms.

Outcome-Students understood the Literary Terms and their usage

#### Department of Sociology Course Objectives and Course Outcomes

#### **Foundations of Social Thought**

Unit - I Emergence of Sociology as a Discipline

**Objective** - To Make the students know in detail about the emergence of sociology as a discipline.

Outcome - Students understood the concept of the emergence of sociology as a discipline Unit - II Founders of Sociology I

**Objective** - Students understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer,)

**Outcome** - Students understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer)

Unit – III Founders of Sociology II

**Objective** - Students understood the concept of Founders of Sociology-II (Charles of Horton Cooley, Emile Durkheim)

Outcome - Students understood the concept of Founders of Sociology-II (Charles of Horton Cooley, Emile Durkheim)

Unit - IV Founders of Sociology III

**Objective** - Students understood the concept of Founders of Sociology-III (Karl Marx, Max Weber)

**Outcome** -Students understood the concept of Founders of Sociology-II (Karl Marx, Max Weber)

#### **Department of History**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To study Battle of Buxar and English policy.
- To understand Kayamdhara Methods, Ryotwari, and Lord Wellesley.
- To understand the uprising of 1857 (independent war) results.
- To understand how did nationalism emerge in India?

#### **Course Outcomes**

- Studied the Battle of Buxar and how the British implemented their policy in India
- Gained information about working methods, Kaymdhara, Ryotwari and Mahalwari and Lord Wellesley deployment forces.
- The uprising of 1857 (independent war) result was known
- Learned how Nationalism emerged in India

#### Department of Marathi Marathi Literature Course Objectives and Course Outcomes

Unit Iफ उद्ष्ट—कुसुमाग्रजाच्या रसयात्रा कविता संग्रहाच्या आधारे विविध प्रकारच्या कवितांची ओळख व माहिती विद्यार्थ्यांना देणे.

साध्य—कुसुमाग्रजांच्या कवितासंग्रहातून सामाजिक कविता,राजकीय, राष्ट्रीय कविता, प्रेम कविता,निसर्ग कविता व तत्वज्ञानपर कवितांची माहिती विद्यार्थ्यांना झाली.

#### Unit II:

उदिष्ठ—काव्यषास्त्र परिचय यातून काव्यकारण व षब्दषक्ती याविषयी विद्यार्थ्यांना माहिती देणे. साध्य—विद्यार्थ्यांना काव्य निर्मितीचे कारण व षब्दाच्या अभिदा, व्यंजना व लक्षणा या षब्दषक्तीची माहिती प्राप्त झाली.

#### **Semester-IV**

# Department of English Course Objectives and Course Outcomes Compulsory English

**Unit I: Objective-**Making students aware of the importance of faith and friendship

**Outcome-**Students understood the value of friendship.

**Unit II: Objective-** Making students realize about discipline and struggle.

**Outcome-**Students tried to apply the discipline and struggle in their lives.

**Unit III: Objective-** Making students understand the presence of the mind.

**Outcome-** Students were put through various activities to get the feel ofit.

Unit IV: Objective-Grammatically correct usage of Tense and Voice.

Outcome-Students tried to solve the examples of Tense and Voice.

**Unit V: Objective-**To create the ability to use English for the purpose of communication.

**Outcome-**Students attempted to use English for the purpose of communication in the Class.

-Students attempted to use English for the purpose of communication in the Class.

#### Department of Marathi Course Objectives and Course Outcomes

#### Compulsory Marathi साहित्यरंग.भाग.2

#### Unit I:

प्रकरण — 1.उदिष्ठ—आज्ञापत्राच्या आधारे राजकर्तव्ये पाठातून षिवछत्रपतींच्या कतबगारीचा बोध विद्यार्थ्यांना करुन देणे. साध्य— राजकर्तव्ये पाठातील षिवाजींच्या कार्यकर्तृत्वाची विद्यार्थ्यांनी जाणिव झाली व विद्यार्थ्यांनी बोध घेतला.

प्रकरण —2.उदिष्ठ—स्वराज्य व सुराज्य पाठातून लोकमान्य टिळकांच्या भारतीय स्वातंत्र्यासंबंधी योगदानाची विद्यार्थ्यांना माहिती करुन देणे.

साध्य— भारतीय स्वातंत्र्यात लोकमान्य टिळकांच्या व्यक्तिचित्रणातून निर्भयता, निःस्पृहता, ज्वलंत देषभक्ती या गुणांचा प्रत्यय विद्यार्थ्यांना आला.

प्रकरण — 3.उदिष्ठ— माध्यान्ह या पाठातील कुसुमावती देषपांडे यांचे माध्यान्हीच्या वेळेतील अनुभव विद्यार्थ्यांना सांगणे. साध्य— माध्यान्हीच्या वेळेतील समतोलपणा, गंभीरता, अभिजात सौंदर्य व बानंद या गुणांची जाणीव विद्यार्थ्यांना नात्री

प्रकरण -4.उदिष्ठ-अव्दैताचा साक्षात्कार यातून साने गंरूजींच्या संदेषाची विद्यार्थ्यांमध्ये रुजवणूक करणे.

साध्य- साने गुरूजींच्या' अव्देत भारतीय संस्कृतीचा आत्मा आहे, या तत्वाची विद्यार्थ्यांना जाणीव झाली.

प्रकरण –5.उदिष्ठ– आधार या कथेतून वि.सं. जोग यांनी रेखाटलेल्या भाऊकाकांची 'गेकांतिका विद्यार्थ्यांना सांगणे.

साध्य-ओंकारी, अधम संस्कृतीत वावरणाऱ्या भाऊकाकांच्या 'गोकांतिकेचा विद्यार्थ्यांनी बोध घेतला-

#### Unit II

कविता— 1.उदिष्ठ— अभंगवाणीतून संत चोखमेळाकालीन सामाजिक वि"ामता व अन्यायकारक वागणूकीची माहिती देणे. साध्य—तेराव्या 'ातकातील सामाजिक परिस्थिती रूढी परंपरांची माहिती चोखामेळाच्या अभंगातून विद्यार्थ्यांना समजून आली.

कविता —2.उद्ष्ठि—क्रांतीचा जयजयकार कवितेतून भारताच्या स्वातंत्र्यासाठी क्रांतीकारकांनी दिलेल्या योगदानाची माहिती सांगणे

साध्य—कुसुमाग्रजांनी व्यक्त केलेली क्रांतीकारकांच्या मनातील स्वातंत्र्यासंबंधी देषभक्तीची जाणीव विद्यार्थ्यांना झाली. कविता— 3.उदिष्ठ—सत्य या संकल्पनेचे स्वरुप सत्याच्या जातीला कवितेतून विद्यार्थ्यांना सांगणे.

साध्य-षरच्चंद्र मुकितबोध यांच्या कवितेतून संघ"षील वृत्ती आणि विपरीत स्थितीतील उतुंग आषावाद याची माहिती विद्यार्थ्यांना मिळाली.

कविता— ४.उदिष्ठ— रातझडीचा पाऊस कवितेतून 'ीतातल्या निसर्गाषी कविच्या वृत्ती तादात्म्य पावण्याची साक्ष पटविणे. साध्य— प्रेमासक्त आणि निसर्गासक्त अषा दोन रुपांची सायुज्यता व पाऊसाची विद्यार्थ्यांना साक्ष पटली.

कविता- 5.उदिष्ठ-माझ्या कवितेची चव कवितेतून कविच्या काव्यनिर्मितीचे प्रयोजन विद्यार्थ्यांना सांगणे.

साध्य- इंद्रजित भालेराव यांनी व्यक्त केलेली काव्यविष्वाची भूमिका विविध 'ाब्द प्रतिमांतून विद्यार्थ्यांनी समजून घेतला.

#### Unit III:

प्रकरण — 3.उदिष्ठ—पटकथा व संवादलेखन याबध्दलची माहिती विद्यार्थ्यांना देणे. साध्य— सिनेमात कथा,पटकथाव संवादलेखन कसे असते याची जाणीव विद्यार्थ्यांना झाली. प्रकरण — 4.उदिष्ठ— स्मरणिकेचे संपादन व इतर संपादनकार्य व स्वरूप स्पष्ट करणे. साध्य—स्मरणिकेचे संपादन कार्य व मासिकाचे कार्य काय असते हे विद्यार्थ्यांना कळले.

#### Department Of Political Science Course Objectives and Course Outcomes

**Course Objectives** 

- To explain the vital contemporary emerging issues of center-state relations and political parties, the emergence of the new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- To understand the strengths and weakness of Indian political processes, both in terms
  of their effectiveness in responding to public policy needs.
- To understand the current political issues in the context of wider debates about democratic life in India and the capacity of political institutions.
- To understand the basic concept and issues concerning human rights and challenges.

#### **Course Outcomes**

- Familiarized with the vital contemporary emerging issues of center-state relations, political parties, the emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- Analyzed the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs and retaining constitutional protections.
- Understood the political issues in context of wider debates about democratic life in India and the capacity of political institutions.
- Acquainted with a basic understanding of concept and issues concerning Right to Information Act, Human Rights and Challenges.

#### Department of Economics Course Objectives and Course Outcomes

#### **Unit -I: Commercial and Central Bank Commercial Banks:**

Objective – To explain the function of the Commercial and Central Bank and why it is importance.

Outcome – Students learned the function of the Commercial and Central Bank and why it is important.

#### Unit -II: RBI and Innovation in Banking Reserve Bank of India:

Objective - Introduce RBI and innovation in Banking Sector.

Outcome – Students learnt about the structure of RBI and its function.

#### **Unit -III: Financial Market Money Market:**

Objective – To define FinancialMarket.

Outcome – Students understood the function of Financial Market.

#### **Unit –IV: Health Economics and Statistics for Economics Health Economics:**

Objective – To explain the importance of Health Economics and Statistics.

Outcome – Students understood the knowledge of Health Economics and Statistics

#### Department of English Course Objectives and Course Outcomes

#### **English Literature**

Unit I: Objective-Making students conscious of the various issues of Indian society.

Outcome-Students attempted to understand the various issues of Indian society

Unit II: Objective- Making students realize revolution and its effects.

Outcome-Students realized equality, revolution, and their effects.

Unit III: Objective- Making students understand the biography, autobiography and Criticism.

Outcome- Students understood the biography, autobiography and Criticism.

Unit IV: Objective- Making students understand the Literary Terms.

Outcome- Students understood the Literary Terms and their usage.

#### **Department of Sociology**

#### **Course Objectives and Course Outcomes**

#### **Indian Sociological Tradition**

#### **Unit - I** Theoretical Roots of Caste in India

**Objective** - To make the students aware of the Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

**Outcome -** Student understood the concept of Founders of Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

#### **Unit - II Social Change from Indian Perspective**

**Objective -** To make the students aware of Social Change from Indian Perspective (M.N. Shriniwas, D.P.Mukharjee)

**Outcome -** Student understood the concept of Social Change from Indian Perspective (M.N. Shriniwas, D.P.Mukharjee)

#### **Unit - III Indian Society and Contemporary Change**

**Objective -** To make the students aware of Indian Society and Contemporary Change (R.K. Mukharjee, S.C. Dube)

**Outcome -** Student understood the concept of Indian Society and Contemporary Change (R.K. Mukharjee, S.C. Dube)

#### Unit - IV Gender and Society in India

**Objective** - To Make Students Aware of Gender and Society in India (Tarabai Shinde, Jyotiba Fule and Savitribai Fule)

**Outcome -** Student understood the concept of Gender and Society in India (Tarabai Shinde, Jyotiba Fule and Savitribai Fule)

### Department of History Course Objectives and Course Outcomes

**B.A.II** (IV -Sem) History of

India (1885 -1947)

#### **Course Objectives**

- To study How the National Congress was formed
- To understand What was the role of Jahal and Mawal.
- To study Non-cooperation, civil disobedience movement
- To learn Indian Independence Mountaineering Scheme

#### **Course Outcomes**

- Learned about the establishment of the National Congress
- Understood the role of Jahal and Mawal
- Information was received about non-cooperation, civil disobedience movement
- Gained detailed knowledge of how India became independent

#### Department of Marathi Marathi Literature Course Objectives and Course Outcomes

#### Unit I:

उदि्ष्ट— कुसुमाग्रजाच्या रसयात्रा कविता संग्रहाच्या आधारे विविध प्रकारच्या कवितांची ओळख व माहिती विद्यार्थ्यांना देणे

साध्य-कुसुमाग्रजांच्या कवितासंग्रहातून सामाजिक कविता,राजकीय, राष्ट्रीय कविता, प्रेम कविता,निसर्ग कविता व तत्त्वज्ञानपर कवितांची माहिती विद्यार्थ्यांना झाली.

#### Unit II:

उदिष्ठ—काव्यषास्त्र परिचय यातून काव्यकारण व षब्दषक्ती याविषयी विद्यार्थ्यांना माहिती देणे. साध्य— विद्यार्थ्यांना काव्य निर्मितीचे कारण व षब्दाच्या अभिदा, व्यंजना व लक्षणा या षब्दषक्तीची माहिती प्राप्त झाली.

# B. A. III Semester-V Department of Marathi Compulsory Marathi Course Objectives and Course Outcomes

#### Unit I:

लीळाचरित्र एकांक दुडाॅ. मदन कुळकणीं

उदिष्ट- लीळाचरित्राच्या एकांक ग्रंथाच्या आधारे तत्कालीन सामाजिक परिस्थितीचा आढावा घेणे.

साध्य-लीळाचरित्र एकांक ग्रंथातून लीळांच्या आधारे विद्यार्थ्यांना तत्कालीन सामाजिक, धार्मिक व राजकीय परिस्थिती तसेच एकून समाजजिवनाची ओळख विद्यार्थ्यांना झाली.

Unit II: दलित साहित्य वेदना व विद्रोह- भालचंद्र फडके

उदिष्ठ— दलित साहित्य वेदना व विद्रोह यातून दलित साहित्याच्या अभ्यासाचे महत्व साहित्यातील योगदान व महत्व विद्यार्थ्यांना पटवन देणे.

साध्य— दलित साहित्याचा उगम, चळवळ तसेच साहित्यिकांचे प्रेरणास्थान व कार्य याची जाणीव विद्यार्थ्यांना झाली. भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. कृळकर्णी

उदिष्ठ- भाषाविज्ञानाचा परिचय विद्यार्थ्यांना करून देणे.

साध्य- प्रमाण भाषा आणि बोली तसेच स्पीम व पदविचार यांची माहिती विद्यार्थ्यांना झाली.

#### Department of Political Science Course Objectives and Course Outcomes

Course Objectives

- List the difference between scholarly and popular publication in Comparative Politics.
- To understand the issues of International and Domestic Politics and public Policy.
- To analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- To discuss the major theories and concepts of political science and its subfields.
   To relate the basics of International Relations and the new trends in the realm of International Relations.

Course Outcomes

- Write an analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the Indian model.
- Exposed to issues of International and Domestic Politics and Public Policy.
- Analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- Presented with the major theories and concepts of political science and its sub fields.
- Aware with the basics of International Relations and the new trends in the realm of international relations.

#### **Department of Economics**

#### **Course Objectives and Course Outcomes**

Unit – I Nature of Indian Economy

Objective – To introduce the basic Knowledge of the Indian Economy

Outcome -Students learnt about the Knowledge of the Indian Economy.

Unit – II Agriculture

Objective –To explain the importance of the Agriculture Sector in the Indian Economy. Outcome -Students learnt about the Importance of the Agriculture Sector in the Indian Economy.

Unit – III - Industry

Objective – To explain the Importance and Role of Industries in Economic Development Outcome -Students learnt about the Knowledge of Industries in the Economic Development.

Unit – IV- Employment and Poverty

Objective- To develop preliminary knowledge of Employment and Poverty

Outcome -Students learnt about the preliminary knowledge of Employment and Poverty.

#### **English Literature**

#### **SEM-V**

#### **Course Objectives and Course Outcomes**

**Objective**: To enable students to analyze literary text.

Outcome: Students showed their ability to analyze literary text.

**Objective**: To enable students to interpret literary texts.

**Outcome:** Students showed their ability to interpret the literary text.

**Objective**: To enable students to understand significant developments in the history of English and Indian literature.

**Outcome**: Students became aware of significant developments in the history of English and Indian literature

**Objective**: To enable students to apply theoretical approaches to the critical reading of literary texts.

**Outcome**: Students tried to apply theoretical approaches to the critical reading of literary texts.

### तमसो मा ज्योतीर्गमय

### Department of Sociology Course Objectives and Course Outcomes

Unit - I Indian Society, Structure and Inequality

Objective - To know in detail about Indian Society, Structure and Inequality

Outcome - Student understood the concept of Indian Society, Structure and Inequality

Unit - II Family in Contemporary India

Objective - To make the students aware of Family in Contemporary India.

Outcome -Student understood the concept of Family in Contemporary India

Unit - III Tribal Issues and Problems in India

Objective - To make the students aware of Tribal Issues and Problems in India.

Outcome – Students understood the concept of Tribal Issues and Problems in India.

#### Unit - IV Rural Community in India

Objective - To make the students know in details about Rural Community in India.

Outcome - Student understood the concept of Rural Community in India

### Department of History Course Objectives and Course Outcomes

#### **Course Objective**

- To understand What were the causes and consequences of
- the French Revolution?
- To study How imperialism came into being
- To study World War I Treaty of Vasai
- To understand United Nations and performance

#### **Course Outcomes**

- UnderstoodThe French Revolution was also the first revolution in the world
- Studied What are the reasons for imperialism?
- Understood World War I The Treaty of Vasai
- Learned about the United Nations and its achievements and Failures

#### Department of Marathi Course Objectives and Course Outcomes Marathi Literature

#### Unit I:

लीळाचरित्र एकांक दृडॉ. मदन कुळकर्णी

उदिष्ट- लीळाचरित्राच्या एकांक ग्रंथाच्या आधारे तत्कालीन सामाजिक परिस्थितीचा आढावा घेणे.

साध्य-लीळाचरित्र एकांक ग्रंथातून लीळांच्या आधारे विद्यार्थ्यांना तत्कालीन सामाजिक, धार्मिक व राजकीय परिस्थिती तसेच एकून समाजजिवनाची ओळख विद्यार्थ्यांना झाली.

Unit IIक्त दलित साहित्य वेदना व विद्रोह- भालचंद्र फडके

उदिष्ठ— दलित साहित्य वेदना व विद्रोह यातून दलित साहित्याच्या अभ्यासाचे महत्व साहित्यातील योगदान व महत्व विद्यार्थ्यांना पटवून देणे.

साध्य— दलित साहित्याचा उगम, चळवळ तसेच साहित्यिकांचे प्रेरणास्थान व कार्य याची जाणीव विद्यार्थ्यांना झाली. भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. कुळकर्णी उदिष्ठ— भाषाविज्ञानाचा परिचय विद्यार्थ्यांना करून देणे. साध्य— प्रमाण भाषा आणि बोली तसेच स्पीम व पदविचार यांची माहिती विद्यार्थ्यांना झाली

### Department of Marathi SEMESTER-VI

#### Course Objectives and Course Outcomes Compulsory Marathi

#### Unit I:

प्रकरण – ६.उदिष्ठ-चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करुन देणे.

साध्य- महाभारतातील द्रौपदीच्या मनातील गूढ वगुंतागुंतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्रापत झाली.

प्रकरण – ७.उदिष्ठ-पक्षीगान पाठातून पक्ष्यांच्या सौंदर्याचे दर्षन घडविणे..

साध्य-पक्षीगान मधून विविधक्षी, पक्ष्यांची घरटी, त्यांची पिल्ले यांची माहिती व ओळख विद्यार्थ्यांना झाली.

प्रकरण - 8.उदिष्ठ-अन्वरषा फकीर या मुस्लीम व्यक्तीमत्वाची ओळख विद्यार्थ्यांना करून देणे.

साध्य-लहान मुले, स्त्रीया, माणसे व आजुबाजूच्या गावातील जनतेसाठी उपयुक्त असे अन्वरषा फकीराचे व्यक्तिमत्व असल्याचे विद्यार्थ्यांना कळून आले.

प्रकरण –9.उदिष्ठ– दाभोळकराच्या अंधश्रध्दा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करुन देणे.

साध्य—वैज्ञानिक दृथ्ष्टकोण व षास्त्रीय विचार पध्दतीने अंधश्रध्दा निर्मूलन करण्याचे घ्येय दाभोळकरांचे होते याची माहिती विद्यार्थ्यांना झाली.

प्रकरण -10.उद्ष्ठ-महिला ग्रामपंचायतीच्या निवडनूकीचे चित्रण विद्यार्थ्यांना सांगणे.

साध्य- ग्रामीण भागातील ग्रामपंचायत मधील निवडणूकीची माहिती व परिस्थितीची जाणीव विद्यार्थ्यांना आली.

#### Unit II:

कविता— 6.उदि्ष्ठ—ही निळी पांढरी कवितेतील षरद ऋतूतील दुपारचे वर्णन करुन देणे.

साध्य-इंदिरा संतानी केलेलीषरद ऋतूतील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

कविता -7.उदिष्ठ-दोन ज्योती यातून कविने वर्णन केलेल्या दोन ज्योतीचा उलघडा करणे

साध्य—एक दुःखाची ज्योत लाल असते व दुसरी दुःखाची ज्योत काळी असून तीचे दुःख कायम टिकणारे असते याची जाणीव विद्यार्थ्यांना झाली.

कविता— ८.उदिष्ठ—पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थ्यांना उलघडून दाखविणे

साध्य-ग्रेस कवीने रेखाटलेले स्त्री वेदनेचे स्वरुप व स्त्री मनाच्या भावना याविषयीविद्यार्थ्यांना माहिती मिळाली.

कविता— 9.उदिष्ठ—प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रन करुन जाणीव करून देणे.

साध्य—मानवी समाजरचनेत माणूसपण विसरत चालला असून पीडितांना न्याय मिळत नसल्याची साक्ष विद्यार्थ्यांना पटली.

कविता— 10.उदिष्ठ— टाहारा कवितेतून आदिवासी समाजाला कसा पुढारी हवा याची माहिती विद्यार्थ्यांना देणे. साध्य—कवितेत वर्णन केलेला आदिवासिंचा पुढारी कविला हवा असल्याची जाणीव विद्यार्थ्यांना झाली.

#### **Unit III:**

प्रकरण — 3.उदि्ष्ठ—ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे.

साध्य— ग्रंथपरीक्षण करताना परिक्षणाची पहीली पायरी ग्रंथवाचन होय त्यानंतर इतर बाबींक्डे लक्ष्य द्यावे याची माहिती विद्यार्थ्यांना प्राप्त झाली.

प्रकरण – 4.उदिष्ठ-इंटरनेट आणि मराठी भाषा व साहित्य याची माहिती विद्यार्थ्यांना करुन देणे.

साध्य— संगणक संवाद,मराठी संकेतस्थळे, इंटरनेटवरील मराठी दैनिके, व मायबोली या संकेतस्थळावरील लेख, कविता, व इतर मराठी साहित्याची माहिती विद्यार्थ्यांना झाली

### Compulsory English Course Objectives and Course Outcomes

**Objective**: To enable students to read fluently with proper pronunciation and comprehend the prose.

Outcome: Students read fluently with proper pronunciation and comprehended the prose

**Objective**: to make students enable to understand and enjoy one act play

**Outcome**: Students understood and enjoyed one-act- play.

**Objective:** To enable students to understand the poets and their prescribed poetry.

**Outcome-** Students understood the theme of the poems and had knowledge about the prescribed poets.

**Objective**: To enable students to have knowledge of applied skills like composing an Email, Curriculum vitae, paragraph with the help of given hints/points.

**Outcome**: Students had knowledge of applied skills like composing an Email, Curriculum vitae, paragraph with the help of given hints/points.

**Objective**: To enrich conversational skills of students **Outcome**: Conversational skill of students improved

#### Department Of Political Science Course Objectives and Course Outcomes

#### Course Objectives

- List the difference between scholarly and popular publication in Comparative Politics.
- To understand the issues of International and Domestic Politics and public Policy.
- To analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- To discuss the major theories and concepts of political science and its subfields.
- To relate the basics of International Relations and the new trends in the realm of International Relations.

#### **Course Outcomes**

- Write an analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the Indian model
- Exposed to issues of International and Domestic Politics and Public Policy
- Analyze contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- Presented with the major theories and concepts of political science and its sub fields.
- Aware with the basics of International Relations and the new trends in the realm of international relations.

#### **Course Objectives and Course Outcomes**

#### Unit -I: Economic Development and Growth

- Objective- To develop the ability to explain the core economic Sector of Economic Development and Growth.
- Outcome Students learnt and accepted the Knowledge of Economic Development and Growth.

#### Unit –II: Planning and Policy

- Objective To introduce the theory of Planning and Policy.
- Outcome Students learnt the theory of Planning and Policy

#### Unit -III: Public Finance

- Objective- To develop preliminary knowledge of Public Finance.
- Outcome Students learnt preliminary knowledge of Public Finance.

#### Unit -IV: International Trade

- Objective- To explain the theory of International Trade.
- Outcome –Students learnt about the theory of International Trade.

### Department of Sociology Course Objectives and Course Outcomes

#### **Current Social Problems in India**

#### Unit - I Education in Contemporary

Objective - To make the students in detail about Education in Contemporary India.

Outcome - Students understood the concept of Education in Contemporary India.

#### Unit - II Displacement and Rehabilitation

Objective – To make the students aware of Displacement and Rehabilitation.

Outcome – Students understood the concept of Displacement and Rehabilitation.

#### Unit - III Intolerance, Riot Crime

Objective - To make students know in detail about Intolerance, Riot Crime.

Outcome - Students understood the concept of Intolerance, Riot Crime.

#### **Unit IV** Corruption

Objective - To make students aware of Corruption.

Outcome -Students understood the concept of Corruption.

#### Department of History Course Objectives and Course Outcomes

#### **Course Objectives**

To Study what were Russia's five-year plans?

- To understand Hitler Mussolini's foreign policy.
- To understand the Causes of World War II.
- To study the United Nations the and performance of Suez Canal.

#### **Course Outcomes**

- Learned about Russia's Five-Year Plan
- Learned about Hitler Mussolini's foreign policy in detail.
- Learned the reasons for the Second World War.
- Received information about the United Nations.
- Understood the performance of the Suez Canal, NATO SEATO, Warsaw Pact.

#### Department of Marathi Course Objectives and Course Outcomes Marathi Literature

#### Unit I:

गरूडझेप- भरत आंधळे

उदिष्ठ गरूड झेप मधील लेखकानी नोकरीसाठी ध्येयवेडा प्रवास कसा केला याची माहिती देऊन विद्यार्थ्यांना प्रेरीत करणे.

साध्य— भरत आंधळेच्या पैक्षणिक प्रगतीचा व स्पर्धा परीक्षेच्या कार्याचा आढावा घेऊन विद्यार्थ्यांनी गरुडझेप आत्मकथनातून पेरणा घेतली.

प्राचीन मराठी वाड.मयाचा इतिहास– ल.रा. निषराबादकर.

उदि्ष्ट— प्राचीन मराठी वाड्.मयाचा इतिहासाच्या आधार संतसाहित्य, पंडिती साहित्य,षाहिरी साहित्य, बखर वाड्.मय या साहित्याची माहिती विद्यार्थ्यांना देणे

साध्य– संतसाहित्य, पंडिती साहित्य,षाहिरी साहित्य, बखर वाड्.मय या साहित्याची माहिती विद्यार्थ्यांना झाली. भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. क्ळकर्णी

उदिष्ठ— भाषाविज्ञानाचा परिचय विद्यार्थ्यांना करून देणे.

साध्य– मराठी मुळाक्षरे, स्वन व स्वनांतरे यांची माहिती विद्यार्थ्यांना झाली

#### **Bachelor of Commerce**

**Course Objectives and Course Outcomes** 

#### Semester -I Compulsory English

#### **Course Objective**

Students will be able -

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders
- To understand financial and business acumen through basic research skills for business
- To understand and value inclusivity in human nature
- To prioritize the importance of human life and wealth
- To understand horror stories with elements of surprise and irony
- To understand expansive and imaginative concepts

- To understand the meanings of motivation and indomitable spirit
- To take up tasks and not to worry about the end result for the larger benefit of Human kind
- To understand that tranquil temperament is the most potent weapon one can have against diversity
- To understand grammar and apply it in their writing skills

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders
- Understood financial and business acumen through basic research skills for business
- Understood and value inclusivity in human nature
- Understood prioritize the importance of human life and wealth
- Understood horror stories with elements of surprise and irony
- Understood expansive and imaginative concepts
- Understood the meanings of motivation and indomitable spirit
- Understood tasks and not to worry about the end result for the larger benefit of Human kind
- Understood that tranquil temperament is the most potent weapon one can have against diversity
- Understood grammar and apply it in their writing skills

#### **Department of Marathi**

#### **Course Objectives and Course Outcomes**

उदिष्टे:- 1. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरुची निर्माण करणे.

- 2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- 3. विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- 4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
- 5. साहित्यातून समाजातील प्र"नांना वाचा फोडून त्यांचे निराकरण करणे

ध्येय:- 1. भावी काळात विदयार्थ्यांमधून साहित्यनिर्मिती करणे.

- 2. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करुन संवाद"ील वातावरण निर्मिती करणे.
- 3. विभागात विविध उपक्रमांचे आयोजन करुन मराठी भाषेचा दर्जा
- 4. विदयार्थ्यांमध्ये सं"गोधनवृत्ती वृध्दिगत करणे.
- 5. मराठी भाषेची प्रयोग"गाळा निर्माण करणे.

#### By the end of this course, the students will be able to:

CO1 भारतीय लोक"।।हीचे मूल्य विदयार्थ्यांमध्ये रुजविणे.

CO2 ग्रामीण जनजिवन व शेतीनिष्ठे"ी विदयार्थ्यांची नाळ जोळणे.

- CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.
- CO4 शाह् महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
- CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.
- CO6 विदयार्थ्यामध्ये आधूनिक मूल्य रुजविणे
- CO7 विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण करणे.
- CO8 विदयार्थ्यामध्ये सर्जन" तिलता निर्माण करणे.

### Financial Accounting Course Objectives and Course Outcomes

#### Unit No. I - Financial Accounting.

- Objective- To make the students understand Financial Accounting. Meaning, Principles & Problem.
  - Outcome -Students understood the following topics. Financial Accounting. Meaning, Objective, Principles & Problem.

#### Unit No 2- Hire Purchase Account.

- Objective To make the students understand Hire Purchase Account Meaning, Method & Problems.
- Outcome- Students understood the following topics
   Hire Purchase Account Meaning, Method & Problems.

#### Unit No 3- Final Account of Co-Operative Societies.

- Objective To make the students to understand the Final AccountCo-Operative Societies. Introduction, Type, Co-operative Legislation and Problems.
- Outcome- Students understood the following topics
  - Final Account of Co-Operative Societies
    Introduction, Type, Co-Operative Legislation and Problems

#### Unit No 4- Join Venture Accounts.

- Objective- To make the students understand Join Venture Accounts Meaning, Method and Problem.
- Outcome Students understood the following topics Join Venture Accounts Meaning, Method and Problems.

#### **BUSINESS ORGANISATION**

#### **Course Objectives and Course Outcomes**

#### **Objectives**

- To make the students understand the concept, objective, importance of business.
- To acquaint the students with various forms of Business organization and their functioning.
- To make the students understand the concept, functions of Organization and types of Organization.
- To make the students understand the Internal constituents of the Business Organization KeyManageriall Personnel, Chairman, Chief executive officer, E-Commerce, E-business and E-banking.

#### **Outcomes**

Students understood the concept, objective and importance of business.

- Acquainted the students with various forms of Business organization and their functioning.
- Understood the concept, functions of Organization and types of Organization.
- Understood Internal constituents of the Business Organization Key Managerial Personnel, Chairman, Chief executive officer, E-Commerce, E-business and E-banking.

#### **Company Law**

#### **Course Objectives and Course Outcomes**

Unit No. I - Background of New Company

- Objective To make the students understandthe Background of New Company Act 2013, Corporate Personality & Kinds of Company.
- Outcome Students understood the following topics. Background of New Company Act 2013, Corporate Personality & Kinds of Company.

Unit No 2- Memorandum of Association, Article of Association and Prospectus.

- Objective To make the students understand the Memorandum of Association, Article of Association and Prospectus.
- Outcome Students understood the Memorandum of Association, Article of Association and Prospectus.

Unit No 3- Shares and Share Capital

- Objective- To make the studentsunderstand Shares and Share Capital.
- Outcome- Students understood the following topics; Shares and Share Capital.

Unit No 4- Membership in a company, Director.

- Objective To make the students understand Membership in a company, Director.
- Outcome- Students understood the following topics; Membership in a company, Director.

### **Business Economics- I Course Objectives and Course Outcomes**

Unit I-

Nature and Scope of Business Economics:

Objective- To make the students understand the concept of Business Economics.

Outcomes- Students get well understood the following topics:

Business Economics.

Unit II-

Theory of Consumption:

Objective- To make the students understand the Law of Demand, Elasticity of Demand & Demand forecasting.

Outcomes-Students get well understood the following topics:

Law of Demand, Elasticity of Demand & Demand forecasting.

Unit III-

Theory of Production:

Objective- To make the students understand the Theory of Production.

Outcomes- Students get well understood the Theory of Production.

Unit IV-

Theory of Cost and Revenue:

Objective- Students should be aware of the Theory of Cost and Revenue.

Outcomes-Students get well understood Theory of Cost and Revenue.

#### Semester-II Compulsory English Course Objectives and Course Outcomes

#### **Course Objectives**

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- To understand financial and business acumen through basic research skills for business.
- To understand and value inclusivity in human nature.
- To prioritize the importance of human life and wealth.
- To understand horror stories with elements of surprise and irony.
- To understand expansive and imaginative concepts.
- To understand the meanings of motivation and indomitable spirit.
- To take up tasks and not to worry about the end result for the larger benefit of Humankind.
- To understand that tranquil temperament is the most potent weapon one can have against diversity.

मा ज्र

To understand grammar and apply it in their writing skills.

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders.
- Understood financial and business acumen through basic research skills for business.
- Understood and valued inclusivity in human nature.
- Understood prioritizing the importance of human life and wealth.
- Understood horror stories with elements of surprise and irony.
- Understood expansive and imaginative concepts.
- Understood the meanings of motivation and indomitable spirit.
- Understood the tasks and not to worry about the end result for the larger benefit of Human kind.

- Understood that tranquil temperament is the most potent weapon one can have against diversity.
- Understood grammar and apply it to their writing skills.

### Department of Marathi Course Objectives and Course Outcomes

#### By the end of this course, the students will be able to:

- CO1 भारतीय लोक"गाहीचे मुल्य विदयार्थ्यांमध्ये रुजविणे.
- CO2 ग्रामीण जनजिवन व शेतीनिष्ठे" विदयार्थ्यांची नाळ जोळणे.
- CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.
- CO4 शाह महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
- CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.
- CO6 विदयार्थ्यामध्ये आधुनिक मृल्य रुजविणे
- CO7 विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण करणे.
- CO8 विदयार्थ्यामध्ये सर्जन" गिलता निर्माण करणे.

#### Statistics and Business Mathematics Course Objectives and Course Outcomes

#### Unit No. I - Statistics & Measures of Central Tendency

- Objective To make the students understand the Background of Statistics & Measures of Central Tendency.
- Outcome Students understood the following topics. Statistics & Measures of Central Tendency.

#### Unit No 2- Dispersion.

- Objective To make the students understand Dispersion.
- Outcome Students understood the following topics Dispersion.

#### Unit No 3- Skewness

- Objective To make the students understand Skewness.
- Outcome Students understood the following topics Skewness.

#### Unit No 4- Business Mathematics

- Objective- To make the studentsunderstand Business Mathematics.
- Outcome Students understood the following topics.

#### **BUSINESS MANAGEMENT**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To make the students understand the Meaning, types of management, Principles, function of Business Management.
- To make the students know about Planning and Decision Making.
- To make the students know about Delegation of Authority and coordination& Controlling.
- To expose the students for the applicability of recent trends in management practices.

 To make students familiar with the modern management practices being used by the corporate world.

#### **Course Outcomes**

- Understood the Meaning, types of management, Principles, and function of Business Management.
- Knew about Planning and Decision Making.
- Students knew about Delegation of Authority and coordination& Controlling.
- Exposed the students for the applicability of recent trends in management practices.
- Understood and became familiar with the modern management practices being used by the corporate world.

### Secretarial Practice Course Objectives and Course Outcomes

#### Unit No. I - Incorporation of Company

- Objective To make the students understand the Incorporation of Company,
   Directors of Company.
  - Outcome Students understood the following topics Incorporation of Company, Directors of Company.

Unit No 2- Company Meeting, Company Agenda & Voting and Resolution.

- Objective To make the students understand the Company Meeting, Company Agenda & Voting and Resolution.
- Outcome- Understood the Company Meeting, Company Agenda & Voting and Resolution.

Unit No 3- Report Writings, Secretarial audit & E-Governance and E-Filing

- Objective To make the students understand Report Writings, Secretarial Audit &E-Governance and E-Filing.
- Outcome Students get well understood the following topics Report
   Writings, Secretarial audit & E-Governance and E-Filing.

Unit No 4- Key Management Personnel, Appointment of Director & Management Remuneration.

- Objective To Make the students understand Key Management Personnel, Appointment of Director & Management Remuneration.
- Outcome Students understood the following topics
   Key Management Personnel, Appointment of Director &
   Management Remuneration.

### **Business Economics II Course Objectives and Course Outcomes**

#### Unit I-

#### **Market Structure**

**Objective-** To make the students understand the Market structure.

**Outcome-**Students understood the Market Structure.

#### Unit II-

#### **Perfect & Imperfect Competition Markets**

**Objective-** Students should become aware of Perfect& Imperfect Competition.

Outcome-Students understood Perfect& Imperfect Competition.

**Unit III-**

#### **Theories of Distribution**

Objective- Students should become aware of the Theory of Distribution.

Outcome-Students understood & they applied their knowledge.

Unit IV-

#### **Business cycles & National Income**

Objective- Students should become aware of Business cycles & National Income.

Outcome-Students understood Business cycles & National Income.

#### Compulsory English Semester-III

#### **Course Objectives and Course Outcomes**

#### **Course Objective**

Students will be able -

- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders
- To understand financial and business acumen through basic research skills for business
- To understand and value inclusivity in human nature
- To prioritize the importance of human life and wealth
- To understand horror stories with elements of surprise and irony
- To understand expansive and imaginative concepts
- To understand the meanings of motivation and indomitable spirit
- To take up tasks and not to worry about the end result for the larger benefit of Human kind
- To understand that tranquil temperament is the most potent weapon one can have against diversity
- To understand grammar and apply it in their writing skills

#### **Course Outcomes**

- Understood the meaning of Start-up through the prescribed Life Sketches of Start-up founders
- Understood financial and business acumen through basic research skills for business
- Understood and value inclusivity in human nature
- Understood prioritize the importance of human life and wealth
- Understood horror stories with elements of surprise and irony
- Understood expansive and imaginative concepts
- Understood the meanings of motivation and indomitable spirit
- Understood tasks and not to worry about the end result for the larger benefit of Human kind
- Understood that tranquil temperament is the most potent weapon one can have against diversity
- Understood grammar and apply it in their writing skills

### Department of Marathi Course Objectives and Course Outcomes

#### By the end of this course, the students will be able to:

- CO1 मातुभाषेची आवड व जाणीव निर्माण करणे
- CO2 प्राचिन मराठीचे वैिंगष्ट्रे स्पष्ट करणे.
- CO3 विनोदी लेखनात खेळकरवृत्तीचे द"नि घडविणे.
- CO4 संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोक"गहीचा पुरस्कार करणे.
- CO5 स्त्री विषयक जाणिव जागृती करणे.
- CO6 वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे.

### Financial Accounting-II Course Objectives and Course Outcomes

#### Unit I-

#### **Consignment Accounts**

**Objective-** Students should be aware of the topic of Consignment Accounts.

**Outcomes-**Students understood &solved the problems.

Unit II-

#### **Hire Purchase:**

**Objective-** Students should be aware of the topic of Hire Purchase.

**Outcomes-**Students understood &solved the problems.

#### Unit III-

#### Capital Structure & Issues of Shares.

**Objective-** Students should be aware of the topic of Capital Structure & Issues of Shares.

Outcomes-Students understood &solved the problemsof Issues of Shares.

Unit IV-

#### **Final Accounts of Joint Stock Companies**

**Objective-** Students should be aware of topic of Final Accounts of Joint Stock Company.

**Outcomes-** Students understood & solved the problems.

### **Business Communication & Management Course Objectives and Course Outcomes**

Unit No. I - Meaning, Definition and concept of Communication, objective of Communication

Objective - To make the students understand the Meaning, Definition and concept of Communication, objective of Communication

Outcome - The students understood the Meaning, Definition and concept of Communication, the objective of Communication

Unit No 2- Business Communication.

Objective - To make the studentsunderstand the Business Communication.

Outcome- The students understood Business Communication.

Unit No 3- Technology and Business Communication

Objective - To make the studentsunderstand Technology and Business Communication.

Outcome- Students understood the following topics;

Technology and Business Communication.

Unit No 4- M.S. Office Aided Communication.

Objective - To make the students understand M.S. Office-Aided Communication.

Outcome - Students understood the following topics;

M.S. Office Aided Communication.

#### **Business Law**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- Students will be able to understand various provisions of the related Acts the course gives the knowledge regarding The Indian Contract Act, 1872, The Sales of Goods Act, 1930, The Indian partnership Act 1932, Negotiable Instruments Act 1881.
- To make the students gain knowledge of various legal aspects of the business.
- To make the students understand laws that affect mercantile transactions.

 Students will be able to understand court interpretations of laws like, Prevention of Money Laundering Act-2002, Consumer Protection Act – 2002

#### **Course Outcomes**

- Student understood various provisions of the related Acts the course gives the knowledge regarding The Indian Contract Act, 1872, The Sales of Goods Act, 1930, The Indian partnership Act 1932, Negotiable Instruments Act 1881.
- Students gained knowledge of various legal aspects of the business.
- Students understood laws that affect mercantile transactions.
- Students understood court interpretations of laws like, the Prevention of Money
   Laundering Act-2002, Consumer Protection Act 2002

### Monetary Economics-I Course Objectives and Course Outcomes

Unit I-

Money

Objective- To make the students understand the concept of the Evolution of Money & Functions of Money.

Outcome-Students understood the concept of the Evolution of Money & Functions of Money.

Unit II-

Inflation & Deflation

Objective- To make the students understand the concept of inflation and deflation. Outcome-Students developed their knowledge about inflation and deflation.

Unit III-

Money Market & Policies

Objective- To make the students understand the concept of the Money Market and Monetary Policy.

Outcome-Students understood & they applied their knowledge.

Unit IV-

**Public Finance** 

Objective- To make the students

understand the concept of Public Finance.

Outcome-Students applied & developed the knowledge.

Semester-IV Compulsory English

**Course Objectives and Course Outcomes** 

**Course Objectives** 

#### Students will be able -

- To understand and value inclusivity in human nature
- To prioritize the importance of human life and wealth
- To understand horror stories with elements of surprise and irony
- To understand expansive and imaginative concepts
- To understand the meanings of motivation and indomitable spirit
- To take up tasks and not to worry about the end result for the larger benefit of Human kind
- To understand grammar and apply it in their writing skills

#### **Course Outcomes**

- Understood and value inclusivity in human nature
- Understood prioritize the importance of human life and wealth
- Understood horror stories with elements of surprise and irony
- Understood expansive and imaginative concepts
- Understood the meanings of motivation and indomitable spirit
- Understood tasks and not to worry about the end result for the larger benefit of Human kind
- Understood grammar and apply it in their writing skills

### Department of Marathi Course Objectives and Course Outcomes

#### By the end of this course, the students will be able to:

CO1 मातुभाषेची आवड व जाणीव निर्माण करणे

CO2 प्राचिन मराठीचे वैिंगष्टे स्पष्ट करणे.

CO3 विनोदी लेखनात खेळकरवृत्तीचे द"नि घडविणे.

CO4 संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोक"गहीचा पुरस्कार करणे.

CO5 स्त्री विषयक जाणिव जागृती करणे.

CO6 वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे.

### Financial Accounting III Course Objectives and Course Outcomes

#### Unit I-

**Final Accounts of Banking Companies** 

**Objective**-Students should become aware of the topic of Final Accounts of Banking Companies.

Outcome-Students understood and solved the Problems.

Unit II-

#### **Final Accounts of General Insurance Companies**

**Objective-** Students should become aware of the topic of Final Accounts of General Insurance Companies.

Outcome-Student understood and solved the Problems.

**Unit III-**

#### **Valuation of Goodwill**

Objective- Students should become aware of the topic of the Valuation of Goodwill.

Outcome-Student understood and solved the Problems.

Unit IV-

#### **Liquidation of Company**

Objective- Students should become aware of the topic of the Liquidation of Company.

Outcome-Student understood & solved the Problems.

#### Skill Development Course Objectives and Course Outcomes

Unit No. I - Introduction- Basic Personality, Human Growth and Behavior and Motivation.

- Objective To make the students understand the Introduction- Basic Personality, Human Growth and Behavior and Motivation.
- Outcome The students understood the Introduction- Basic Personality, Human Growth and Behavior and Motivation.

Unit No 2- Communication Skill and Personality Development.

- Objective To make the students understand Communication Skills and Personality Development.
- Outcome The students understood the Communication Skills and Personality Development.

Unit No 3- Techniques in Personality Development.

- Objective To make the studentsunderstand Techniques in Personality Development.
- Outcome Students understood the following topics; Techniques in Personality Development.

Unit No 4- Entrepreneurial Skill Development.

- Objective To make the students understand Entrepreneurial Skill Development.
- Outcome- Students understood Entrepreneurial Skill Development.

### Income Tax Course Objectives and Course Outcomes

#### **Course Objectives**

- To make the students understand the basic concepts involved in the Income Tax act and the basics of income tax.
- To make the students understand the Taxable Salary and tax liability.
- Students get exposure to provisions of taxation of house property.
- To make the students understand Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and 80U. Students get exposure to provisions of taxation of Income from other sources.
- They learn the procedure of filing tax returns, Advance tax and tax refunds.

#### **Course Outcomes**

- Understood the basic concepts involved in Income Tax act and also the basics of income tax.
- Understood the Taxable Salary and tax liability.
- Students got exposure to provisions of taxation of house property.
- Understood Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and 80U. Students get exposure to provisions of taxation of Income from other sources.

They learn the procedure of filing tax returns, Advance tax and tax refunds.

### Monetary Economics-II Course Objectives and Course Outcomes

#### Unit I-

#### **Commercial Bank**

**Objective-**To make the students understand the functions of Commercial Bank.

Outcome-Students understood the functions of Commercial Bank.

#### Unit II-

#### E-Banking and Core Banking

**Objective-** To make the students understand -Banking and Core Banking.

Outcome-Students developed their knowledge.

#### **Unit III-**

#### **Banks and Customers Relationship and Service**

**Objective-** To make the studentsunderstand the Banks Customers Relationship and Service.

Outcome-Students understood & applied their knowledge.

Unit IV-

**Central Bank** 

**Objective-** To make the students to understand the Central Bank.

**Outcome-**Students developed the knowledge about Central Bank.

#### Semester-V Financial Accounting-IV Course Objectives and Course Outcomes

Unit No.I - Amalgamations & Absorption of Companies.

Objective - To make the students understand Amalgamations & Absorption.

Outcome - Students understood the topics like Amalgamations & Absorption.

Unit No 2- Reorganization & reconstruction of Companies.

Objective - To make the studentsunderstand the Re-organization & reconstruction problem.

Outcome - Students understood the concepts of the Reorganization & reconstruction problems.

Unit No 3- Valuation of Shares

Objective - To make the students understand Valuation of Shares Problems.

Outcome- Studentsunderstood the Valuation of Shares Problems.

Unit No 4- Double Account system

Objective - To make the students understand Double Account system.

Outcome - Students understood the Double Account system.

### Management Process Course Objectives and Course Outcomes

#### Unit I-

Management and Administration

Objective- To make the students understand meaning and difference of Management and Administration.

Outcome-Students applied the knowledge of Management and Administration.

#### Unit II-

Managerial Development & Group Dynamics

Objective- To make the students to understand the Managerial Development & Group Dynamics

Outcome-Students understood the knowledge of Managerial Development & Group Dynamics.

Unit III-

Managerial Style

Objective- To make the students understand the Managerial Style.

Outcome-Students developed the knowledge of Managerial Style.

Unit IV-

Motivation:

Objective- To make the students understand the Motivation.

Outcome- Students understood the meaning of Motivation and their types.

# Indian Economics Course Objectives and Course Outcomes

Unit I-

Indian Economy& Planning:

Objective- To make the students understand the Indian Economy & Planning.

Outcomes-Students will be able to understand Indian Economy & Planning.

Unit II-

Indian Economy& Policy:

Objective- To make the students understand the Indian Economy & Policy.

Outcomes-Students will be able to understand Indian Economy & Policy.

Unit III-

Population& Unemployment:

Objective- To make the students understand the population & Unemployment

Outcomes-Students will be able to understand the population &Unemployment

Unit IV-

India's Public Finance:

Objective- To make the students understand Public Revenue and Public Expenditure.

Outcomes-Students will be able to understand the Public Revenue and Public Expenditure.

## Computerize Accounting Course Objectives and Course Outcomes

Objective - To make the students understand Introduction of Computerize Accounting,

Advantage, Need and Accounting Groups.

Outcome - Students understood the following topics;

Introduction of Computerize Accounting, Advantage, Need and Accounting

Groups.

Unit No 2- Accounting Software's.

Objective - To make the students understand Accounting Software.

Outcome - Students understood the topic- Accounting Software.

Unit No 3- Accounts Info Menu, Accounts Groups.

Objective - To make the studentsunderstand the Accounts Info Menu, Accounts Groups-

Create Group, Ledger Accounts, Voucher & Features of Account Voucher.

Outcome - Students understood the following topics-

Accounts Info Menu, Accounts Groups-

Create Group, Ledger Accounts, Voucher & Features of Account

Voucher.

Unit No 4- Inventory Info, Features of Inventory Info. Configure.

Objective - To make the students understand the Inventory Info, Features of the Inventory

Info. Configure.

Outcome - Students understood the following topics-

Inventory Info, Features of Inventory Info. Configure.

Auditing
Course Objectives and Course Outcomes

#### - Course Objectives

- To make the Students learn a lot about the basics of audit and auditing, internal and external check, periodic audits, internal audit external audit, continuous audit, cost audit, management audit and annual audit.
  - To make the Students learn the Audit Planning and Audit Documentation and Evidence.
  - To make the studentsunderstand standard on Auditing, Vouching & Verification Vouching, Verification of Assets and Liabilities.
  - A glimpse into company audit gives an idea of appointing a company auditor, and the Procedure of audit in a company etc. along with the rules of company and corporate audit.

#### **Course Outcomes**

- Students learnt a lot about basics of audit and auditing, internal and external check, periodic audit, internal audit external audit, continuous audit, cost audit, management audit and annual audit.
  - Students learnt Audit Planning and Audit Documentation and Evidence.
  - Students understood the standard on Auditing, Vouching & Verification Vouching, Verification of Assets and Liabilities.
  - A glimpse into company audit gave an idea of appointing a company auditor, and the Procedure of audit in a company etc.along with the rules of the company and corporate audit.

#### **Semester-VI**

#### Financial Accounting-V Course Objectives and Course Outcomes

Unit No.I - Accounting of Holding Company.

- Objective To make the students understand Accounting of Holding Company
- Outcome Students understood the following topics Accounting of Holding Company.

Unit No. 2 - Insurance Claims.

- Objective To make the students understand the Insurance Claims.
- Outcome Students understood the following topics Insurance Claims.

Unit No. 3 - Investment Accounts.

- Objective To make the studentsunderstand Investment Accounts.
- Outcome Students understood the topic- Investment Accounts.

Unit No. 4 - Profit Prior to Incorporation.

- Objective To make the students understand the Profit Prior to Incorporation.
- Outcome Students understood the topic- Profit Prior to Incorporation.

#### **Management Accounting**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

• To make the students get a clear idea about the concept, objectives, importance and benefits of management accounting along with the basic advantages and

- significance of various techniques of management accounting and Break-Even Point Analysis.
- A good idea of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organizations.
- Students get a clear idea of Ratio Analysis like- Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Classification of Ratio, Liquid Ratio, Inventory Turnover Ratio, Debtors and Creditors Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, Earnings per Share Ratio.
- To make the students understand and get a clear idea of the Fund Flow Statement.

#### **Course Outcomes**

- Student got a clear idea about the concept, objectives, importance and benefits of management accounting along with the basic advantages and significance of various techniques of management accounting and Break-Even Poing Analysis.
- Understood good ideas of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organizations.
- Students understood clear idea of Ratio Analysis like- Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Classification of Ratio, Liquid Ratio, Inventory Turnover Ratio, Debtors and Creditors Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, Earnings per share Ratio.
- Understood and got clear idea of Fund Flow Statement

# Advanced Statistics Course Objectives and Course Outcomes

Objective - To make the students understand the Accounting of Correlation

Outcome - Students understood the following topics. Correlation Company

Unit No. 2 - Regression.

Objective- To make the students understand Regression.

Outcome - Students understood the Regression.

Unit No. 3 - Index Number.

Objective - To make the students to understand Index Number.

Outcome - Students understood the following topics Index Number.

Unit No. 4 - Time Series Analysis.

Objective - To make the students understand Time Series Analysis.

Outcome- Students understood the Time Series Analysis.

Indian Economics-II
Course Objectives and Course Outcomes

#### Unit I

#### **Indian Agriculture**

**Objective**- To make the students understand the Indian Agriculture.

**Outcome-**Students applied the knowledge.

#### **Unit II**

#### **Indian Industry**

**Objective-** To make the students understand the Indian Industry.

Outcome-Students created the knowledge.

#### Unit III

#### India's Service Sector and International Trade

Objective- To make the students understand the India's International Trade.

**Outcome-**Students developed the knowledge.

#### **Unit IV**

#### **Contribution of Indian Economic Thinkers**

**Objective-** To make the students understand the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar Lohiya.)

**Outcome-**Students understood the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar Lohiya.)

# **Human Resource Management Course Objectives and Course Outcomes**

#### Unit I-

#### Introduction

**Objective**- To make the students understand the concept of Human Resources Management & Human Resource Manager.

**Outcome-**Students understood the concept of Human Resources Management & Human Resource Manager.

#### **Unit II-**

#### Recruitment, selection and training

**Objective**- To make the students understand the Recruitment, selection and training **Outcome**-Students understood the Recruitment, selection and training

#### **Unit III-**

#### Labor welfare and collective bargaining

**Objective**- To make the students to understand the Labor welfare and collective bargaining.

Outcome-Students understood the Labor welfare and collective bargaining.

Unit IV-

#### **Human Resource Planning and Accounting**

**Objective-** To make the studentsunderstand the Human Resource Planning and Accounting.

Outcome-Students understood Human Resource Planning and Accounting.

#### **Industrial Law**

#### **Course Objectives and Course Outcomes**

#### **Course Objectives**

- To make the students to understand The Indian Factories Act, 1948 and The Industrial Disputes Act, 1947.
- Learners learn Laws Relating to Wages, Laws Relating to Bonus and Gratuity, Laws Relating to Employee's State Insurance and Provident Fund and Laws Relating to Workmen Compensation and Maternity Benefits.
- To make the students to understand Child Labour Act, 1986, Trade Union Act, 1926, International Labour Organisation ILO and Contract Labour Act, 1971.
- Students will be able to understand the meaning and nature of Industrial Estate,
   Technology Park, SEZ and Co-operative Industrial Estate.
- Learners learn Intellectual Property Rights Law in India and Environment Protection Act, 1986.

#### **Course Outcomes**

- Understood The Indian Factories Act, 1948 and The Industrial Disputes Act,
   1947
- Learned Laws Relating to Wages, Laws Relating to Bonus and Gratuity, Laws Relating to Employee's State Insurance and Provident Fund and Laws Relating to Workmen Compensation and Maternity Benefits.
- Understood Child Labour Act, 1986, Trade Union Act, 1926, International Labour Organisation – ILO and Contract Labour Act, 1971.
- Understood the meaning and nature of Industrial Estate, Technology Park, SEZ and Co-operative Industrial Estate.
- Learners learnt Intellectual Property Rights Law in India and Environment Protection Act, 1986.

**Bachelor of Science (B.Sc.)** 

Semester-I
Department of English
Compulsory English

**Course Objectives and Course Outcomes** 

Unit I: Objective-Making students' conscious about the functioning of Democracy.

**Outcome-**Students tried to understand the importance of democracy.

Unit II: Objective- Making students understand slavery and its effects.

Outcome-Students tried to understand the effects of slavery and its punishing practice.

**Unit III: Objective-**to make students understand correct usage of Tense, Transformation of sentences and Common errors.

**Outcome-**Students tried to solve the examples of Tense, Transformation of sentences and Common errors.

Unit IV: Objective-To create the ability of writing Curriculum Vitae.

Outcome-Students attempted to write the Curriculum Vitae.

Unit I: Objective-Making students conscious of slavery, education, and compassion.

Outcome-Students understood the issues related with slavery, education and struggle in life.

Unit II: Objective- Making students understand about Self- reliance, Indian Freedom and words of wisdom.

Outcome- students understood about Self- reliance, Indian Freedom and words of Wisdom.

Unit III: Objective-To make students understand the value of struggle, Kindness and honesty.

Outcome- students understood the value of struggle, Kindness and honesty.

Unit IV: Objective-To create the ability of writing and comprehension.

Outcome-Students attempted to write and comprehend the passage.

# Department of Marathi Course Objectives and Course Outcomes

#### **Course Objectives**

उदिष्टे:- १. मराठी भाषेतिषयी विदयार्थ्यांमध्ये अभिरूची निर्माण करणे.

- २. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- विदयार्थ्यामध्ये असलेल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- ४. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
- ७. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

ध्येय:- १. भावी काळात विदयार्थ्यामधून साहित्यनिर्मिती करणे.

- २. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करून संवादशील वातावरण निर्मिती करणे.
- विभागात विविध उपक्रमांचे आयोजन करून मराठी भाषेचा दर्जा वाढविणे.

- ४. विदयार्थ्यांमध्ये संशोधनवृत्ती वृध्दिंगत करणे.
- ५. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

#### **Course Outcomes**

साहित्य सेतू

- CO1 विदयार्थ्यांनमध्ये साहित्य विषयक आवड निर्माण करणे
- CO2 वाचन संस्कृतीचा पुरस्कार करणे
- CO3 भारतीय संविधानाचे महत्व समजावून सांगणे
- CO4मानवी मृल्यांची जपणुक करणे
- CO5 कविता लंखनाचे तंत्र अवगत करणे
- CO6 पर्यावरण विषयक जागृती निर्माण करणे
- CO7 व्यावहारीक मराठीचे महत्व समजावून सांगणे

# Department of Chemistry Programme Educational Objectives (PEOS)

- PEO1: Graduates will pursue higher studies in related fields including management
- **PEO2:** Graduates will perform as employee in private/government institutions rising up to top positions
- **PEO3:** Graduates will become entrepreneurs.
- **PEO4:** Graduates will prepare for various competitive examinations.

#### **Programme Specific Outcomes (PSOS)**

- **PSO-1:** Gain the knowledge of Chemistry through theory and practical.
- **PSO-2:** To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.
- **PSO-3:** Identify chemical formulae and solve numerical problems.
- PSO-4: Use modern chemical tools, Models, Chem-draw, Charts and Equipment's.
- **PSO-5:** Know structure-activity relationship
- **PSO-6:** Understand good laboratory practices and safety.
- **PSO-7**: Make aware and handle the sophisticated instruments/equipment.
- **PSO-8:** Develop research-oriented skills.
- **PSO-9:** Study and understand the different techniques used in purification of compounds

#### **Programme Outcomes (POs)**

- The students are expected to understand the fundamentals, principles, and recent developments in the subject area.
- It is expected to inspire and boost interest of the students towards chemistry as the main subject.
- To impart practical skills and learn basics behind experiments

- To prepare background for advanced and applied studies in chemistry.
- To inculcate the scientific temperament in the students and outside the scientific community.
- To inculcate the scientific temperament in the students and outside the scientific community.
- Use modern techniques, decent equipment and Chemistry software

#### **Course Outcomes (COs)**

Course Name: B. Sc. Year/Semester: First/First Subject: Chemistry

Paper	СО	Outcomes
FY Paper-I Inorganic Chemistry (101)	101.2	<ul> <li>To understand the basic structure of atom.</li> <li>Understand shape of orbitals.</li> <li>Understand periodic properties such as atomic and ionic radii, ionization energy, electron affinity etc.</li> <li>To understand the concept of covalent bond.</li> <li>To understand the bond parameters and various types of types of hybridization.</li> <li>To understand the ionic structures with respect to NaCl and CsCl.</li> </ul>
× / 7	101.3 THUIF 101.4	<ul> <li>Understand s block element and their properties such as electronic configuration, atomic and ionic radii, I.P. etc.</li> <li>Understand chemical properties of the noble gases, preparation, structures, bonding and applications.</li> <li>To understand the P block element. Comparative study of groups 15,16, 17 with respective their properties.</li> <li>Understand the Hydrides, Oxides, Peroxyacids, Hydrides.</li> </ul>
FY Paper-II Physical Chemistry (102)	102.1	<ul> <li>Understand the common thermodynamics terms. Types of systems and varies thermodynamics processes.</li> <li>State and path functions and their differentiation.</li> <li>Understand the first law of thermodynamics.</li> </ul>
	102.2	<ul> <li>Understand gas equation and laws.</li> <li>Understand qualitative discussion of the Maxwell-Boltzmann distribution.</li> </ul>

		Understand ideal gas and real gases behaviors.
	102.3	<ul> <li>Understand the Intermolecular forces, structure of liquid, structural difference between solid, liquid and gases.</li> <li>Properties of liquid like surface tension, viscosity, refractive index.</li> </ul>
*	102.4	<ul> <li>Understand the concept of different types of surface phenomenon and catalytic property, like Adsorption mechanism of adsorption, factor affecting adsorption. Difference between adsorption and absorption, etc.</li> <li>Understand types of catalysis and enzymes.</li> </ul>
F.Y. Chemistry Practical Course	103	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

#### **Department of Physics**

#### **Programme Educational objectives (PEOS)**

- **PEO1:** Graduates will pursue higher studies in related fields including management
- **PEO2:** Graduates will perform as employee in private/government institutions rising up to top positions
- **PEO3:** Graduates will become entrepreneurs.
- **PEO4:** Graduates will prepare for various competitive examinations.

#### **Programme Specific Objectives (PSOS)**

- **PSO-1:** Gain the knowledge of Physics through theory and experiments.
- **PSO-2:** Understand good laboratory practices and safety.
- **PSO-3:** Develop research-oriented skills.
- **PSO-4:** Make aware and handle the sophisticated instruments/equipments.

#### **Programme Outcomes (POs)**

 Bachelor of Science offers theoretical as well as practical knowledge about different subject areas.

- This course forms the basis of science for coherent understanding of the academic field to pursue multi and interdisciplinary science careers in future. These subject areas include Physics, Chemistry, Mathematics and Botany and Zoology.
- Able to plan and execute experiments or investigations, analyze and interpret data information collected using appropriate methods
- It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace through research.
- Think critically; follow innovations and developments in science and technology.

#### **Course Outcomes (COs)**

Course Name: B. Sc. Year/Semester: First/First

**Subject: Physics** 

After the successful completion of the course students will be able to-

After the successful completion of the course students will be able to-			
Paper	CO	Outcomes	
Paper 1:	101.1	• Understand the mechanical behavior of the material and	
Properties of	50	the fundamental terminology like Stress, Strain, Poisson's	
Matter and		ratio, Hooks law, bending moment and modulus of	
Mechanics	7	elasticity	
(101)	101.2	Understand the concept of viscosity.	
(50		• Apply Poiseuille's Equation, Bernoulli's Theorem, Stoke's	
		law and the concept of terminal velocity.	
1 1	101.3	• Understand the concept of surface tension and surface	
		energy, Newton's laws of motion and to resolve the	
X\\ -		components of velocity and acceleration in different	
7//	144	coordinate system.	
	101.4	<ul> <li>Understand the System of particles and conservation laws.</li> </ul>	
Paper 2:	102.1	• Understand the concept of Electrostatic force, Electric	
Electrostatics,		field, Electric potential, Electric dipole, Electric dipole	
Time varying		moment.	
fields & Electric	102.2	Understand the concept of polarization and capacitors with	
Currents		and without dielectric.	
(102)		<ul> <li>Apply Gauss law to parallel plate capacitor.</li> </ul>	
	102.3	To understand the concept of electromagnetic induction	
		and transformer.	
		Apply equation of continuity and Kirchhoff's law to rise	
		and decay of current in LR, CR and LCR circuits.	
	102.4	<ul> <li>To apply complex number in solving an a.c. circuit.</li> </ul>	
		<ul> <li>Apply j- operator in LR, CR and LCR circuit.</li> </ul>	
		Understand the concept of Resonance	
		• Calculate I, Z, Φ and fr.	
Physics Practical	103	Apply and demonstrate the theoretical concepts of Physics	
(103)		and to develop scientific attitude.	
		Interpret the experimental data	

#### **Department of Mathematics**

### Programme Educational Objectives (PEOs): B.Sc. (Mathematics)

1.	Graduates will pursue higher studies in related fields including management
2.	To prepare necessary knowledge base for research and development in Mathematics
3.	To help student's build-up a successful career in Mathematics

#### **Programme Specific Outcomes (PSO): B.Sc. (Mathematics)**

1.	Enhance students' ability to develop mathematical models
2.	Develop research-oriented skills.
3.	Nurture problem solving skills, thinking, and creativity through assignments, project
	Work.
4.	Prepare for various competitive exams

### **Programme Outcomes (POs): B.Sc. (Mathematics)**

1.	Understand and solving of major concepts in all disciplines of mathematics.		
2.	Solve the problem and also think methodically, independently and draw a logical		
	conclusion.		
3.	To inculcate the scientific temperament in the students and outside the scientific		
	community.		
4.	Create an awareness of the impact of mathematics on society and development outside		
	the scientific community.		
5.	Gain experience investigating the real-world problems and learn to how to apply		
	Mathematical ideas and models to those problems.		
6.	Understand and able to use mathematical formulae in another subject.		

### **COURSE OUTCOMES (COs)**

Course Name: B. Sc.

Year/Semester: First/First Subject: Mathematics

After successful completion of three-year degree programme in **Mathematics** students

should be able to;

Paper	CO	Outcomes
FY	101.1	Understand the basic concept related to Matrices and
Paper-I	-	solve the problem based on a system of Linear
Algebra and		equations
Trigonometry	101.2	Understand the general properties of equations and
101		Solutions of Different equations
	101.3	Understand the basics of complex numbers and solve
		the problems
	101.4	understand Group theory and general properties
FY	102.1	Using Definition, verify the values of limit and
Paper-II		continuity and solve the problem on Differentiation
102	102.2	Understand the concept of Maclaurins and Taylor's
Calculus		theorem
		Indentify Indeterminate forms and application of

	L'Hospitals Rule
102.3	Understand the concept of partial differential
	equation, Eulers Theorem and Jacobians
102.4	Identify the various types and methods to solve
	Integration and application of Reduction Formulae

### **Department of Zoology**

	PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):
1.	Graduates will pursue higher studies in related fields including management
2.	Graduates will perform as employers in private/government institutions rising
	up to top positions
3.	Graduates will become entrepreneurs.

PROGRAMME OUTCOMES (PO)			
1.	The students are expected to understand the fundamentals, principles, and recent developments in the subject area.		
2.	It is expected to inspire and boost interest of the students towards zoology as the main subject.		
3.	To impart practical skills and learn basics behind experiments.		
4.	To prepare background for advanced and applied studies in zoology.		
5.	To inculcate the scientific temperament in the students and outside the scientific community.		
6.	To inculcate the scientific temperament in the students and outside the scientific community.		
7.	Use modern techniques, decent equipments and Zoology softwares.		

S	PROGRAMME SPECIFIC OUTCOME		
1.	Gain the knowledge of Zoology through theory and practicals.		
2.	Use modern biological tools, Models, Charts and Equipment's.		
3.	Know structure-activity relationship.		
4.	Understand good laboratory practices and safety.		
5.	Make aware and handle the sophisticated instruments/equipment.		
6.	Develop research-oriented skills.		
7.	Study and understand the different technique used in purification of		
	compounds		

COURSE OUTCOMES (COs)

Course Name: B. Sc.

**Year/Semester:** First/First

# **Subject: Zoology After the successful completion of the course students will be able to-**

Paper	CO	Outcomes
FY	101.1	To understand general characters and classification up to
Paper-I		classes of protozoa, structure and reproduction of
Life and		Paramoecium, structure and life cycle of Plasmodium,
Diversity of		parasitic Protozoans of Man (Entamoeba, Trypanosoma,
Animals –		Giardia and Leishmania). Mode of infection and its control.
Non-	101.2	To understand the general characters and classification up to
chordates		classes of porifera, Structure, reproduction and development,
(Protozoa to		Canal system in sponges, General characters and
Annelida)		classification up to classes of Coelenterata, structure and life
(101)		cycle of Obelia, Polymorphism in hydrozoa.
, ,	101.3	To Understand the Helminthes: General characters and
		classification up to classes, Ascaris: External morphology,
		reproductive system and life cycle, <i>Taenia solium</i> : Structure
	//	and life cycle, Elementary idea of parasitic adaptations in
. /		helminthes
1	101.4	To Understand the Annelida: General characters and
7//		classification up to classes, Leech : Morphology, digestive
//	12	and urinogenital system, Trochophore larva and its
. / /	DY	significance, Vermiculture and its importance
FY	102.1	To understand the Atmosphere: Major zones and its
Paper-II	0	importance, composition of air, Hydrosphere: Global
Environmental		distribution of water, Physico-chemical characteristics of
Biology	-	water, Lithosphere: Types of rocks, formation of soil,
(102)		Renewable and non- renewable energy sources
(102)	102.2	Understand the Ecosystem - Definition and types, Detailed
1 1	102.2	study of pond ecosystem, Food chain, food web and
$\sim 1.1$		ecological pyramids, Energy flow in an ecosystem, Single
441	71	channel, Y – shape and Universal model
, / /	102.3	To understand the Biodiversity and its conservation, Causes
1 1	10210	of reduction of biodiversity, Wildlife conservation acts (1972
~ \ \ \		and 1984), Introductory study of national parks and
7		sanctuaries – Tadoba, Kanha, Bharatpur and Nagzira, Hot
		spots of biodiversity in India
4	102.4	To understand the Sources, effect and control measures of air
	101	pollution, Acid rain, green house effect, ozone depletion and
		global warming, Sources, effect and control measures of
		water pollution, Sources effect and control measures of noise
		pollution, Toxic effect of heavy metals (lead, cadmium and
		mercury) – Bioaccumulation and biomagnification
F.Y.	103	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
Practical		1
Course		Improve analytical skills
2 2 2 2 2 2 2		• Correlate the theory and experiments and understand
		their importance

### **Department of Botany**

### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

1.	Graduates will pursue higher studies in related fields including
	management
2.	Graduates will perform as employee in private/government institutions
	rising up to top positions
3.	Graduates will become entrepreneurs.
4.	Graduates will prepare for various competitive examinations.

**PO1**.Understanding of Plant Diversity and its importance in the maintenance of ecological balance.

**PO2**. Students learn to carry out practical work, in the field and in the laboratory, interpreting plantmorphologyandanatomy, Plant identification, Vegetation analysis techniques.

PO3. Applytheknowledgeofbasic science, life sciences and fundamental process of plants.

**PO4**. Apply modern techniques and instruments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological studies of plants with anunderstanding theapplications in human life.

**PO5**. Apply theknowledge gained from the studies for the upliftment of society via addressing health, environmental issues, food scarcityetc.

#### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

**PSO1**. Critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize their position in the classification systems and atphylogenetic level.

**PSO2**. Students willbe able to access the primary literature, identify relevant works for aparticular topic, and evaluate the scientific content of these works

**PSO3**. Students will be able to compare and contrast the characteristics of the different groups ofplantssuchas algae, fungi, bryophytes, pteridophytes, gymnospermsand angiosperms.

**PSO4**. Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth.

**PSO5**.Students will be able to explain how Plants functionat gene, genome, cellular and tissue level,

**PSO6**. Students will be will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.

**PSO7.** Students will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find alivelihood via establishing miniature plant nurseries

Course Name: B. Sc. Year/Semester: First/First

**Subject: Botany** 

Paper	CO	Outcomes
FY	101.1	<ul> <li>To understand the nature of viruses,</li> </ul>
Paper-I		Ultra-structure and economic
Viruses,		importance.
Prokaryotes,Alg		<ul> <li>Understand the properties of</li> </ul>
ae		Mycoplasma and its reproduction.
And		Understand general characteristics and

Biofertilizers		reproduction in bacteria.
(101)	101.2	To understand general characteristics and classification of algae
		To understand the to understand general structure of Cyanobacteria and its reproduction.
	101.3	Understand life cycle of Chara,     Vaucheria ,Ectocarpus, and     Batrachospermum.
	101.4	<ul> <li>To understand Scope and importance of Biofertilizers.</li> <li>Understand the microbes used in biofertilizers.</li> </ul>
FY Paper-II Fungi, Plant Pathology,Liche	102.1	<ul> <li>Understand the Characteristics of fungi.</li> <li>Understand the reproduction and life cycle of <i>Albugo</i>, <i>Mucor</i>, <i>Puccinia and Cercospora</i>.</li> </ul>
ns, Bryophyta and Mushroom Cultivation (102)	102,2	Pathogen study, control and causes of diseases: leaf curl of papaya, Citrus canker and red rot of sugarcane
* (F)	102.3	<ul> <li>Understand classification and general characteristics of Bryophyta.</li> <li>Life history of <i>Marchantia</i>, <i>Anthoceros and Funaria</i></li> <li>To Study the nutritional and medicinal values of edible and non-edible</li> </ul>
*// 7	नमसो ग	mushrooms. Technology of mushroom cultivation
F.Y. Chemistry Practical Course	103	<ul> <li>Study the fungal genera.</li> <li>Study the lichens, thallus structure and types of lichens.</li> <li>Plant pathological study.</li> <li>Study of bryophytes and identification of its characteristics.</li> <li>Preparation of mushroom beds.</li> </ul>

# Semester II Department of English Course Objectives and Outcomes Compulsory English

**Unit I: Objective-**Making students conscious about the functioning of Democracy.

**Outcome-**Students tried to understand the importance of democracy.

Unit II: Objective- Making students understand slavery and its effects.

Outcome-Students tried to understand the effects of slavery and its punishing practice.

**Unit III: Objective-**To make students understand correct usage of Tense, Transformation of sentences and Common errors.

**Outcome-**Students tried to solve the examples of Tense, Transformation of sentences and Common errors.

**Unit IV: Objective-**To create the ability to write Curriculum Vitae.

Outcome-Students attempted to write the Curriculum Vitae.

#### Department of Marathi Course Objectives and Outcomes

#### **Programme Objectives**

उदिष्टे:- 1. मराठी भाषेविषयी विदयार्थ्यांमध्ये अभिरुची निर्माण करणे.

- 2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
- 3. विदयार्थ्यांमध्ये असलेंल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृध्दिंगत करणे.
- 4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
- 5. साहित्यातून समाजातील प्र"नांना वाचा फोडून त्यांचे निराकरण करणे.

#### **Course Outcomes**

साहित्य सेतू

ध्येयः— 1. भावी काळात विदयार्थ्यांमधून साहित्यनिर्मिती करणे.

- 2. अध्यापन व अध्ययनात विदयार्थ्यांना सहभागी करुन संवाद"ील वातावरण निर्मिती करणे.
- विभागात विविध उपक्रमांचे आयोजन करुन मराठी भाषेचा दर्जा वाढविणे.
- विदयार्थ्यांमध्ये सं"गोधनवृत्ती वृध्दिंगत करणे.
- 5. मराठी भाषेची प्रयोग"गाळा निर्माण करणे

## **Department of Chemistry Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/ Second

**Subject: Chemistry** 

Paper	CO	Outcomes
FY	201.1	To make students understand different organic
Paper -I		compounds and the concept structure and bonding in
Organic		organic compounds.
Chemistry		<ul> <li>Understand the mechanism of organic reaction.</li> </ul>
(201)		onderstand the meenting of organic reaction.

	201.2	<ul> <li>Understand the concept of stereochemistry of organic compounds.</li> <li>To make the structure of Geometrical isomerism and conformational isomerism.</li> <li>Many of the daily used materials are organic compounds and majority of them are hydrocarbons therefore this topic makes the concept regarding their information</li> </ul>
	201.4	<ul> <li>Basic of the alkane and alkynes with respect to their chemical point of view.</li> <li>To understand the aromaticity of organic compounds.</li> </ul>
F.Y. Pape-II Physical Chemistry (202)	202.1	<ul> <li>To understand the thermodynamics of chemical reactions.</li> <li>Understand free energy functions like work function, Gibb's free energy etc.</li> </ul>
*//	202.2	<ul> <li>To understand the concept of phase equilibria.         Statement of phase rule and term. Application of phase rule     </li> <li>Understand the concept of nuclear chemistry and</li> </ul>
*	202.4	To Understand the concept of chemical kinetics and theories of chemical kinetics.
F.Y. Chemistry Practical course	203	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

### Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Physics** 

Title the successful completion of the course students will be use to				
Paper	CO	Outcomes		
Paper 1:	201.1	• To understand the concept of linear and angular		
Oscillations,		S.H.M., Damped harmonic oscillator		
Kinetic theory of	201.2	• To understand the concept of Forced oscillation with one degree of freedom and kinetic theory of gasses.		
gases and				
Thermodynamics	201.3	• To understand the Transport phenomenon in gas		
(201)		Zeroth and First law of thermodynamics and Cornot's		

		Theorem		
	201.4	To understand second and third law of thermodynamics and Maxwell's general relationship and its applications		
Paper 2: Gravitation,	202.1	To understand Newton's laws of gravitation and the concept of Gravitational self-energy of the galaxy		
Astrophysics, Magnetism and  Output  Magnetism and				
Magnetostatics (202)	202.3	• To understand the concepts of Dimagnetism, Paramagnetism and Ferromagnetism and their applications		
	202.4	• To understand the Concept of magnetic field and to study various laws of magneto static and their applications.		
Physics Practical (203)	203	<ul> <li>Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.</li> </ul>		

### **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/ Second Subject: Mathematics

After successful completion of three-year degree programme in **Mathematics** students

should be able to;

Paper /	CO	Outcomes		
FY	201.1	Understand the concept of Solid Geometry		
Paper-I	202.2	Identify and solve the problems on Differential equations		
201		of first order		
Geometry,	203.3	Understand the Higher order linear differential equations		
Differential and		with constant coefficient		
Difference	204.4	Understand the basic concept of Difference equation		
Equations				
FY	202.1	Students learn the concept of Vector differentiation and		
Paper-II		Line Integral		
202	202.2	Learn the evaluation of area by double Integral		
<b>202.3</b> Apply integration to evaluate over surface and vol		Apply integration to evaluate over surface and volume		
		Evaluate Improper Integrals also study the gamma and		
		Beta functions		

# **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Zoology** 

Paper	CO	Outcomes
FY 201.1		To understand the, Arthropoda: General characters and
Paper -I		classification up to classes, Cockroach: Mouth parts,
Life and Diversity		digestive system and reproductive system, Insects as
of Animals –		Vectors: Mosquito, Housefly, Sandfly, Tse-Tse fly,
Nonchordates		Study of crustacean larvae: Nauplius, Zoea and
(Arthropoda to		Megalopa; Social behavior in honey bees

Hemichordata)	201.2	To understand the Mollusca: General characters and
(201)		classification up to classes, <i>Pila</i> : Morphology,
		digestive, respiratory and reproductive system, Pearl
		formation in Mollusca, Molluscan larvae : Glochidium
		and Veliger
201.3		To understand the Echinodermata : General characters
		and classification up to classes, Asterias: External
		features and digestive system, Water vascular system
		and locomotion in Starfish, Echinoderm larvae:
		Bipinnaria and Auricularia
	201.4	To understand Hemichordata: General characters and
		phylogeny, Balanoglossus: External features and
	N 0	digestive system, Reproduction in Balanoglossus,
	M	Tornaria larva, Affinities of Balanoglossus
F.Y.	202.1	To understand the Ultrastructure of prokaryotic and
Paper-II	//	eukaryotic cell, Plasma membrane: Structure- Fluid
Cell Biology		Mosaic Model and functions, Endoplasmic reticulum:
(202)		Types, ultrastructure and functions, Golgi complex:
4//	202.2	Ultrastructure and functions
4//	202.2	To understand Ultrastructure of mitochondria,
	12	Oxidative phosphorylation – Glycolysis and Kreb's
1 / / /	07	cycle, Electron Transport Chain and terminal oxidation,
*// (	202.3	Lysosome: Structure, polymorphism and functions  To understand the Nucleus: Ultrastructure of nuclear
	202.3	membrane, Structure and functions of nucleolus,
	ll ll	Chromosome: Structure and types, structure of
V (C)		nucleosome, Giant chromosomes: Lamp-brush and
7 4	-	polytene chromosome
	202.4	To understand the Ribosome: Structure, types, Lake's
1 1		model and functions, Somatic cell division: Cell cycle
×\\ -		and Mitosis, Meiosis (different phases and
711	146	significance), synaptonemal complex, Cellular ageing
		and cell death, Elementary idea of cancer and its
		causative agents
F.Y.	203	Verify theoretical principles experimentally
Zoology		Interpret the experimental data
Practical course		Improve analytical skills
	/ /	<ul> <li>Correlate the theory and experiments and</li> </ul>
		understand their importance
	-	Deposition of Potony

### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: First/Second

**Subject: Botany** 

Paper	CO	Outcomes
FY	201.1	<ul> <li>To make students understand fossils,</li> </ul>
Paper -I		Pseudofossils, and its importance.
Paleobotany, Pteridophytes,		<ul> <li>Knowledge about types of fossils.</li> </ul>
Gymnosperms and Soil		<ul> <li>Details of Geological time scale.</li> </ul>
Analysis (201)		<ul> <li>Differentiation among the types of fossil.</li> </ul>

		<ul> <li>Study the general characteristics of</li> </ul>
	201.2	Pteridophytes and its classification.
		• Life history of <i>Selaginaella</i> . And
		Equisetum.
	201.3	Classify the Gymnosperms, its
		characteristics and economic importance.
		Understand the fossil gymnosperm.
		Study the life cycle of <i>Cycas</i> and <i>Pinus</i>
	201.4	Skill development and soil analysis.
		<ul> <li>Identification of types of soil on the basis</li> </ul>
		of its color and texure.
h 2	X	<ul> <li>Study the physical properties of soil.</li> </ul>
	-	Understand the pH of soil and nitrogen
		availability in it.
F.Y.	202.1	Study the morphological characteristics of
Pape-II	-	plants.
Morphology of	211	Identification of morphological characters
Angiosperms and		of plants.
Floriculture	dis.	Study the modification occure in root,
(202)	3	stem and leaf.
11/20	202.2	Study the reproductive morphology.
X// K		Study the types of inflorescence.
112	73/	Study the calyx, corolla and Androecium.
11/2	202.3	Understand the structure of gynoecium.
K   4	( Since	Study the fruit and its types.
	202.4	Develop the skills of floriculture and
		cultivation
W	1	Method of cultivation.
F.Y.	203	Study of different root and stem
Botany		modification and branching patterns.
Practical course	_	• Study the types of leaf and its phyllotaxy,
W-		venation and modification.
	(P	<ul> <li>Understand the flower structure and</li> </ul>
	9/.	position of calyx, corolla, androecim and
		gynoecium.

# Semester-III Department of Chemistry COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Chemistry** 

	,,,,,		
Paper	CO	Outcomes	
S.Y	301.1	• Understand the concept of molecular orbital	
Paper-I Inorganic		theory and VSEPR theory.	
8	301.2	• Understand the properties of d and f block	

Chemistry		elements.
(301)	301.3	<ul> <li>Understand the role of nonaqueous solvents.</li> <li>Understand concept of errors and evaluation in chemical analysis.</li> </ul>
	301.4	Understand the concept of chemistry of Lanthanides and Actinides series.
S.Y. Paper-II Organic	302.1	Understand the structure and chemical bonding in aryl, alkyl halides, and aldehydes.
Chemistry (302)	302.2	Understand the structure and chemical bonding in alcohols and phenols.
*	302.3	Understand the nomenclature, structure of the carbonyl group, synthesis of aldehydes and ketones
*//	302.4	Understand chemical reaction of carboxylic acids and its derivatives.
S.Y. Chemistry Practical Course	303	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

### Department of Physics COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Sound Waves, Applied Acoustic,	301.1	• Understand the concept of group and phase velocities, formation of standing waves and diagrammatic introduction of human ear and its responses.
Ultrasonic and Power Supply (301)	301.2	<ul> <li>Understand the working of transducers and their characteristics and the concept of acoustic and its applications.</li> </ul>
	301.3	• Understand the production and applications of ultrasonic waves.
	301.4	• Understand the concept of voltage regulation and working of the half, full and bridge rectifier.
Paper 2: Physical Optics and	302.1	• Understand the concept of interference of light through thin film
Electromagnetic		Apply the concept of interference of light through thin

Waves		film in wavelength determination.
(302)	302.2	• Understand the concept of diffraction, Resolving Power of grating and Rayleigh's criterion for resolution.
	302.3	• Understand the concept of polarization and double refraction
	302.4	<ul> <li>Understand the origin and characteristics of EM waves, Physical significance of Maxwell's equations, Characteristics impedance of dielectric and Poynting theorem.</li> </ul>
Physics Practical (303)	303	• Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.

# **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

**Year/Semester: Second/Third** 

**Subject: Mathematics** 

After successful completion of three-year degree programme in Mathematics, students should be able to:

should be able to,		
Paper	CO	Outcomes
SY	301.1	Students understand Mean Value theorem
Paper-I	301.2	Learn about an envelope of a family of curves in the
301	7	plane and study the Langranges Multiplier method
Advanced	301.3	Understand the concept of sequence
Calculus,	301.4	Use Tests for convergence
Sequences &	-	74 )
Series		(0.50)
SY	302.1	Understand the concept of Special Functions(Bessels and
Paper-II		Legendre's function)
302	302.2	Students understand the concept of Laplace Transform
Differential	1414	and solve the problems
<b>Equation and</b>	302.3	Applications of Laplace Transform & Fourier Transform
Group	302.4	Students develop knowledge in group theory
Homomorphism		7 //*

# **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Zoology** 

Paper	CO	Outcomes
S.Y	301.1	Understand the Protochordata : General characters and classification
Paper-I		up to order, <i>Herdmania</i> : Structure, digestive system, ascidian
Life and		tadpole and retrogressive metamorphosis, <i>Amphioxus</i> : Structure,
Diversity of		digestive system, circulatory system, sense organs and
Animals -		protonephridia, Agnatha: General characters of Cyclostomata
Chordates		(Petromyzon and Myxine)
(Protochordata	301.2	Understand the Pisces: Salient features of Chondrichthyes and
to Amphibia)		Osteichthyes, Origin of paired fins in fishes, Migration and
(301)		Accessory respiratory organs in fishes, Amphibia : General

		characters and classification up to order, Parental care and Neotony
		in Amphibia
	301.3	Understand the Gametogenesis and type of eggs, Fertilization of
		egg, Post fertilization development of fish, Types of scales of fishes,
		Development of placoid scales
	301.4	Understand the Frog Embryology - Cleavage, blastulation and
		gastrulation, Fate map, Morphogenetic movements in gastrula of
		frog, Development of respiratory organs in frog, Development of
		Aortic arches of frog
S.Y.	302.1	Understand the Mendelian Principles- Dominant recessive
Paper-II		relationships, Mendelian laws, Interaction of genes- Epistasis -
Organic		dominant and recessive, codominance, incomplete dominance,
Zoology		Quantitative genetics – Polygenic traits, inbreeding and
(302)		outbreeding, hybrid vigor, Extracellular genome – Presence and
	V	functions of mitochondrial DNA, plasmids
<b>M</b>	302.2	Understand the concept of Cytoplasmic inheritance- Kappa particles
4	//	in Paramecium, CO2 sensitivity in Drosophila, milk factor in mice,
'/		Linkage and crossing over – Basic concepts of linkage, types and
	/	theories, Concepts of genes – Cistron, muton and recon, Genetic
77//		disorders in human beings – Haemoglobin disorders – Thalassemia
	./>	and Sickle cell anemia. Metabolic disorder: Phenylketonurea
. / /	302.3	Understand the concept of Sex determination – ZZ, XY, XO, ZW
1	20	pattern, Sex determination in <i>Drosiphila</i> – Genic balance theory,
<b>X</b> ///		Environmental sex determination in <i>Bonellia</i> , Chromosomal
111	0	aberrations: addition, deletion, duplication and inversion, Gene
		mutations- Spontaneous and induced mutations, mutagenic agents,
A ( 6		Disorders related to chromosomal number- Turner syndrome,
		Klinefelter syndrome and Down syndrome
	302.4	Understand the Lethal genes – Concepts and consequences,
\ \		Population genetics: Basic concepts in population genetics, Hardy
XII.		Weinberg equilibrium and its significance, Genetic counseling –
	UH.	Introduction, purpose, hereditary diseases and disorders, Applied
		genetics - DNA fingerprinting, amniocentesis, sperm banks,
		karyotyping
S.Y.	303	<ul> <li>Verify theoretical principles experimentally</li> </ul>
Zoology		Interpret the experimental data
Practical		Improve analytical skills
Course		Correlate the theory and experiments and understand their
		importance
	1	ппропансе
-		

**Department of Botany Course Outcomes (COs)** 

Course Name: B. Sc.

Year/Semester: Second/Third

**Subject: Botany** 

Paper	CO	Outcomes
S.Y	301.1	• Understand the study of angiosperms, Fossil

Paper-I		angiosperms, Angiosperms taxonomy.
raper-1		
		• Understand the nomenclature.
D . 4		<ul> <li>Study the trends in taxonomy.</li> </ul>
Botany		
(301)	301.2	<ul> <li>Understand the classification system of Benthem and Hooker, Engler and Prantle.</li> </ul>
	301.3	<ul> <li>Study the types of pollinaton and its significance</li> <li>Study the structure of anther, pollen grain and male gametophyte development.</li> <li>Study the types of ovules and female gametophyte.</li> </ul>
		Understand the fertilization process.
	301.4	<ul> <li>Study the skills of landscaping and gardening.</li> </ul>
S.Y.	302.1	<ul> <li>Understand anatomical features of plants and its</li> </ul>
Paper-II		organs.
Angiosperm		<ul> <li>Study the tissue its types and functions.</li> </ul>
anatomy and Horticulture	302.2	<ul> <li>Study the primary and secondary growth I stem and root.</li> </ul>
(302)	302.3	<ul> <li>Study the periderm growth rings, sap heartwood, leaf anatomy.</li> <li>Study the Senescence and Abscission.</li> </ul>
+//	302.4	<ul> <li>Study the techniques of horticulture, methods of propagation.</li> </ul>
		Learn the technique of bonsai preparation.
S.Y.	303	<ul> <li>Study the simplest and complex tissue from</li> </ul>
Botany	5	permanent micro-preparation.
Practical (		<ul> <li>Identification of types of vascular bundle.</li> </ul>
Course		<ul> <li>Anatomy of Dicot and Monocot stem with temporary or double stained.</li> </ul>
X		• Study the internal structure of dicot and monocot leaf.

# SEMESTER IV Department of Chemistry Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Chemistry** 

Paper	CO	Outcomes
S.Y. Paper-I Inorganic Chemistry (401)	401.1	Understand the properties of coordination compounds. Chelates: classification and their application and valance bond theory of complexes.
	401.2	Understand the concept of isomerism in coordination compounds. Concept of oxidation and reduction and balancing of redox reaction.
	401.3	<ul> <li>Understand the concept of colorimetry and spectrophotometry.</li> <li>Understand the concept of separation technique like chromatography ion exchange and solvent</li> </ul>

		extraction.
	401.4	Understand the concept of inorganic polymers.
S.Y. Paper-II Physical Chemistry (402)	402.1	<ul> <li>Understand solid state and their classification and their laws.</li> <li>To understand the concept of determination of crystal structure.</li> </ul>
(402)	402.2	<ul> <li>Understand electrochemistry of reversible and irreversible cells.</li> <li>Understand the concept of electrical transport and transport number.</li> </ul>
	402.3	<ul><li> Use spectroscopy for chemical analysis.</li><li> Understand types of spectroscopy.</li></ul>
*	402.4	Understand the concept of quantum chemistry and wave function.
S.Y. Chemistry practical Course	403	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

### Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Second/Fourth

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1:	401.1	• Understand the basic concept of crystallography, find
Solid State		various lattice parameters, find Miller Indices of the
Physics, X-ray		given plane and draw planes from the set of Miller
and Laser		Indices.
(401)	401.2	• Understand main feature of continuous X-ray spectra
		and Characteristics X-ray spectra,
	1	• Apply Moseley's law to determine wavelength of X-
		ray.
	401.3	<ul> <li>Understand the basic concept of solid state physics.</li> </ul>
		• Apply Bragg's law for wavelength determination and
		simple cubic structure determination.
		• Calculate Miller indices of the given plane and identify
		the orientation of the plane from the given set of
		Millar indices.
	401.4	Understand the concepts of LASER emission.
		• Understand the construction and working of various
		types of LASER.
Paper 2:	402.1	Understand the construction and working and
Solid State		characteristics of various solid state devices.
Electronics, and	402.2	• Understand the construction and working and

Molecular		characteristics of various FETs.
Physics	402.3	<ul> <li>Understand the concept molecular physics.</li> </ul>
(402)	402.4	<ul> <li>Understand and apply the Raman spectroscopy.</li> </ul>
Physics	403	• Apply and demonstrate the theoretical concepts of
Practical		Physics and to develop scientific attitude.
(403)		•

# **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

**Year/Semester: Second/Fourth** 

**Subject: Mathematics** 

After successful completion of three-year degree programme in Mathematics, students

should be able to:

should be able to,		
Paper	CO	Outcomes
SY	401.1	Understand the concept of ordinary Differential Equations
Paper-I		in more than two variables
401	401.2	Use the methods to solve the linear and nonlinear partial
Partial //	4	differential equations of first order
Differential	401.3	Understand the concept of Higher Partial Differential
<b>Equations &amp;</b>	0	Equations
Calculus of	401.4	Find the distance between the curves and understand the
Variation	5	concept of Eulers differential equation
CXX	402.4	
SY	402.1	Students learn about Coplanar Forces, Virtual Work and
Paper-II		Catenary
402	402.2	Understand the velocity, Acceleration and simple
Mechanics		harmonic Motion
	402.3	Understand the concept of Lagranges Equations of motion
-K//	402.4	Learn the problem of two bodies moving under the
y \ \	(144	influence of a mutual central force

# **Department of Zoology Course Outcomes (COs)**

Course Name: B. Sc.

**Year/Semester: Second/Fourth** 

**Subject: Zoology** 

Paper	CO	Outcomes
	X	
S.Y.	401.1	Understand the Reptilia- Classification based on temporal
Paper-I		vacuities, Poison apparatus, biting mechanism, snake
Life and Diversity		venom and its importance, Aves – Comparison of Ratitae
of Animals –		and Caranitae, Flight adaptations and migration, Mammals
Chordates		- General characters of Prototheria, Metatheria and Eutheria
(Reptilia, Aves and	401.2	Understand the Modern theories of evolution : Darwinism
Mammals)		and Neo-Darwinism, Adaptations – Cursorial, Aquatic,
(401)		Terrestrial, Fossorial and Volant, Introduction to genetic
		basis of evolution – Species Deme, Variation, Races in Man
		(Caucasoid, Negroid, Mongoloid and Australoid)
	401.3	Understand the Comparative account of aortic arches and
		heart in Reptiles, Birds and Mammals, Structure of hen's

		egg, Development of chick up to premitive streak stage,
		Development of extra embryonic membranes in chick and
	401.4	functions  Lindaystand the Error Errobandle on Classical blockulation
	401.4	Understand the Frog Embryology - Cleavage, blastulation
		and gastrulation, Fate map, Morphogenetic movements in
		gastrula of frog, Development of respiratory organs in frog, Development of Aortic arches of frog
S.Y.	402.1	Understand the DNA: Structure of DNA, forms of DNA,
Paper-II	702.1	properties of DNA, DNA as a genetic material, RNA:
Molecular Biology		Structure of RNA, types of RNA, RNA as a genetic
and		material, Prokaryotic and eukaryotic gene structure,
Immunology(402)		Recombination in Bacteria: Bacterial transformation –
		Griffith's experiment, Conjugation in bacteria, transduction
	402.2	Understand the concept DNA replication: Semiconservative
	Y	model, Meselson Stahl experiments. Process of replication –
<u> </u>		origin of replication, concept of replication, directionality of
4/		replication, Genetic code: Characteristics of genetic code,
'/		Wobble hypothesis, Protein synthesis: Transcription
4//		mechanism – Initiation, elongation and termination of
<b>X</b> //	1 2	transcription. Translation – activation of amino acids,
1//	2	transfer of activated amino acids to tRNA, Initiation,
. // 2		elongation and termination of polypeptide chain; inhibitors
*// /		of protein synthesis, Gene regulation models- Lac operon
	402.3	and tryptophan operon
	402.3	Understand the Concepts of immunity – Innate and acquired immunity, organs of the immune system, Antigen -
L 100		Structure, diversity, functions and types of antigen,
* -		Antibody- Structure, types and functions, Antigen-antibody
1		interaction – Precipitation and agglutination
	402.4	Understand the Types of immune response: B cell response
$\times 11$ –		(antibody mediated), T cell response (cell mediated),
<b>T</b> \\ d	46	Complement system: Basic concepts of complement
		cascades, classical, alternative and MBL pathways,
		implications of complement system in immune defense,
<i>X</i> -\\		Cytokines- General account on cytokines, Cytokine related
		diseases, Autoimmunity and immunodeficiencies-
		Autoimmune diseases and their treatment, AIDS and other
0.37	402	immunodeficiencies
S.Y.	403	Verify theoretical principles experimentally
Zoology practical Course	*	Interpret the experimental data
Course		Improve analytical skills
		Correlate the theory and experiments and understand
		their importance

# **Department of Botany Course Outcomes (COs)**

Course Name: B. Sc.

**Year/Semester: Second/Fourth** 

**Subject: Botany** 

Paper	CO	Outcomes
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C 17	401.1	TT 1 . 1.1 1 1 0
S.Y.	401.1	• Understand the brief account of cell theory.
Paper-I		Comparison between eukaryotic and prokaryotic
Cell biology, Plant		cell.
Breeding,		<ul> <li>Structure and function of cell wall, Endoplasmic</li> </ul>
<b>Evolution</b> , and		reticulum, Golgi complex, plasma membrane,
Technology (401)		Ribosome and Vacuole.
	401.2	<ul> <li>Understand the structure and functions of</li> </ul>
		chloroplast, Mitochondria and Nucleus.
		<ul> <li>Understand the chromosome morphology,</li> </ul>
		Molecular organization of chromosomes.
		<ul> <li>Understand the sex chromosomes and cell</li> </ul>
		division process.
	401.3	Understand plant breeding, methods of plant
	M	breeding.
	V	<ul> <li>Understand the biostatistics and determine the</li> </ul>
		Mean, Mode, Median.
4/		<ul> <li>Understand the evolution process.</li> </ul>
'/	401.4	ZIII ZII GT
4//	401.4	<ul> <li>Understand the seed development technology which is used to increase a commercial value of</li> </ul>
7//	. 3	seeds.
S.Y.	402.1	
// // /	402.1	Understand the principle of Mendelism.
Paper-II	402.2	Understand the linkage and crossing over process.
(402)	402.2	Understand the Mutation, chromosomal
(402)		aberrations and variation in chromosome number.
II J		<ul> <li>Understand the DNA damage and repair process.</li> </ul>
	402.3	<ul> <li>Study the concept of DNA and RNA.</li> </ul>
		<ul> <li>Understand the concept of gene, genetic code.</li> </ul>
		<ul> <li>Understand the process of protein synthesis and</li> </ul>
		regulation of gene interaction.
X\\ =	402.4	Study the skill development.
	144	Develop the skills related with plant nursery.
	20 10 10	<ul> <li>Understand the nursery management techniques.</li> </ul>
S.Y.	403	Study the Mendel's law of segregation with help
Botany		of color beads.
practical Course		<ul> <li>Prove the Mendel's law of independent</li> </ul>
		assortment.
		<ul> <li>Study the different method of vegetative</li> </ul>
		propagation.
	1	<ul> <li>Study the method of soil sterilization for plant</li> </ul>
	X	
	10-1	nursery.

# SEMESTER V Department of Chemistry Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Chemistry** 

Paper	CO	Outcome
T.Y.	501.1	<ul> <li>Understand the concept of organic compounds</li> </ul>

Paper-I		of nitrogen and amines.
Organic Chemistry (501)	501.2	Understand heterocyclic compounds and their structure.
	501.3	<ul> <li>Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.</li> <li>Understand reaction and structure of organometallic compounds.</li> </ul>
	501.4	<ul> <li>To study Spectroscopy.</li> <li>To understand Electromagnetic and Infrared absorption spectroscopy</li> </ul>
T.Y. Paper-II Physical Chemistry	502.1	<ul> <li>Understand electrochemistry and various types of cells.</li> <li>Understand types of reversible electrodes.</li> </ul>
(502)	502.2	Understand quantum chemistry and molecular orbital theory.
*//	502.3	<ul> <li>Understand the concept of Photochemistry.</li> <li>To study Raman Spectroscopy</li> </ul>
*// 6	502.4	To understand colligative properties and macromolecules.
T.Y. Chemistry Practical Course	503	<ul> <li>Verify theoretical principles experimentally</li> <li>Interpret the experimental data</li> <li>Improve analytical skills</li> <li>Correlate the theory and experiments and understand their importance</li> </ul>

## Department of Physics Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Physics** 

Paper	CO	Outcomes
Paper 1: Atomic	501.1	• Understand Vector atom Model, the concept of space
Physics, Free		quantization, Zeeman Effect and L-S and J-J
Electron Theory		coupling.
and Statistical	501.2	• Apply free electron theory and band theory of solid
Physics		to classify solids as conductor, semiconductor and
(501)		insulator.
	501.3	<ul> <li>Understand and apply Maxwell-Boltzmann statistics</li> </ul>
	501.4	• Understand and apply Bose-Einstein statistics and
		Fermi-Dirac statistics.
Paper 2: Quantum	502.1	• Understand the basics of quantum mechanics and
Mechanics,		apply it to explain the phenomena like black body
Nanomaterials and		radiation and Compton Effect.
Nanotechnology	502.2	• Understand and apply Schrodinger's equation to free
(502)		particle in a one and three dimension.

	502.3	Understand the basics of nanotechnology.
	502.4	Understand the synthesis and characterization  techniques of none materials.
		techniques of nano materials.
Physics Practical (503)	503	• Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.

### **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Fifth Subject: Mathematics

After successful completion of three year degree program in Mathematics a Student should be able to;

Paper	CO	Outcomes
TY	501.1	Understand the concept of Fourier series
Paper-I	501.2	Understand the concept of Riemann-Stieltjes integral
501	501.3	Understand the concept of Analytics Functions
Analysis	501.4	Students learn about Mobius Transformation
TY	502.1	Students deal with the definition, properties and
Paper-II	2	examples of countable and uncountable sets and
502	2	understand the metric space
Metric spaces,	502.2	Understand the concept of Completeness, Compactness
Complex		and Connectedness
integration &	502.3	Understand the concept of Ring
Algebra		Analyze and demonstrate examples of ideals and
K   4-		quotient rings
	502.4	Understand the basic concept of Complex Integration
		Evaluate integrals along a path - directly from the
~11		definition and also via the Fundamental Theorem of
411 6	L	Contour Integration and Cauchy's Theorem

### Department of Zoology Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Zoology** 

Paper	CO	Outcomes
T.Y.	501.1	Understand the Enzymes – Distribution and chemical nature of
Paper-I		enzymes, General properties of enzymes, Classification of enzymes,
General		Factors affecting enzyme activity
Mammalian	501.2	Understand the Structure and functions of digestive glands - (Salivary,
Physiology –		Gastric, Intestinal, Liver and Pancreas), Gastrointestinal hormones,
I		Digestion and absorption of proteins, carbohydrates and lipids,
(501)		Vitamins- Fat soluble and water soluble vitamins; Sources, deficiency
		and diseases
	501.3	Understand the Respiratory pigments - Types, distribution and
		properties, Mechanism of Respiration, Transport of O2 and CO2,
		Respiratory disorders and effects of smoking
	501.4	Understand the Composition and functions of blood, Blood clotting –
		Intrinsic and extrinsic factors, blood groups and <i>Rh</i> factor, Cardiac
		cycle, E.C.G. and Blood pressure

T.Y.	502.1	Understand Site selection and construction, Pre stocking and post
Paper-II		stocking manangement of nursery, rearing and stocking ponds, Breeding
Physical		of fishes by bund and Chinese hatcheries. Induced breeding by
Zoology		hypophysetion. New generation drugs in induced breeding, Brief study
(502)		of freshwater aquaculture system – Polyculture, cage culture, sewage fed
(302)		
		fish culture, integrated fish farming, Fish products and byproducts, Fish
		preservation
	502.2	Understand the Prawn culture and Pearl culture, Fabrication and setting
		up of aquarium and its maintenance, Breeding of aquarium fishes – Live
		bearers and egg layers, Diseases caused by fungi, bacteria, protozoa and
		helminthes
	502.3	Understand the concept Chemical control: Insecticides - Pyrethroids,
		carbomate and HCN – mode of action, merits and demerits, Biological
		control – Biological agents – predators and parasites; merits and
		demerits, Crop pest: Life cycle, damage and control of Cotton spotted
	M	boll worm -Earias vitella ,Stored grain pest- Rice Weevil, Sitophilus
	T	oryzae, Animal pest: Life cycle, damage and control of – House fly –
	-	Musca nebulo, Stable fly – Stomoxys calcitrans
	502.4	Understand the Sericulture- Types of Silkworm. Life cycle and rearing
		of mulberry silkworm, <i>Bombyx mori</i> , Life cycle and rearing of non
	1//	mulberry silkworm (Tasar), Antheraea mylitta; Brief idea of coccon
	/ /	processing for silk fabric - coccon boiling, reeling, rereeling, winding,
	/ /	doubling, twisting and weaving, Apiculture – Types of honey bees. Life
**	/	cycle, culture, movable frame hive, bee product and its economic
/ \ /	/	importance, Lac culture – Lac insect, <i>Laccifer lacca</i> - Life cycle, Lac
		processing, Lac products and Economic Importance
T.Y.	503	
Zoology	303	Verify theoretical principles experimentally
Practical		Interpret the experimental data
	1	Improve analytical skills
Course	\ \	Correlate the theory and experiments and understand their
* \		importance
₩		वन्ताना ज्यावागनय //
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### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Fifth

**Subject: Botany** 

Paper	CO	Outcomes
T.Y.	501.1	<ul> <li>Understand water relation and its significance.</li> </ul>
Paper-I		<ul> <li>Understand the Osmosis, Diffusion, Osmotic Pressure.</li> </ul>
Plant		<ul> <li>Understand the ascent of sap.</li> </ul>
physiology,		Understand the transpiration, phloem transport and
Mineral		mineral uptake.
Nutrition	501.2	• Understand the photosynthesis process, photosynthetic
and		pigments.
Hydrophoni		Understand the light and dark reaction of
cs (501)		photosynthesis.
		<ul> <li>Understand the respiration and its mechanism.</li> </ul>
		Understand the fermentation process.
	501.3	Understand the nitrogen fixation by symbiotic and

	1	N 6 1::
		Non-Symbiotic mechanism.
		<ul> <li>Study the pant movements and photoperiodism.</li> </ul>
		<ul> <li>Study the circadian rhythms and Biological Clock.</li> </ul>
	501.4	<ul> <li>Understand the mineral nutrition, source and types.</li> </ul>
		<ul> <li>Study the role and deficiency symptoms</li> </ul>
		Macronutrients and Micronutrients.
		<ul> <li>Study the hydroponics, advantages and disadvantages</li> </ul>
		of hydroponics.
T.Y.	502.1	Understand the concept of Ecology.
Paper-II		• Study the climatic, Edaphic and Physiographic factors.
Plant	502.2	Study the ecosystem, components of Ecosystem.
Ecology and		Understand the food chain, food web and ecological
Organic	-	pyramids.
Farming	4	Study the Autecology and Synecology.
(502)	502.3	Understand the process of succession.
	-/	Study the plant adaptations.
	//	Study the Biogeochemical cycles.
/	502.4	<ul> <li>Develop the skills of organic farming.</li> </ul>
7-/		<ul> <li>Understand the methods of recycling of biodegradable</li> </ul>
		kitchen, agriculture and industrial waste.
. / /	\ \cdot\ \	Study to prepare organic manure.
T.Y.	503	Determining the Frequency, Density, and Abundance
Botany	1	of community by Quadrate Method.
Practical	10	Determining the homogeneity of vegetation by
Course	T	Raunkier's frequency.
		Study the frequency of herbaceous species in
		grassland to compare the frequency distribution with
		Raunkier's standard frequency diagram.
		<ul> <li>Study the soil profile of different locations near by</li> </ul>
* II		area.
V / /	(14	Study the salinity of different water samples.

### SEMESTER VI

**Department of Chemistry Course Outcomes (COs)** 

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Chemistry** 

Paper	CO	Outcomes				
T.Y. Paper-I Inorganic Chemistry (601)	601.1	<ul> <li>Understand Metal ligand bonding in Transition Metal complexes.</li> <li>Electronic spectra of Transition Metal Complexes.</li> </ul>				
	601.2	<ul> <li>Understand Magnetic Properties of Transition metal Complexes.</li> <li>To study thermodynamic and kinetic aspect of metal complexes.</li> </ul>				
	601.3	<ul> <li>Understandorganometallic chemistry.</li> <li>Understand properties and structure of metal carbonyls.</li> </ul>				

	601.4	<ul> <li>To study Bio-organic chemistry</li> <li>Understand the concept of s Hard and Soft acids and bases.</li> </ul>
T.Y. Paper-II	602.1	Understand NMR Spectroscopy
Organic Chemistry (602)	602.2	<ul> <li>Understand Organic Synthesis via Enolates.</li> <li>Carbohydrates: classification, reaction and mechanisms.</li> </ul>
	602.3	<ul> <li>Understand Amino acids, peptides and nucleic acids.</li> <li>To study Fats, oil and detergents.</li> </ul>
	602.4	<ul> <li>Understand synthetic dyes, synthetic drugs, synthetic polymer.</li> </ul>
T.Y.	603	Verify theoretical principles experimentally
Chemistry		Interpret the experimental data
Practical		Improve analytical skills
Course		Correlate the theory and experiments and understand their importance

# **Department of Physics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Physics** 

Paper	СО	Outcomes		
Paper 1: Relativity, Nuclear Physics and Bio Physics (601)	601.1	<ul> <li>Understand the postulates of the special theory of relativity.</li> <li>Apply the concept of relativity to explain Length contraction, Time dilation, Velocity addition theorem, Variation of mass with velocity, Mass energy equivalence.</li> </ul>		
	601.2	Understand the concept of nuclear physics.		
*	601.3	<ul> <li>Apply the concept of nuclear physics to explain various decay processes.</li> </ul>		
	601.4	<ul> <li>Understand the Principle, Construction and working of different bio instruments.</li> </ul>		
Paper 2: Electronics, Fiber	602.1	<ul> <li>Understand the operations and applications of operational amplifiers.</li> </ul>		
Optics, Communication and Digital	602.2	<ul> <li>Understand the various basic structures of optical fibers and basic concept involved in propagation of light waves through optical fiber.</li> </ul>		
Electronics (602)	602.3	Understand the concept of amplitude modulation and frequency modulation.		
	602.4	<ul> <li>Understand various number systems.</li> <li>Construct the truth tables for various logic gates.</li> <li>Verify De Morgan's theorem</li> </ul>		
Physics Practical (603)	603	Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.		

# **Department of Mathematics Course Outcomes (COs)**

Course Name: B. Sc.

Year/Semester: Third/Sixth Subject: Mathematics

After successful completion of three-year degree program in Mathematics, Students should

be able to;

Paper	CO	Outcomes			
TY	601.1	Understand the concept of Group Automorphism			
Paper-I	601.2	Understand definition and examples of vector spaces			
601	601.3	Learn about algebra of linear transformation			
Abstract	601.4	Find range, rank, kernel and nullity of matrix and also			
Algebra		study about Inner product spaces			
		CTATTE / A			
TY	602.1	Study the Newtonian Mechanics and understand the			
Paper-II	4	concept special theory of relativity			
602	602.2	Learn the Lorentz transformation and consequences			
Special Theory	602.3	Understand the concept of Tensors and Space -Time			
of Relativity structure					
1//	602.4	Study the Mass Energy Equivalence, Energy momentum			
<b>X</b> ///		Tensor and Maxwell's Equation of Electromagnetic			
	7	theory in Vacuum			

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Zoology** 

Paper	CO	Outcomess		
T.Y.	601.1	Understand the Types of neurons, E.M. structure of neuron,		
Paper-I		Conduction of nerve impulse, Ultrastructure of striated muscle,		
General	4/	Sliding filament theory of muscle contraction, Properties of		
Mammalian		muscles (Twitch, Tetanus, Tonus, Summation, All or None		
Physiology - II		Principle, Muscle fatigue)		
(601)	601.2	Understand Structure of uriniferous tubule, Mechanism of urine		
	,	formation, Counter – current mechanism, Normal and abnormal		
		constituents of urine; Elementary idea of dialysis		
	601.3	Understand the Structure and functions of pituitary gland, Structure		
		and functions of thyroid and parathyroid gland, Structure and		
		functions of adrenal gland, Structure and functions of pineal gland		
	601.4	Understand the Oestrous and menstrual cycle, Male and female sex		
		hormones, Causes of infertility in male and female, Contraceptives		
		– Mechanical and hormonal; <i>In-vitro</i> fertilization		
T.Y.	602.1	Understand the Concepts of sterilization: Filtration, autoclaving,		
Paper-II		dry heat sterilization, wet sterilization and radiation, Separation of		
Applied		biomolecules: Centrifugation (Sedimentation, density gradient);		
Zoology –II		Chromatography ( Elementary idea of thin layer, gel filtration and		
(Biotechniques,		ion exchange - Principles and applications), Electrophoresis:		

Microtechnique,		Agarose gel electrophoresis, SDS-PAGE, Principles of colorimeter				
Biotechnology,		and spectrophotometers				
Bioinformatics	602.2	Understand the concept of Fixation, dehydration, clearing,				
and		embedding & section cutting, Difficulties encountered during				
Biostatistics)		section cutting (causes and remedies), Double staining with				
(602)		Haematoxylin and Eosin, Histochemical staining techniques for				
		carbohydrates (Periodic acid schiff), proteins (Mercury-				
		bromophenol blue) and lipids (Sudan black-B)				
	602.3	Understand the Basic concepts in recombinant DNA technology,				
		Gene isolation method- Shotgun cloning, Isolation of gene- DNA				
		manipulation enzymes: Nucleases, ligases, polymerases, Basic				
		concepts of cloning vectors and splicing: Insertion of DNA and				
		ligation using blunt ends, cohesive ends, Cloning vectors,				
		Application of biotechnology: Insulin and vaccine production				
	602.4	Understand the Bioinformatics: Definition, Basic concepts in				
	V	bioinformatics, importance and role of bioinformatics in life				
2	4/	sciences, Bioinformatics databases- introduction, types of				
	///	databases, Nucleotide sequence databases, Elementary idea of				
_1	//	protein databases, Biostatistics – Tabulation of data, presentation				
		of data, sampling errors, mean, mode, median, probability,				
	/ /	standard error and standard deviation				
T.Y.	603	Verify theoretical principles experimentally				
Zoology		Interpret the experimental data				
Practical	100	Improve analytical skills				
Course	10	Correlate the theory and experiments and understand their				
	15	importance				
	G.	mportane				

### Department of Botany Course Outcomes (COs)

Course Name: B. Sc.

Year/Semester: Third/Sixth

**Subject: Botany** 

Paper	CO	Outco	omes
Biochemistry,	601.1	1 4.	Study the lipids, role of fatty acids, oils and
biotechnology			waxes.
And herbal technology		•	Study the enzymes its classification and
Paper-I			nomenclature.
(601)		·	Study the basic concepts of Enzymology.
	V		Study the enzyme inhibitors.
	601.2	•	Study the tissue culture techniques.
		•	Study the process of sterilization.
		•	Study the preparation of culture media.
	601.3	•	Understand the techniques of genetic
			engineering.
		•	Study the process of DNA library.
		•	Study the types of DNA library.
		•	Study the Agrobacteria mediated gene transfer.
	601.4	•	Develop the skills of herbal technology.
		•	Study the methods of Cultivation, Harvesting,

		<ul> <li>Understand the technique of dye yielding of herbal plants.</li> </ul>
		<ul> <li>Study the used of herbs in cosmetics.</li> </ul>
T.Y.	602.1	Study the phytogeography, climatic regions of
Paper-II		India.
Phytogeography, Utilization		<ul> <li>Study the Environmental pollution.</li> </ul>
of Plants, Techniques and		Study the Renewable and Non Renewable
Pharmacognosy (602)		sources.
		<ul> <li>Understand the conservation strategies.</li> </ul>
	602.2	Study the morphology, utilization and
		important chemicals constituents of the plants.
	-	<ul> <li>Understand the concept of Ethnobotany.</li> </ul>
<u></u>	602.3	Study the principle, types and application of
-		microscope.
		<ul> <li>Study the various techniques.</li> </ul>
*/	602.4	<ul> <li>Understand synthetic dyes, synthetic drugs,</li> </ul>
1//		synthetic polymer.
, //	15	<ul> <li>Study the pharmacological plants</li> </ul>
T.Y.	603	<ul> <li>Find out the level of noise pollution of different</li> </ul>
<b>Botany Practical Course</b>		nearby area with the help of decimeter and
		compare it with tolerance limit
1// 27	5	Study the morphology, utilization, and
		important chemical constituents of plants.
11 20		Study the Ethnobotanical importance of plants.
JUE	5	<ul> <li>Study the different adulterants used with</li> </ul>
		reference to drug adultration.

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Principal Bhiwapur Mahavidyalaya Bhiwapur, Dist.-Nagpur

#### **Backward Class Youth Relief Committee's**

## Bhiwapur Mahavidyalaya, Bhiwapur

Dist - Nagpur, Maharashtra 441201

## Criteria - 2

## **Teaching- Learning and Evaluation**

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website.

**Academic Session 2022-23** 



# Programme Outcomes Course Outcomes

**Academic Session-2022-2023** 

Faculty of Bachelor of Arts, Bachelor of Commerce and Bachelor of Science

## Bhiwapur Mahavidyalaya, Bhiwapur Course Outcomes and Programme Outcomes Index

## **Department of Arts**

Session	Course	Semester	Sr. No.	Subject	Page No.
	B. A	First	1	English	
			2	Marathi	
			3	Political Science	
			4	Economics	
			5	English Literature	
		1.00	6	Sociology	
		an 28	7	History	
		#	8	Marathi Literature	
	44	10	9	Ambedkar Thought	
	1977	Second	10	English	
	11	100	11	Marathi	
	1///	2000	12	Political Science	75
196	1000	3-	13	Economics	1
ada d	17 1	70	14	English Literature	100
1.5%	1 12		15	Sociology	
2022-2023	11.12		16	History	N.V.
-101			17	Marathi Literature	1174
-			18	Ambedkar Thought	111
- COV	W	Third	19	English	///_
- F-1	13	11111	20	Marathi	
100	NO.		21	Political Science	/-
- 36	100	1.0	22	Economics	14
- 27	100		23	English Literature	
	42		24	Sociology	
	100		25	History	
		1	26	Marathi Literature	
		Acres 1975	27	Ambedkar Thought	
		Fourth	28	English	
			29	Marathi	
			30	Political Science	
			31	Economics	
			32	English Literature	
			33	Sociology	
			34	History	
			35	Marathi Literature	
			36	Ambedkar Thought	
		Fifth	37	English	
		1 11 (11	1 3,	211011	

	38	Marathi
	39	Political Science
	40	Economics
	41	English Literature
	42	Sociology
	43	History
	44	Marathi Literature
	45	Ambedkar Thought
Sixth	46	English
	47	Marathi
	48	Political Science
1,0-0	49	Economics
-84	50	English Literature
4.50	51	Sociology
1.7526263	52	History
4 // /	53	Marathi Literature
27/2/ 2/2	54	Ambedkar Thought

## **Department of Commerce**

Session	Course	Semester	Sr. No.	Subject	Page No.
45.1.	B. Com	First	1	English	11.7%
			2	Marathi	11.1
Sant	N =		3	Financial Accounting- I	1710
1953	A. OF	11111	4	Business organization	11/19
11.00	NAC:		5	Company law	7
- 36		- 70	6	Business Economics- I	140
5.7	1.30	Second	7	English	
	44.5		8	Marathi	
	- 2	3	9	Statistics and Business mathematics	
		No. 10.7	10	Business Management	
			11	Secretarial Practice	
			12	Business Economics II	
		Third	13	English	
			14	Marathi	
2022-2023			15	Financial Accounting II	
			16	Business communication	
			1.5	and management	
			17	Business law	
			18	Monetary economics-I	
		Fourth	19	English	
			20	Marathi	

		21	Financial Accounting-III
		22	Skill Development
		23	Income Tax
		24	Monetary Economics-II
	Fifth	25	Financial Accounting-IV
		26	Cost Accounting
		27	Management Process
		28	Indian Economics-I
		29	Computerized Accounting
		30	Auditing
	Sixth	31	Financial Accounting-V
	H	32	Management Accounting
	M	33	Advanced Statistics
4.4	1.	34	Indirect Economics-II
- 3/	1	35	Human Resource Management
30//	0.00	36	Industrial Law

# Department of Science (Physics, Chemistry, Mathematics, Zoology and Botany)

Session	Course	Semester	Sr. No.	Subject	Page No.
	-22		1	English	WW.
JE 1	DE .	FEIT ST	2	Marathi	1114
1000	N 1995		3	Chemistry I & II	6360000
194	KW	First	4	Physics I & II	10:
1.5	1.7	1000	5	Mathematics I & II	
	1000	100	6	Zoology I & II	
	100		7	Botany I & II	
	- 4	7	8	English	
	100	Second Second	9	Marathi	
2022 2022	D C		10	Chemistry I & II	
2022-2023	B.Sc.		11	Physics I & II	
			12	Mathematics I & II	
				13	Zoology I & II
			14	Botany I & II	
			15	Chemistry I & II	
		771 · 1	16	Physics I & II	
		Third	17	Mathematics I & II	
			18	Zoology I & II	
			19	Botany I & II	
		Fourth	20	Chemistry I & II	

		21	Diam're I 0 II
		21	Physics I & II
		22	Mathematics I & II
		23	Zoology I & II
		24	Botany I & II
		25	Chemistry I & II
		26	Physics I & II
	Fifth	27	Mathematics I & II
		28	Zoology I & II
		29	Botany I & II
		30	Chemistry I & II
	1900	31	Physics I & II
17-	Sixth	32	Mathematics I & II
		33	Zoology I & II
24.5	Carrier Contract	34	Botany I & II



## **Programme Outcomes and Course Outcomes**

## **Faculty of Arts**

## **Academic Session-2022-2023**

Sr. No.	Subject	Programme Outcomes	Course Outcomes
		First - Semester	
1	English	On the completion of the Course:  Students will be able to attempt different types of written communication utilizing the language study and vocabulary.	The students will be able:  1. To respond to the texts and thereby improving in their linguistic and Communication Skills.  2. To get inspired from biographies and broaden their horizon.  3. To develop drafting skills, job applications and resumes.  4. To understand the structure of sentences through prescribed grammar
2	Marathi	१ मराठी भाषेच्या समृद्धीची जाणीव करून देणे २ भाषेच्या व साहित्याच्या अभ्यासाद्वारे भारतीय सांस्कृती आणि इतिहासाची ओळख करून देणे- 3 साहित्यप्रकारांची ओळख करून देणे- ४ विद्यार्थ्यांची भाषिक कौशल्ये विकसित करणे व त्याना रोजगाराभिमुख बनविणे ५ नैतिक मूल्ये रुजविणे	१a- विद्यार्थी भाषेचे सुयोग्य उपयोजन करू शकेल- २a- पत्रलेखन,साराशलेखन यासारखी भाषिक कौशल्ये व कार्यालयीन भाषा तसेच जीवनव्यवहारात उपयुक्त ठरतील- 3- एकाग्रतेने वाचन करण्याची सवय लागेल- ४- भाषिक संवाद व्यवहारामुळे विद्यार्थ्यांचा सामाजिक व वैयक्तिक विकास होईल- ५- अचूक आणि अविलंब विचार करण्याची क्षमता निर्माण होईल-

			६-विचारांचा नेमका वेध घेण्याची क्षमता निर्माण होईल ७- अभ्यासक्रमाची उद्दिष्टे साध्य होतील-
4	Political Science  Economics	On the completion of the Course:  1. Familiarized with the different dimensions and the contemporary relevance of different concepts and theories, which would be applied in studying other papers  2. Shaped as citizens who are aware of the ideals and philosophies of the Indian Constitution, Constitutional rights and duties, governmental institutions, Centre - state relations and electoral politics in India.  3. Made conscious of the social, cultural, economic and political environment that affect politics in India, at the National as well as regional level.  On the completion of the course:  Economics subject enables the learners to build up a professional carrier as economists, financial advisors, economics planners and policy makers. It prepares them to cope up with the stress and strain involved in the process of economic development. Department supports the education and training of students, teachers and research in economics.	1. To understand the basic concept and ideological orientations of political science discipline.  2. To discuss the major theories and concepts of political science and its subfields.  1. After completing this course, the students will be able to Learn the basic principles of microeconomic theory.  2. Students shall be able to understand efficiency and equity of consumption and production as well as cost and firms' policy in market behavior.  3. Students will also be able to analyze demand by households and supply of goods and services by business firms.

			<ul> <li>4. Students will also be able to understand interaction of demand and supply in various market structures.</li> <li>5. Lastly Students will gain and develop the skill to think practically in to economic domain like economists.</li> </ul>
5	English Literature	On completion of the Course:  Students will be adept in explication of the studied text.	<ol> <li>To explain the historical socio -economic and cultural significance of the 16th Century.</li> <li>To understand the characters in lieu of the background study made available.</li> </ol>
6	Sociology	Think critically by exercising sociological imagination	<ol> <li>To know in details about culture and society</li> <li>To know in details about Social Structure</li> <li>To know in details about Social Stratification.</li> <li>To aware of Concept of Gender.</li> </ol>
7	History	Programme Outcomes: After successful completion of three-year degree Programme in History a student's able to know:  1. History has an unprecedented significance in human life 2. The study of history leads to socio- political awareness 3. Learn about world events 4. The study of history is important for competitive examination 5. Conversational skills come and understand the importance of human society 6. Studying history inspires patriotism	Course Outcomes: Outcome completion of the course students should be able to:  1. Students understood Harappan culture and Vedic culture 2. I got detailed information about Jainism-Buddhism 3. Understood the value of slavery and sultanate 4. Understood information about Devotional movement and sufi sect.

		7. The study of history reveals the National-International relations of the country.	
8	Marathi Literature	1 मराठी वाड्मय प्रकारांची ओळख करून देणे- 2-आत्मचरित्र या वाड्.मय प्रकाराचे स्वरूप व वैशिष्टये यांचे आकलन करून देणे-	1- मराठीतील कविता] कथा] नाटक] चरित्र- आत्मचरित्र या वाड्.मय प्रकारांची ओळख विद्यार्थ्यांना झाली-
		3-माझी जन्मठेप या वि-दा- सावरकरांच्या आत्मचरित्राचा आढावा घेणे-	2- आत्मचरित्र या वाड्-मय प्रकाराचे स्वरूप व वैशिष्टये व घटकांची माहिती विद्यार्थ्यांना मिळाली-
	26	4-साहित्यातून व्यक्त विषेशांची माहिती देणे-	3- वि- दा- सावरकरांच्या जिवनाचा वृतांत माझी जन्मठेप या आत्मचरित्रातून समजून आला-
9	Ambedkar Thought	Second- Semester	Paper: life and mission of Dr. Ambedkar  • Students will be able to learn about Dr. Ambedkar life.  • Students will be able to learn Caste in India.  • Students will be able to understand the concepts of untouchability.  • Students will be able to learn constitutional values
10	English	On the completion of the course:  Students will be able to apply the grammar, vocabulary to respond to the questions and in daily lives and will espouse the values through the	The students will be able:  1.To espouse important values and principles of life through the texts.
		biographies of people who by their hard braved life and succeeded.	<ul><li>2.To develop drafting skills: advertisement Writing Meeting Agenda, Notice and Minutes.</li><li>3.To use verbs and tenses in the given contexts.</li></ul>
			4.To comprehend vocabulary and use it in their daily lives.

11	Manadi		
11	Marathi	<ul> <li>१ मराठी भाषेच्या समृद्धीची जाणीव करून देणे</li> <li>२ भाषेच्या व साहित्याच्या अभ्यासाद्वारे</li> <li>भारतीय सांस्कृती आणि इतिहासाची ओळख करून देणे-</li> <li>३ साहित्यप्रकारांची ओळख करून देणे-</li> <li>४ विद्यार्थ्यांची भाषिक कौशल्ये विकसित करणे व त्याना रोजगाराभिमुख बनविणे</li> <li>५ नैतिक मूल्ये रुजविणे</li> </ul>	१- विद्यार्थी भाषेचे सुयोग्य उपयोजन करू शकेल- २ -पत्रलेखन,साराशलेखन यासारखी भाषिक कौशल्ये व कार्यालयीन भाषा तसेच जीवनव्यवहारात उपयुक्त ठरतील- ३- एकाग्रतेने वाचन करण्याची सवय लागेल- ४- भाषिक संवाद व्यवहारामुळे विद्यार्थ्यांचा सामाजिक व वैयक्तिक विकास होईल- ५- अचूक आणि अविलंब विचार करण्याची क्षमता निर्माण होईल- ६-विचारांचा नेमका वेध घेण्याची क्षमता
	36	110000	निर्माण होईल
12	Political Science	तमसा मा ज्याता	७- अभ्यासक्रमाची उद्दिष्टे साध्य होतील- The students will be able:  1. To understand the contribution of the main traditions of Western Political Thinkers to Political Thought  2. To evaluate the Renaissance; Political thought of Reformation and Plato, Aristotle, J. S. Mill and Karl Marx.
13	Economics	On the completion of the course:  Economics subject enables the learners to build up a professional carrier as economists, financial advisors, economics planners and policy makers. It prepares them to cope up with the stress and strain involved in the process of economic development. Department supports the education and training of students, teachers and research in economics.	<ol> <li>After completing this course, the students will be able to Learn various concepts of GDP and relationship between National Income and welfare of people.</li> <li>Students will further be able to understand factors determine domestic productivity, employment level of prices and interest rates.</li> <li>Students will be able to apply basic concepts to</li> </ol>

	*	* * * *  * * * *  * * * *	analyses the situations of inflation and business cycles.  4. Students will able to evaluate the role of monetary and fiscal policy of Government to fight inflation or to stabilize business cycles.  5. Lastly, Students will have ability to understand the relationship between consumption function and investment in economy and shall be able to give suggestion for promoting investment.
14	English Literature	On Completion of the Course: Students will be improved in their critical and creative skills.	<ol> <li>To summarize the situation and characters present in poems, prose and plays.</li> <li>To interpret and apply all the literary terms taught.</li> </ol>
15	Sociology	तमसा मा ज्याता के नागर्थ	1- To know in detail about Socialization 2- To know in detail about Social Change 3- To know in detail about Social Movements. 4- To know in detail about Social Deviation and Social Control.
16	History		1.Understood how the Mughal power was established in India  2. how the Mughal power was established in India.  3. Learned information about Sher Shah Suri and Mughal administration  4. I got information about Chhatrapati Shivaji and Mughal relationship

			5. Understood the Panipat Third War and the arrival of the British.
17	Marathi Literature	<ol> <li>नाटक या वाड्.मय प्रकाराचा आढावा घेऊन स्वरूप व वैशिष्टये यांचे आकलन करुन देणे—</li> <li>-वि- वा शिरवाडकरांच्या नटसमाट या शोकात्म नाटकाची माहिती देणे-</li> <li>कथा व कविता वाड्.मय प्रकारांची ओळख करुन देणे-</li> </ol>	<ol> <li>मराठीतील विविध वाड्मय प्रकारांची माहिती विद्यार्थ्यांना मिळाली-</li> <li>नाटक या वाड्.मय प्रकाराची स्वरूप व यांची जाणीव विद्यार्थ्यांना झाली-</li> <li>नटसमाट या षोकात्म नाटकाच्या आधारे वि- वा शिरवाडकरांच्या साहित्याचे रहस्य कळून आले-</li> </ol>
18	Ambedkar Thought	तमसा मा ज्याता	Paper: Social Thoughts of Dr. Ambedkar  • Students will learn the caste system in India and varna system.  • Students will be able to learn about structure of caste.  • Students will be able to learn about nature of untouchability.  • Students will be able to learn about social movements of Dr. Ambedkar.
		Third -Semester	*
19	English	On the completion of the Programme:  Students will be able to apply the human values, the grammar vocabulary to respond to the questions and in daily lives and will espouse the values through the biographies of people who by their hard braved life and succeeded.	The students will be able:  1.To understand the importance of Honesty.  2. To understand the beauties of nature and sublime.  3.To apply the values of nature and sublime.  4. To understand the social evils of society and the values of Humanity.

			<ul><li>5.To understand the correct usage of Narration and Punctuation.</li><li>6.To use English for the purpose of communication.</li></ul>
20	Marathi	१ मराठी भाषेच्या समृद्धीची जाणीव करून देणे व प्राचीन तसेच आधुनिक साहित्याचा परिचय घडविणे २ भाषेच्या व साहित्याच्या अभ्यासाद्वारे राष्ट्रीय आणि सामाजिक प्रश्नांची जाणीव करून देऊन त्यावरील उपायाचा शोध घेण्यास प्रवृत्त करणे. ३ मानवतावाद व जीवनव्यवहाराची सांगड घालणे व मानवतावादी दृष्टिकोन निर्माण करणे. ४ विद्यार्थ्यांची लेखनकौशल्ये विकसित करणे व त्याना रोजगारा भिमुख बनविणे ५ ग्रामजीवन, लोकसंस्कृती व श्रमसांस्कृती याविषयी आदराची भावना निर्माण करणे.	१ साहित्याचा आस्वाद घेण्याची क्षमता विकसित होईल.  २ सांपादन काया, संवादलेखन यासारखी भाषिक संवाद कौशल्ये भाषाव्यवहारात तसेच जीवनव्यवहारात उपयुक्त ठरतील.  3 मुद्रण व्यवहारात परिचय होईल.  ४ मानवतावाद व जीवनमुल्यांची व विदयांची जोपासना करतील  ५ श्राव्य,दकृ श्राव्य व दकृ माध्यमासाठी सांवादलेखन कसे करावे याची जाण निर्माण होईल.  ६ देशप्रेम व देशभक्तीची भावना निर्माण होईल.
21	Political Science	* * *	The students will be able:  1. To understand the processes and dynamics of Indian government and politics  2. To understand the strengths and weaknesses of Indian political processes, both in terms of their effectiveness in responding to public policy needs.  3. To attentive current political issues in context of wider debates about democratic life in India and

			the capacity of political institutions  4. To understand the basic concept and issues concerning the Right to Information Act, Human Rights and challenges.
22	Economics	On the completion of the course:  Economics subject enables the learners to build up a professional carrier as economists, financial advisors, economics planners and policy makers. It prepares them to cope up with the stress and strain involved in the process of economic development. Department supports the education and training of students, teachers and research in economics.	<ol> <li>It provides knowledge regarding the formulation of broad economic policies that maximize the level of national income.</li> <li>Students Identify various Concept of National income.</li> <li>Providing economic growth to achieve sustainability, full employment,</li> <li>Price stability, external balance, increasing Productivity in the long run.</li> <li>Students will learn a theory of Employment</li> </ol>
23	English Literature	On completion of the Programme:  Students will be become experts in the studied text.	The students will be able to:  1.To understand the various issues of the Indian society  2.To realize the values of the concepts of equality, revolution and its effects.  3.To. understood the biography, autobiography and Criticism.  4.To understand the Literary Terms and their usage.
24	Sociology		<ol> <li>To know in detail about Sociology as a Discipline</li> <li>To know in detail about August Comte, Harbary Spencer</li> </ol>

25	History	* * * *	<ol> <li>To know in detail about Charles Horton Cooley, Emile Durkheim</li> <li>To know in detail about Karl Marx, Max Weber.</li> <li>The Battle of Buxar and how the British implemented their policy in India</li> <li>Gained information about working methods, Kayamdhara ryotwari and Mahalwari and Lord Wellesley deployment forces.</li> <li>The uprising of 1857 (independent war) result was known</li> <li>Learned how nationalism</li> </ol>
26	Marathi Literature Ambedkar	1- स्वातंन्त्रोत्तर मराठी कविता या पुस्तकातील कवितांचा व कविंचा आढावा घेणे- 2- अभिनव काव्यप्रकाश या साहित्य ग्रंथातील काव्याची लक्षणे व काव्याचे प्रयोजन याविशयी माहिती देणे-	emerged in India  2- स्वातंन्त्रोत्तर मराठी कविता मधील निवडक कवी व कवितांचा भावार्थ विद्यार्थ्यांना समजून आले-  3- अभिनव काव्यप्रकाश मधील कवितेची लक्षणे व कवितेची प्रयोजने याविशयीची माहिती मिळाली-  Paper: Dr. Ambedkar on
	Thought	* * *	<ul> <li>Students will be learn dharma and dhamma by Dr. Ambedkar.</li> <li>Students will be able to learn about dhamma chakka pavatam.</li> <li>Students will be able to learn about the eight paths of Buddha.</li> <li>Students will be able to learn about Buddhism and democracy</li> </ul>

		Fourth- Semester	
28	English	On the completion of the Programme:  Students will be able to apply the human values, the grammar, vocabulary to respond to the questions and in daily lives and will espouse the values through the biographies of people who by their hard braved life and succeeded.	The students will be able:  1. To understand the importance of faith and friendship  2. To apply discipline and struggle in their lives.  3. To solve the examples of Tense and Voice.
	*	्राचिड्या लाज	4. To use English for the purpose of communication.
29	Marathi	१ मराठी भाषेच्या समृद्धीची जाणीव करून देणे व प्राचीन तसेच आधुनिक साहित्याचा परिचय घडविणे २ भाषेच्या व साहित्याच्या अभ्यासाद्वारे राष्ट्रीय आणि सामाजिक प्रश्नांची जाणीव करून देऊन त्यावरील उपायाचा शोध घेण्यास प्रवृत्त करणे. 3 मानवतावाद व जीवनव्यवहाराची सांगड घालणे व मानवतावादी दृष्टिकोन निर्माण करणे. ४ विद्यार्थ्यांची लेखनकौशल्ये विकसित करणे व त्याना रोजगारा भिमुख बनविणे ५ ग्रामजीवन, लोकसंस्कृती व श्रमसांस्कृती याविषयी आदराची भावना निर्माण करणे.	१ साहित्याचा आस्वाद घेण्याची क्षमता विकसित होईल. २ सांपादन काया, संवादलेखन यासारखी भाषिक संवाद कौशल्ये भाषाव्यवहारात तसेच जीवनव्यवहारात उपयुक्त ठरतील. 3 मुद्रण व्यवहारात परिचय होईल. ४ मानवतावाद व जीवनमुल्यांची व विदयांची जोपासना करतील ५ श्राव्य,दकृ श्राव्य व दकृ माध्यमासाठी सांवादलेखन कसे करावे याची जाण निर्माण होईल. ६ देशप्रेम व देशभक्तीची भावना निर्माण होईल.
30	Political Science		The students will be able:  1. To understand the vital contemporary emerging

		* * * *	issues of center-state relation, political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.  2. To understand the changing nature of the Indian State  3. To understand the Religion and Politics, Cast and Politics, Affirmative Action policies.
31	Economics	On the completion of the course:  Economics subject enables the learners to build up a professional carrier as economists, financial advisors, economics planners and policy makers. It prepares them to cope up with the stress and strain involved in the process of economic development. Department supports the education and training of students, teachers and research in economics.	<ol> <li>It attempts to impart an understanding of monetary economics.</li> <li>It describes carefully the basics of monetary economics like money, value of money, theories of money, banking and international financial institutions.</li> <li>Students learn the function of Commercial and Central Bank and why it is importance</li> <li>Students learn about the structure of RBI and its function. Students Will be identify Financial Market Function</li> </ol>
32	English Literature	On completion of the Programme: Students will become experts in the studied text.	Students will be able:  1. To understand the various  2. issues of Indian society  3. To realize equality, revolution, and their effects.  4. To understand the biography, autobiography and Criticism.  5. To understand the Literary Terms and their usage.

33	Sociology	* * *	<ol> <li>To know in detail about         Founders of theoretical         Root's of caste in India         B.R. Ambedkar and G.S.         Gurye     </li> <li>To know in detail about         Social change from         Indian perspective M.N.         Shriniwas &amp; D.P.         Mukharjee     </li> <li>To know in detail about         Indian Society and         Contemporary Chenges         R.K. Mukherjee and S.C.         Dube     </li> <li>To know in detail about         Gender and Society in         India Tarabari Shinde     </li> </ol>
	*//	SE IN	India Tarabari Shinde, Jyotirao Fule and Savitribai Fule
34	History	तमसा मा ज्याता	Learned about the     establishment of the     National Congress     Understood the role of     Jahal and Mawal     Information was received     about     non-cooperation, civil     disobedience movement     Gained detailed     knowledge of
	78	A. 4111.2	knowledge of how India became independent
35	Marathi Literature	1- स्वातंत्र्योत्तर मराठी कथा या पुस्तकाच्या आधारे कथाकार व कथेचा आढावा घेणे-	1- स्वातंत्र्योत्तर मराठी कथाकारांच्या कथांची माहिती विद्यार्थ्यांना प्राप्त
		2- अभिनव काव्यप्रकाश या पुस्तकातील शब्दाच्या	झाली-
		तीन शक्ती व अलंकाराचा आढावा घेणे-	2- अभिदा] व्यंजना व लक्षणा या शब्दाच्या तीन शक्ती विद्यार्थ्यांना समजून आल्या-
36	Ambedkar Thought		Paper: Economic thought of Dr. Ambedkar

	26	* * *	<ul> <li>Students will understand the path of mahatma Fule ,Sahu maharaj etc.</li> <li>Students will be able to learn about nature of Economics and caste based economics.</li> <li>Students will be able to learn about the untouchability and slavery.</li> <li>Students will be able to learn about the difference between Marxist and Gandhian thoughts</li> </ul>
	4/	Fifth- Semester	#//#
37	English	Upon successful completion of the B.A. Programme, students will be competent enough to internalize the subsequent qualities, which will facilitate their pursuit of envisioned objectives in their future lives: (a) Grasping of ethical principles (b) Development of a spirit of community engagement (c) Becoming a conscientious and accountable member of society (d) Cultivation of analytical disposition (e) Enhancement of innovative aptitude	<ol> <li>Students will adopt and put into practice the principles of tolerance and simplicity as part of their everyday routines.</li> <li>During a time characterized by widespread unemployment, students will find inspiration in the stories of three prominent personalities, motivating them to consider self-employment as a viable option.</li> <li>The impactful messages aimed at the general public, as communicated through the poetry segment, will exert a favorable influence on the students' attitudes.</li> <li>Engaging with the Grammar and Composition segment will enhance their self-assurance, leading to the development of</li> </ol>

			proficient communication abilities.
38	Marathi	१ मराठी साहित्यातील विविध प्रवाहांची जाणीव करून देणे.	१ साहित्यातील विविध प्रवाहांची जाणीव होईल.
		२ भाषेच्या व साहित्याच्या अभ्यासाद्वारे भारतीयत्वाच्या सांकल्पनेची ओळख करून देणे.	२ संत, पंत आणि तंत साहित्याची जा ओळख होईल. साहित्य आणि समाज यांच्या परस्पर
		३ विविध साहित्य प्रकारांचीओळख करून देणे.	संबंधाची जाणिव होईल
	26	४ व्यावहारिक मराठीच्या माध्यमातून लेखन कौशल्ये विकसित करणे व रोजगाराभिमुख बनविणे	३ मुद्रितशोधन यासारखी भाषिक कौशल्ये विकसित होवून कार्यालयीन भाषा व्यवहारात व जीवनव्यवहारात उपयुक्त ठरतील
	34//	५ भारतीय सांस्कृती –कालची ,आजची आणि	४ अचूक लेखन करण्याची सवय लागेल.
	* C	उद्याची या संदर्भात समन्वयाची भावना रुजवणे.	५ दकृ श्राव्य माध्यमासाठी लेखन, मुद्रितशोधन, भाषांतर कौशल्ये विकसित झाल्यामुळे रोजगाराच्या संधी उपलब्ध होतील. ६ सामाजिक व राष्ट्रीय प्रश्नांवर विचार
	*//	तमसा मा ज्याता	करण्याची क्षमात निर्माण होईल. ७ देशातील वेगवेगळ्या सांस्कृतीचा आदर करण्याची क्षमता निर्माण होईल. ८ अभ्यासक्रमाची उद्दीष्टे साध्य होतील.
39	Political Science	* * *	The students will be able to:
			<ol> <li>Comparative understanding of specific world constitutions such as U. K. and U.S.A.</li> <li>To analyze contemporary problems in the countries (U. K. and U. S. A.) under consideration in light of the conceptual</li> </ol>

			frameworks presented in class.
40	Economics	On the completion of the course:  Economics subject enables the learners to build up a professional carrier as economists, financial advisors, economics planners and policy makers. It prepares them to cope up with the stress and strain involved in the process of economic development. Department supports the education and training of students, teachers and research in economics.	1. This course will use appropriate analytical frameworks to review major trends in economic indicates in the India in post- independence period  2. The course will be able to highlight major policy debates and evaluate the Indian empirical evident to update the major changes of Indian Economy.  3. It will examine various paradigm shifts and turning points in policy debates in India.  It enables students to examine sector spacific policies and their impact trends in key economic indicators in India
41	English Literature	On completion of the course: Students will be able to understand varieties of literature in all the forms available.	The students will be able to:  1.To apply critical and theoretical approaches to analysis of literary texts.  2. To write analytically using language competencies.
42	Sociology	* * *	<ol> <li>To know in detail about Indian Society, Structure and Inequality</li> <li>To know in detail about Family in contemporary India</li> <li>To know in detail about Tribal Issue and problems in India</li> <li>To know in detail about Rural Community in India</li> </ol>

43	History		<ol> <li>The French Revolution         was also the first         revolution in the world</li> <li>What are the reasons for         imperialism?</li> <li>World War I - The Treaty         of Versai. Learned about         the United Nations and its         achievements and failures</li> </ol>
44	Marathi Literature	1- पुर्णामायची लेकरं या कादंबरीचा आढाचा घेणे- 2- दलित साहित्य वेदना व विद्रोह या पुस्तकातील दलित साहित्याचा आढावा घेणे- 3- साहित्याच्या विविध प्रवाहाचा आढावा घेणे-	1- पुर्णामायची लेकरं या कादंबरीतील समाजजिवनाची माहिती विद्यार्थ्यांना मिळाली- 2- दलित साहित्य वेदना व विद्रोह यातून दलितांच्या वेदनेचे व विद्रोहाचे विद्यार्थ्यांना आकलन झाले- 3- प्राचीन साहित्यातील संत, पंत व तंत साहित्यप्रवाहाची माहिती विद्यार्थ्यांना प्राप्त झाली-
45	Ambedkar Thought	तममा मा ज्याता * नागरी * * *	<ul> <li>Paper: Political thought of Dr. Ambedkar</li> <li>Students will understand foundation of political thought.</li> <li>Students will be able to learn about Political independence and Hindu-Muslim conflict.</li> <li>Students will be able to learn about Social and Political Democracy.</li> <li>Students will be able to learn about the aim and objective of political parties and small</li> </ul>

		Sixth- Semester	
46	English	Upon successful completion of the B.A. Programme, students will be competent enough to internalize the subsequent qualities, which will facilitate their pursuit of envisioned objectives in their future lives: (a) Grasping of ethical principles (b) Development of a spirit of community engagement (c) Becoming a conscientious and accountable member of society (d) Cultivation of analytical disposition (e) Enhancement of innovative aptitude	<ol> <li>Students will grasp the idea that prioritizing friendships and human connections is more valuable than a self-centered focus on financial gains, as portrayed in the Prose section.</li> <li>After engaging with A.P.J Abdul Kalam's reflections on resilience, students will witness a significant positive influence on their own lives.</li> <li>The remarkable accomplishments of renowned personalities will prompt learners to understand the truth that determination and hard work are the keys to success.'</li> <li>The Poetry Segment will enhance the promotion of spreading harmony and the message of serenity.</li> </ol>
47	Marathi	१ मराठी साहित्यातील विविध प्रवाहांची जाणीव करून देणे. २ भाषेच्या व साहित्याच्या अभ्यासाद्वारे भारतीयत्वाच्या सांकल्पनेची ओळख करून देणे.	१ साहित्यातील विविध प्रवाहांची जाणीव होईल. २ संत, पंत आणि तंत साहित्याची जा ओळख होईल. साहित्य आणि समाज यांच्या परस्पर
		3 विविध साहित्य प्रकारांचीओळख करून देणे. ४ व्यावहारिक मराठीच्या माध्यमातून लेखन कौशल्ये विकसित करणे व रोजगाराभिमुख बनविणे	संबंधाची जाणिव होईल  3 मुद्रितशोधन यासारखी भाषिक कौशल्ये विकसित होवून कार्यालयीन भाषा व्यवहारात व जीवनव्यवहारात उपयुक्त ठरतील  8 अचूक लेखन करण्याची सवय लागेल.

		५ भारतीय सांस्कृती –कालची ,आजची आणि	५ दकृ श्राव्य माध्यमासाठी लेखन,
		उद्याची या संदर्भात समन्वयाची भावना रुजवणे.	मुद्रितशोधन, भाषांतर कौशल्ये विकसित झाल्यामुळे रोजगाराच्या संधी उपलब्ध होतील.
			६ सामाजिक व राष्ट्रीय प्रश्नांवर विचार करण्याची क्षमात निर्माण होईल.
		de de de	७ देशातील वेगवेगळ्या सांस्कृतीचा आदर करण्याची क्षमता निर्माण होईल.
	26	*	८ अभ्यासक्रमाची उद्दीष्टे साध्य होतील.
48	Political Science	Selling 11055	The students will be able to:
	* 0	AULII HIL FILM	<ol> <li>To understand the nature and development in International Politics</li> <li>To relate the basics of international relations and the new trends in the realm of international relations.</li> </ol>
49	Economics	On the completion of the course:  Economics subject enables the learners to build up a professional carrier as economists, financial advisors, economics planners and policy makers. It prepares them to cope up with the stress and strain	1. It makes the students to understand the aspect of development process in low-income counties. Its focus is on improving the potential for the mass of population through health and education.
		involved in the process of economic development. Department supports the education and training of students, teachers and research in economics.	2. It makes learners to understand the economic functioning and conditions of our country in the context of past, present and future.
			3. Enable the students the pattern and nature of international trade and their contribution to economic development

			It also enables learners to know the role of public authorities in raising revenue and its spending.
50	English Literature	On completion of the course: Students will be able to imbibe ethical, moral and cultural values in an academic context.	The students will be able to:  1. To comprehend the texts in different given contexts.  2. To understand the ideas, values and themes impacting culture and societies.
51	Sociology	तमसा मा ज्याता	<ol> <li>To know in detail about         Education in         contemporary</li> <li>To know in detail about         Displacement and         Rehabilitation</li> <li>To know in detail about         Intolerance, Riot and         Crime</li> <li>To know in detail about         Epidemic social issues &amp;         policy intervention</li> </ol>
52	History	* * *	<ol> <li>Learned about Russia's         Five Year Plan.</li> <li>Hitler - Mussolini's         foreign policy in detail.</li> <li>Learned the reasons for         the Second World War.</li> <li>Received information         about the United Nations         and the performance of the         Suez Canal, NATO         SEATO Warsaw Pact.</li> </ol>
53	Marathi Literature	1-एक होता कार्व्हर या चरित्रातील कार्व्हरचे चरित्र समजून घेणे- 2- भाषाविज्ञान पुस्तकातील मराठीची वर्णमालेचा आढावा घेणे-	1- जॉर्ज वॉशिग्टन कार्व्हर यांचे चरित्र विद्यार्थ्यांना समजून आले-

			2- मराठीची वर्णमालेतील स्वर व व्यंजनाची माहिती विद्यार्थ्यांना मिळण्यास मदत झाली-
54	Ambedkar Thought	* * * *	<ul> <li>Paper: Constitutional thought of Dr. Ambedkar</li> <li>Students will understand nature and objectives of constitution.</li> <li>Students will be able to learn Fundamental rights and states policy.</li> <li>Students will be able to learn about constitutional safe guards to SC and ST.</li> <li>Students will be able to learn about Faderal system and constitutional moralit</li> </ul>

## **Faculty of Commerce**

#### Academic session-2022-2023

- PO1.Students could work on their start- up projects.
- **PO2**.Students will be exposed to the nuances of Finance and Commerce.
- **PO3**.Students will be able to do their Masters in allied subjects and venture into Market Research.

**PO4**. On completion of graduation, Students will be equipped with required skills and various aspects of Managerial Tasks and over all Administration abilities of the Company.

**PO5**.Enables learners to get theoretical and practical exposure in the commerce sector which includes Accounts, Commerce, Management and Economics.

Sr. No.	Subject	<b>Programme Outcomes</b>	Course Outcomes
		First- Semester	
1	English	# # # # # # # # # # # # # # # # # # # #	<ul> <li>The assigned texts inspired students to uncover profound insights about life.</li> <li>Each recommended biography imparted valuable lessons concerning human potential.</li> <li>Informative content about startups, entrepreneurship, social media, and public speaking equipped students for success in the business realm.</li> <li>The chosen study materials cultivated an environment of enthusiastic teaching and learning.</li> <li>The literature provided paved the way for students to develop a keen interest in exploring their potential and facing real-world challenges.</li> </ul>
2	Marathi	/ N. → III	By the end of this course, the students will be able to  • भारतीय लोकशाहीचे मूल्य विदयार्थ्यांमध्ये रुजविणे.  • ग्रामीण जनजिवन व शेतीनिष्ठेशी विदयार्थ्यांची नाळ जोळणे.  • संताच्या व्यावहारीक विचारांचा परिचय घडविणे.  • शाहू महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.  • काव्यातील रसग्रहणक्षमता विकसीत करणे.  • विदयार्थ्यांमध्ये आधूनिक मूल्य रुजविणे  • विदयार्थ्यांमध्ये सामाजीक बांधिलकी निर्माण करणे.

3	Fundamental of Accounting	* * * * * * * * * * * * * * * * * * *	* / 70	Given the information about transaction /cash students will be able to identify the nature of translation /events and will be able to record the financial transaction in the books of accounts.  Give the trial Balance of a sole Trading concern along with the accompanied adjustment the students will be able to prepare the financial statement of a Sole Trader at the end of financial year  Given the details business transaction between the Head office and Branches students will be able to prepare Branch  Account, Cash and Credit sale, debtors & stock and debtors method of accounting.  Given the Trial Balance along with the adjustment of a Cooperative society a students would be able to prepare Trading  Account, Profit & Appropriation  Account and balance Sheet of Cooperative society as per state Cooperative society as per state Cooperative society Act 1960  Given the information of business  Receipts and Payments, students will be able to a simple cash book.
4	Digital Marketing		•	The students will be able to understand the concept and develop the knowledge of Digital Marketing, E-Commerce and M-Commerce The students will be able to understand the concept and will be equipped with the practical knowledge of creating electronic

		* *	*//	mail (E-mail), Websites, Brochure/Flyers. The students will be able to develop the knowledge about usage and Procedures for handling various important Digital Marketing Platforms for Earning Income. The students will be able to develop the knowledge about Recent Trends for Earning income through Digital Marketing. The students will be equipped with the practical knowledge of various important Digital Marketing Platforms.
5	Microsoft Office	HE CO.	では、一方では一	Students got well understood the following topics Microsoft word Students got well understood the following topics Creating Storing and Formatting data using different using Excel formatting tools and features.  Students got well understood the following topics Calculation using function and Present data visually using chart and graph.  Students got well understood the following topics create and design professional presentation using different features & tools of PowerPoint.
6	Business Economics- I	* *	*	Students will be able to classify fundamental problems of an economy.  Students will be able to use demand analysis & Indifference curves analysis in given situations and to measure and comment on elasticity of demand for given data.  Students will be able to apply various demand forecasting techniques.

			•	Students will be able to identify key elements in supply and isoquant curves.
		Second -Semester		
7	English	* *	*/	Students are motivated to explor the extent of their capabilities du to the impact of the prescribe texts.  Informative content about start ups, entrepreneurship, social media, and public speakin equipped students for success if the business realm.  Prose materials aided students is confronting practical challenge encountered in their daily lives.  Prescribed readings encourage students to delve into deeper meanings and implications of life Biographies suggested, served as source of guidance on realizing personal capabilities.
8	Marathi	मा मा ज्य	By the	end of this course, the students wil be able to
	* 1	ीन नाग	E.	भारतीय लोकशाहीचे मूल्य विदयार्थ्यांमध्ये रुजविणे. ग्रामीण जनजिवन व शेतीनिष्ठेशी विदयार्थ्यांची नाळ जोळणे.
	28	* *	*	संताच्या व्यावहारीक विचारांचा परिचय घडविणे. शाहू महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.
			•	काव्यातील रसग्रहणक्षमता विकसीत करणे. विदयार्थ्यामध्ये आधूनिक मूल्य रुजविणे विदयार्थ्यामध्ये सामाजीक बांधिलकी निर्माण
			•	करणे. विदयार्थ्यामध्ये सर्जनशीलता निर्माण करणे.
9	Statistics and Business Mathematics		•	Given the information about a particular variable, Students will be demonstrating an

10 Fundamentals of Banking	understanding of statistics by creating frequency distribution as per the Statistical Series.  From the given data set student will be able to compute, Mean, Median, Mode and other measure of central tendency as required. From the given data Students will be able to know dispersion and to calculate Standard Deviation, Quartiles. Quartiles Deviation & Coefficient of Variation. From the given data set the students will be able to compute the Skewness & its coefficient by using Karl Pearson's and Bowley's method. From the Given information student will able to calculate Percentage, Simple interest, Compound interest and also able calculate Profit & Loss arising out business transaction.  The students will be able to Classify Banking Functions. The students will be aware of Types of Bank Accounts and its Eligibility. The students will be aware of Bank Account Procedure for Opening, operating, Transfer and Closing. The students will be known of Types of Bank services for the Customers. The students will be enlightened regarding the new concepts introduced in the banking system.
11 Skill Development	<ul> <li>The students will be able to relate the concept of skill development and its importance.</li> <li>The student will be able to interpret the problem-solving</li> </ul>

		technique and multiple approaches to creativity.  The students will be able to relate importance of communication Skill for interpersonal communication.  The students will be able to analyses team behavior and impact of empowerment and delegation.  The Students Will be able to explore various skill development avenues.
12	Business Economics II	<ul> <li>Students will be able to establish a relationship between cost and Output in the short/ long run.</li> <li>Students will be able to differentiate between various Market structures.</li> <li>Students will be able to determine prices under different market structures.</li> <li>Students will be able to explain basic concepts of macroeconomics and Students will be measure national income using given data.</li> </ul>
	Third-Semester	-33 //¥
13	English	<ol> <li>Students acquired the skill of comprehending the English language by engaging with recommended poems and prose.</li> <li>Students demonstrated the ability to read and understand moderately intricate English texts.</li> <li>Proficiency, with respect to English speaking, conversing, delivering speeches, narrating, and describing, has been cultivated among the students.</li> <li>Students are equipped to convey proficiently their emotions and thoughts, both verbally and in written English.</li> </ol>

		5. Students are able to compose diverse letters and reports.
14	Marathi	By the end of this course, the students will be able to:
	*	<ul> <li>मातृभाषेची आवड व जाणीव निर्माण करणे</li> <li>प्राचिन मराठीचे वैशिष्ट्रे स्पष्ट करणे.</li> <li>विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.</li> <li>संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोकशाहीचा पुरस्कार करणे.</li> <li>स्त्री विषयक जाणिव जागृती करणे.</li> <li>वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती</li> <li>अवगत करणे</li> </ul>
15	Financial Accounting -I	<ul> <li>Students get well understood the topic of Consignment Accounts and Hire Purchase</li> <li>Students get well understood on the topic of Capital Structure and Issues of Shares.</li> <li>Students get well understood on the topic of Final Accounts of Joint Stock Company.</li> </ul>
16	Business communication and management	<ul> <li>To Make The students to understand Meaning, Definition and concept of Communication, objective of Communication</li> <li>To Make The students to understand Business         Communication.     </li> <li>Students get well understood the following topics Technology and Business Communication.</li> <li>Students get well understood the following topics M.S. Office Aided Communication.</li> </ul>
17	Business law	Students get well understood the following topics. Essential of a Valid Contract, Characteristics or Essential of offer. Important of Rules for Valid offer, Process of

18	Monetary Economics-I	HI HI TU	*/一定一次市场公子	Sale of goods Act, Price of goods & Effect of Sale Contract. Students get well understood the following topics. Types of Negotiable Instruments, Presumptions as to Negotiable Instrument, Registration of Partnership & Type of Partner. Students get well understood the following topics Importance of Consumer Protection Act, Importance of points of Act, Consumer Rights & Importance of Right to Information Act 2005.  Students get well understood the following topics Electronics Governance, Cyber Crime, Punishment, Need for Labour Legislation & Importance of Indian Factory Act.  Students will be able to understand the evolution of Money and functions of Money. Students will be able to understand Inflation, Deflation, Monetary Policy and Fiscal Policy. Students will be able to understand Money Market and Policies. Students will be able to understand the concept of Public Finance and Types of Taxation.
	1	Fourth -Semester	1.	Through analysis and discussion of
19	English		2.	prescribed prose and poems, students gained the ability to examine, interpret, and engage in debates on various topics.

		* *	<ul><li>3.</li><li>4.</li><li>5.</li></ul>	Students are equipped with competence in utilizing information and communication technology (ICT) and social media in a productive manner.  Students developed logical reasoning skills and aptitude for forming personal opinions and making decisions across various subjects.  The ideas and activities delineated in the prescribed texts fostered creativity and innovation among students.
20	Marathi		70	मातृभाषेची आवड व जाणीव निर्माण करणे प्राचिन मराठीचे वैशिष्ट्रे स्पष्ट करणे. विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे. संत साहित्यातून सामाजिक, सांस्कृतीक, आध्यात्मिक लोकशाहीचा पुरस्कार करणे. स्त्री विषयक जाणिव जागृती करणे. वृत्त लेखन व कल्पना विस्तार तंत्राची माहिती अवगत करणे
21	Financial Accounting-II	मा ज्ये १३, नाग *	市场公司	Students get well understood the topic of Final Accounts of Banking Companies. Students get well understood the topic of Final Accounts of General Insurance Companies. Students get well understood the topic of Valuation of Goodwill. Students get well understood the topic of Liquidation of Company.
22	Skill Development		•	To Make The students to understand Basic of personality, Human Growth, Human Skill Behavior our & skill Development and Employment.

23	Income Tax	<ul> <li>To Make The students to understand Communication Skill and Personality Development.</li> <li>To Make The students to understand Techniques in Personality Development.</li> <li>To Make The students to understand Entrepreneurial Skill Development.</li> <li>Students will be able to understand the         <ul> <li>Income Tax Introduction.</li> <li>Agricultural</li> <li>Income, Revenue and Capital receipt and</li> <li>Deduction.</li> </ul> </li> <li>Students will be able to understand the         <ul> <li>Definition of Salary, Allowances types of</li> <li>Allowances, Tax Free allowances partly</li> <li>taxable allowances.</li> <li>Income from House property: Meaning and Annual value, Fully</li> </ul> </li> </ul>
24	Monetary Economics-II	Exempted Income from  House Property, Deemed owner, Deduction from Income from House Property,  Unrealized rent Computation Income from House Property.  Students will be able to understand the  Income Tax slab Rates, Rebates, Deduction Under Section 80C, 80CCC,80CCD, 80D,80DDB, 80 G,80 E, 80G,80GG, 80 U  Income From Other Sources.  Students will be able to understand the functions of Commercial Bank.  Students will be able to understand the E-Banking and Core Banking.

			<ul> <li>Students will be able to understand and they apply their knowledge in the Bank as a customer.</li> <li>Students will be able to develop the knowledge about Central bank.</li> </ul>
		Fifth-Semester	
25	Financial Accounting-IV	* *	• Students got well understood the following topics
	2//	द्धाविद्याः	<ul> <li>Amalgamation and absorption of Companies.</li> <li>Students got well understood the following topics</li> <li>Reconstruction of companies</li> </ul>
	*//25		<ul> <li>Students got well understood the following topics</li> <li>Valuation of Goodwill &amp; Valuation Of Shares.</li> </ul>
- 5		128	<ul> <li>Students got well understood the following topics Account of Public Utility Company.</li> </ul>
26	Cost Accounting	(4. A.)	<ul> <li>The students will be able to understand the concept and develop the knowledge of cost accounting and students will be able to prepare Cost Sheet and Tender Sheet.</li> </ul>
	75	* *	<ul> <li>The students will be able to understand the concept and develop the knowledge of need of reconciliation statement of profit and students will be able to prepare Reconciliation Statement of Profit.</li> <li>The students will be able to</li> </ul>
			understand the concept of Process Costing and students will be able to prepare Process Account.  The students will be able to understand the concept of Contract

			Costing and students will be able to prepare Contract Account.
27	Management Process	* *	<ul> <li>Students will be able to apply the knowledge of Management and Administration.</li> <li>Students will be able to create the knowledge of Managerial Development &amp; Group Dynamics</li> <li>Students will be able to develop the knowledge of Managerial Style.</li> <li>Students will be able to understand the meaning of Motivation and their types.</li> </ul>
28	Indian Economics-I	THE PARTY OF	<ul> <li>Students will be able to understand Indian Economy &amp; Planning.</li> <li>Students will be able to understand Indian Economy &amp; Policy.</li> <li>Students will be able to understand &amp; create the knowledge about the Population and Unemployment.</li> <li>Students will be able to develop the knowledge of India's Public Finance.</li> </ul>
29	Computerized Accounting	*	<ul> <li>Students got well understood the following topics Introduction of Accounting, Advantage of Accounting, Books of Account, Computerized Accounting.</li> <li>Students got well understood the following topics</li> <li>Accounting Software Introduction to Tally Software.</li> <li>Students got well understood the following topics Accounts</li> </ul>

			<ul> <li>Information Menu, Accounts Group.</li> <li>Students got well understood the following topics Inventory Info. Features of Inventory Info, Balance Sheet.</li> </ul>
30	Auditing	* * *	<ul> <li>Students will be able to understand the accounting system, principles, concepts and basics of auditing.</li> <li>Students will be able to gain knowledge about the internal control, the internal check and the internal audit.</li> <li>Students will be able to learn vouching, valuation of assets and liabilities and their verification.</li> <li>Students will be able to know about the appointment, rights, duties and the liabilities of an auditor.</li> </ul>
170	K   G	Sixth- Semester	AK AND
31	Financial Accounting-V	भा मा ज्यात १३२ नागरी * * *	<ul> <li>Students got well understood the following topics         Accounts of Holding Company     </li> <li>Students got well understood the following topics         Insurance Claim     </li> <li>Students got well understood the following topics Investment Accounts</li> <li>Students got well understood the following topics Profit Prior to Incorporation.</li> </ul>
32	Management Accounting		• Students would explain the significance of basic concept, importance & functions of Management Accounting.

		<ul> <li>Students will be able to understand the Meaning of Budgets and prepare Cash Budget and Flexible Budget.</li> <li>Students would calculate the various ratios and would be able to discuss the significance and use of the various ratios.</li> <li>Students would be able to prepare Statement showing Changes in Working Capital and Fund Flow statements.</li> </ul>
33	Advanced Statistics	<ul> <li>Students got well understood the following topics Correlation</li> <li>Students got well understood the following topics Regression Analysis</li> </ul>
8	Part of the second	<ul> <li>Students got well understood the following topics Index Number.</li> <li>To Make The students to understand Time series Analysis</li> </ul>
34	Indian Economics-II	<ul> <li>Students will be able to apply the knowledge of Indian Agriculture.</li> <li>Students will be able to create knowledge about Indian Industry.</li> <li>Students will be able to develop knowledge about India's International Trade.</li> <li>Students will be able to understand the contribution of Indian Economic Thinkers (Mahatma Gandhi, Pandit Dindayal Upadhyaya, Dr. B. R. Ambedkar, Dr. Ram Manohar</li> </ul>
35	Human Resource Management	Lohiya.      Students will be able to understand the concept of Human Resources Management & Human Resource Manager.

			<ul> <li>Students will be able to understand the Recruitment, selection and training</li> <li>Students will be able to understand Labour welfare and collective bargaining.</li> <li>Students will be able to understand Human Resource Planning and Accounting.</li> </ul>
36	Industrial Law	* * * * * * * * * * * * * * * * * * *	<ul> <li>Students will be able to understand the Provision for Workers under Indian Factories Act-1948 Industrial Dispute Act-1947</li> <li>Students will be able to understand the Provision for Workers under Minimum Wages Act-1948, Payment of Wages Act 1936, Payment of Bonus Act 1965 and Payment of Gratuity Act 1972, The Employee's State Insurance Act 1948 and Employee's Provident Fund &amp; Miscellaneous Provision Act 1952, Workmen Compensation Act-1923 and Maternity Benefits Act 1961.</li> <li>Students will be able to understand the Provision for Workers under Child Labour (Prohibition and Regulation) Act 1986, Trade Union Act 1926, Contract Labour Act.</li> <li>Students will be able to understand the concept Industrial Estate, Software Technology Park, SEZ, Co-operative Industrial Estate, Intellectual Property Rights Law In India, Environment Protection Act 1986.</li> </ul>

## Programme Outcomes Course Outcomes Faculty of Science

## (Physics, Chemistry, Mathematics, Zoology, Botany)

## Academic session-2022-2023

## **Programme Outcomes:**

On completion of the Course:

- Students will be able to achieve what they want with tenacity and ambition.
- Bachelor of Science offers theoretical as well as practical knowledge about different subject areas.
- This course forms the basis of science for coherent understanding of the academic field to pursue multi and interdisciplinary science careers in future. These subject areas include Physics, Chemistry, Mathematics and Botany and Zoology.
- Able to plan and execute experiments or investigations, analyze and interpret data information collected using appropriate methods.
- It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace through research.
- Think critically; follow innovations and developments in science and technology.
- Students will be able to achieve what they want with tenacity and ambition.

Sr. No.	Subject	Course Outcomes
		First- Semester
1	English	The student will be able:  • To understand the text through insights given on compassion and
		freedom.  • To comprehend the values system as a Human Beings while
		discharging one's duties.
		To summarize the given text.
2	Marathi	<ul> <li>विदयार्थ्यांनमध्ये साहित्य विषयक आवड निर्माण करणे</li> </ul>

		• वाचन संस्क्तीचा पुरस्कार करणे
		<ul> <li>भारतीय संविधानाचे महत्व समजावून सांगणे</li> </ul>
		<ul> <li>मानवी मुल्यांची जपणूक करणे</li> </ul>
		<ul> <li>कविता लंखनाचे तंत्र अवगत करणे</li> </ul>
		पर्यावरण विषयक जाग्ती निर्माण करणे
		व्यावहारीक मराठीचे महत्व समजावून सांगणे
	Chemistry	101.1
3	Paper-I	• To understand the basic structure of atom.
	Inorganic	Understand the basic structure of atom.      Understand shape of orbitals.
	Chemistry	Understand periodic properties such as atomic and ionic radii,
	(101)	ionization energy, electron affinity etc.
		101.2
	124	To understand the ionic structures with respect to NaCl and CsCl.
	36	To understand the concept of covalent bond.
	100	To understand the bond parameters and various types of types of
	海ャノニ	hybridization.
	11	101.3
146	11/11/11	Understand s block element and their properties such as electronic
1.77	17 X	configuration, atomic and ionic radii, I.P. etc.
71		<ul> <li>Understand chemical properties of the noble gases, preparation,</li> </ul>
1967	1 1500	structures, bonding and applications.
100	1 50	101.4
N		<ul> <li>To understand the P block element. Comparative study of groups</li> </ul>
-bc	G	15,16, 17 with respective their properties.
		<ul> <li>Understand the Hydrides Oxides, Peroxyacids, Hydrides.</li> </ul>
C 200	V	<ul> <li>Understand the concept of food adulteration and detection.</li> </ul>
(本)	Paper-II	102.1
(3,0)	Physical	Understand the common thermodynamics terms. Types of systems
100	Chemistry	and varies thermodynamics processes.
- 29	(102)	<ul> <li>State and path functions and their differentiation.</li> <li>Understand the first law of thermodynamics</li> </ul>
	1000	102.2
	380	Understand gas equation and laws.
		Understand qualitative discussion of the Maxwell-Boltzmann
	1980	distribution.
	100	Understand ideal gas and real gases behaviors
		• Understand the Intermolecular forces, structure of liquid, structural
		difference between solid, liquid and gases.
		Properties of liquid like surface tension, viscosity, refractive index
		102.4
1		• Understand the concept of different types of surface all an arrays and
		<ul> <li>Understand the concept of different types of surface phenomenon and catalytic property, like Adsorption mechanism of adsorption, factor</li> </ul>
1		affecting adsorption. Difference between adsorption and absorption,
1		etc.
		Understand types of catalysis and enzymes.
1		Understand colloidal states of system, preparation of gels,
1		importance and application of colloids.

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	(101)	•	Understand the basic concept related to Matrices and solve the problem based on system of Linear equations
		101.3	
		•	Understand the relation between roots and coefficients and solve the problems based on Cubic and Biquadratic equations
		101.4	problems based on Cubic and Diquadratic equations
		101.4	William Loop Livery Manager To a control of
		•	Understand GCD and LCM with Diophantine Equation and solve the problems
	Mathematics-	102.1	
	II	•	Using Leibnitz's Rule for nth derivative of the product of two functions
	Differential	•	Identify Indeterminate forms and application of L' Hospitals Rule
	and Integral	102.2	
	Calculus (102)		Understand the concept of Partial Derivatives, Asymptotes and Envelopes
	(102)	102.3	Envelopes
	7 B	•	Understand the concept of Jacobians, Taylors series, Maxima and Minima and solve the problems.
	2011	102.4	and sorre the probability
	100	•	Identify the various types and methods to solve Integration and
1.44	11/11/11	(S.Y)	application of Reduction Formulae
	Zoology I &	101.1	- 10 1 1 C
6	11	•	To understand general characters and classification up to classes of
Likery	Paper-I		protozoa, structure and reproduction of <i>Paramoecium</i> , structure and
1075-0	Life and		life cycle of <i>Plasmodium</i> , parasitic Protozoans of Man (Entamoeba,
1.0	Diversity of		Trypanosoma, Giardia and Leishmania). Mode of infection and its
east 11	Animals –		control.
HK. II.	Non-chordates	101.2	Control.
- 11	(Protozoa to	101.2	
C 200			To understand the general characters and classification up to classes of
DREAT.	Annelida)	277	porifera, Structure, reproduction and development, Canal system in
-3-3	(101)	100	sponges, General characters and classification up to classes of
19.3	V-V		Coelenterata, structure and life cycle of Obelia, Polymorphism in
- 36	N. N.	100	hydrozoa.
100	1000	101.3	3 - T
	THOSE	•	To Understand the Helminthes: General characters and classification
	100	-	up to classes, Ascaris: External morphology, reproductive system and
			life cycle, Taenia solium: Structure and life cycle, Elementary idea of
	380		parasitic adaptations in helminthes.
		101.4	C 32 C 36
			To Understand the Annelida: General characters and classification up
			to classes, Leech: Morphology, digestive and urinogenital system,
			Trochophore larva and its significance, Vermiculture and its
			importance
	Paper-II	102.1	r
	Environmental	102.1	To understand the Atmosphere: Major zones and its importance
	Biology		* * * * * * * * * * * * * * * * * * * *
	•		composition of air, Hydrosphere: Global distribution of water, Physico-
	(102)		chemical characteristics of water, Lithosphere: Types of rocks
		102.2	formation of soil, Renewable and non-renewable energy sources.
		102.2	

To understand the bourbears of mistorial many and the properties of mistorial parks and sanctuaries – Tadoba, Kanha Bharatpur and Nagzira, Hot spots of biodiversity in India.			<ul> <li>Understand the Ecosystem - Definition and types, Detailed study of pond ecosystem, Food chain, food web and ecological pyramids, Energy flow in an ecosystem, Single channel, Y – shape and Universal model.</li> <li>102.3</li> <li>To understand the biodiversity and its conservation, Causes of reduction</li> </ul>
Acid rain, greenhouse effect, ozone depletion and global warming Sources, effect and control measures of water pollution, Sources effect and control measures of noise pollution, Toxic effect of heavy metals (lead, cadmium and mercury) – Bioaccumulation and biomagnification  Paper-I- Viruses, Prokaryotes, Algae and Biofertilizers (101)  Understand the nature of viruses, Ultra-structure and economic importance.  Understand the properties of Mycoplasma and its reproduction.  Understand general characteristics and reproduction in bacteria To understand general characteristics and classification of algae  To understand the to understand general structure of Cyanobacteria and its reproduction  Understand life cycle of Chara, Vaucheria, Ectocarpus, and Batrachospermum.  To understand the microbes used in biofertilizers.  Understand the microbes used in biofertilizers.  Paper-II  Fungi, Plant Pathology, Li chens, Bryophyta and Mushroom Cultivation (Utivation (102)  Pathogen study, control and causes of diseases: leaf curl of papaya, Citrus canker and red rot of sugarcane  Understand classification and general characteristics of Bryophyta.  Life history of Marchantia, Anthoceros and Funaria  To Study the nutritional and medicinal values of edible and non-edible mushrooms. Technology of mushroom cultivation  Study the fungal genera.  Study the fungal genera.  Study the fungal genera.  Study the fungal genera.  Study the plant pathological study.  Study of bryophytes and identification of its characteristics.  Preparation of mushroom beds.			of biodiversity, Wildlife conservation acts (1972 and 1984) Introductory study of national parks and sanctuaries – Tadoba, Kanha Bharatpur and Nagzira, Hot spots of biodiversity in India.
7 Paper-I Viruses, Prokaryotes, Algae and Biofertilizers (101)		025	Acid rain, greenhouse effect, ozone depletion and global warming Sources, effect and control measures of water pollution, Sources effect and control measures of noise pollution, Toxic effect of heavy metals
<ul> <li>Understand the Characteristics of fungi.</li> <li>Understand the reproduction and life cycle of Albugo, Muco, Puccinia and Cercospora.</li> <li>Pathogen study, control and causes of diseases: leaf curl of papaya, Citrus canker and red rot of sugarcane</li> <li>Understand classification and general characteristics of Bryophyta.</li> <li>Life history of Marchantia, Anthoceros and Funaria</li> <li>To Study the nutritional and medicinal values of edible and non-edible mushrooms. Technology of mushroom cultivation</li> <li>Study the fungal genera.</li> <li>Study the lichens, thallus structure and types of lichens.</li> <li>Plant pathological study.</li> <li>Study of bryophytes and identification of its characteristics.</li> <li>Preparation of mushroom beds.</li> </ul>	7 */	Paper-I- Viruses, Prokaryotes, Algae and Biofertilizers	<ul> <li>importance.</li> <li>Understand the properties of Mycoplasma and its reproduction.</li> <li>Understand general characteristics and reproduction in bacteria</li> <li>To understand general characteristics and classification of algae</li> <li>To understand the to understand general structure of Cyanobacteria and its reproduction</li> <li>Understand life cycle of Chara, Vaucheria, Ectocarpus, and Batrachospermum.</li> <li>To understand Scope and importance of Biofertilizers.</li> </ul>
Practical Course  • Study the lichens, thallus structure and types of lichens. • Plant pathological study. • Study of bryophytes and identification of its characteristics. • Preparation of mushroom beds.  Second- Semester	*	Fungi, Plant Pathology,Li chens, Bryophyta and Mushroom Cultivation	<ul> <li>Understand the reproduction and life cycle of <i>Albugo</i>, <i>Muco</i>, <i>Puccinia</i> and <i>Cercospora</i>.</li> <li>Pathogen study, control and causes of diseases: leaf curl of papaya, Citrus canker and red rot of sugarcane</li> <li>Understand classification and general characteristics of Bryophyta.</li> <li>Life history of <i>Marchantia</i>, <i>Anthoceros and Funaria</i></li> <li>To Study the nutritional and medicinal values of edible and non-edible</li> </ul>
		Practical	<ul> <li>Study the lichens, thallus structure and types of lichens.</li> <li>Plant pathological study.</li> <li>Study of bryophytes and identification of its characteristics.</li> </ul>
8 English The students will be able:			Second- Semester
	8	English	The students will be able:

		<ul> <li>To understand the values of dignity and courage through the characters of the text.</li> <li>To realize that the ascent of humanity, synthesis of science and spirituality, both are required.</li> <li>To apply phrasal verbs in their writings.</li> </ul>
9	Marathi	<ul> <li>विदयार्थ्यांनमध्ये साहित्य विषयक आवड निर्माण करणे</li> <li>वाचन संस्कृतीचा पुरस्कार करणे</li> <li>भारतीय संविधानाचे महत्व समजावून सांगणे</li> <li>मानवी मुल्यांची जपणूक करणे</li> <li>कविता लंखनाचे तंत्र अवगत करणे</li> <li>पर्यावरण विषयक जाग्ती निर्माण करणे</li> <li>व्यावहारीक मराठीचे महत्व समजावून सांगणे</li> </ul>
10	Chemistry Paper -I Organic Chemistry (201)	<ul> <li>To make student understand different organic compounds and the concept structure and bonding in organic compounds.</li> <li>Understand mechanism of organic reaction</li> <li>201.2 <ul> <li>Understand the concept of stereochemistry of organic compounds.</li> <li>To make the structure of Geometrical isomerism and conformational isomerism</li> </ul> </li> <li>201.3 <ul> <li>Many of the daily used materials are organic compounds and majority of them are hydrocarbons therefore this topic makes the concept regarding their information</li> </ul> </li> <li>201.4 <ul> <li>Basic of the alkane and alkynes with respect to their chemical point of view.</li> <li>To understand the aromaticity of organic compounds</li> </ul> </li> </ul>
	Paper-II Physical Chemistry (202)	<ul> <li>202.1 <ul> <li>To understand the thermodynamics of chemical reactions.</li> <li>Understand free energy functions like work function, Gibb's free energy etc.</li> </ul> </li> <li>202.2 <ul> <li>To understand the concept of phase equilibria. Statement of phase rule and term. Application of phase rule.</li> </ul> </li> <li>202.3 <ul> <li>Understand the concept of nuclear chemistry and molecular structure</li> </ul> </li> <li>202.4 <ul> <li>To Understand the concept of chemical kinetics and theories of chemical kinetics.</li> </ul> </li> </ul>
	Chemistry Practical course	Verify theoretical principles experimentally     Interpret the experimental data

I	I	1 -	Turning and discharge
		•	Improve analytical skills
		•	Correlate the theory and experiments and understand their importance
11	Physics	201.1	
11	Paper 1:	•	To understand the concept of linear and angular S.H.M., Damped
	Oscillations,		harmonic oscillator.
	Kinetic	201.2	
	theory of	•	To understand the concept of Forced oscillation with one degree of
	gases and		freedom and kinetic theory of gasses.
	Thermodyna	201.3	
	mics (201)	•	To understand the Transport phenomenon in gases, Zeroth and First law of thermodynamics and Cornet's Theorem.
		201.4	
		•	To understand second and third law of thermodynamics and
		- 4	Maxwell's general relationship and its applications.
	36	202.1	
	Paper 2:		To understand Newton's laws of gravitation and the concept of
	Gravitation,	and the same	Gravitational self-energy of the galaxy.
	Astrophysics,	202.2	Gravitational series of the galaxy.
1.0	Magnetism	202.2	Know the constituents of universe (Solar system, Stars, Galaxies) and
100	and		some physical aspects of the universe.
	Magnetostatics	202.3	some physical aspects of the universe.
4/	(202)	202.3	To understand the concents of Diamognetism. Dans magnetism and
790.6	) / X2=-7	•	To understand the concepts of Diamagnetism, Para magnetism and
	1 147	202.4	Ferromagnetism and their applications.
	1.552	202.4	
HC II.		•	To understand the Concept of magnetic field and to study various
			laws of magneto static and their applications.
*/	Physics Practical (203)	en'	Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.
	Mathematics-	201.1	7.70
12	I		Understand the concept of Solid Geometry.
100	Geometry,	201.2	ST TITLE AND
	Differential		Understand the concept of Families of curves and orthogonal
	and	77	trajectories.
	Difference	201.3	The state of the s
	Equations	•	Understand the Second order linear differential equations with
	(201)	- 3	constant coefficient.
	,	201.4	
		•	Understand the basic concept of Difference equation.
	Mathematics-	202.1	
	II	•	Students learn the concept of Vector differentiation and Differential
	Vector		Geometry.
	Analysis	202.2	·
	(202)	•	Learn the evaluation of area by double Integral and Relation betweer
			Beta and Gamma function.
		202.3	
			Apply integration to evaluate over Line, surface and volume.
		202.4	
	l		

I		77.1 . 14.0
		<ul> <li>Understand the Greens theorem in the plane and its application, Gauss</li> <li>Divergence theorem and Stokes Theorem</li> </ul>
13	Zoology I & II Paper -I Life and Diversity of Animals –	<ul> <li>To understand the, Arthropoda: General characters and classification up to classes, Cockroach: Mouth parts, digestive system and reproductive system, Insects as Vectors: Mosquito, Housefly, Sandfly, Tse-Tse fly, Study of crustacean larvae: Nauplius, Zoea and Megalopa; Social behavior in honey bees.</li> </ul>
	Non-chordates (Arthropoda to Hemichordata) (201)	<ul> <li>To understand the Mollusca: General characters and classification up to classes, <i>Pila</i>: Morphology, digestive, respiratory and reproductive system, Pearl formation in Mollusca, Molluscan larvae: Glochidium and Veliger.</li> </ul>
146	*/	<ul> <li>To understand the Echinodermata: General characters and classification up to classes, <i>Asterias</i>: External features and digestive system, Water vascular system and locomotion in Starfish, Echinoderm larvae: Bipinnaria and Auricularia.</li> <li>201.4</li> </ul>
	1/2	<ul> <li>To understand Hemichordata: General characters and phylogeny, Balanoglossus: External features and digestive system, Reproduction in Balanoglossus, Tornaria larva, Affinities of Balanoglossus.</li> </ul>
k	Paper-II Cell Biology (202)	To understand Ultrastructure of prokaryotic and eukaryotic cell,     Plasma membrane: Structure- Fluid Mosaic Model and functions,     Endoplasmic reticulum: Types, ultrastructure and functions, Golgi complex: Ultrastructure and functions.
*/	TH	To understand Ultrastructure of mitochondria, Oxidative phosphorylation – Glycolysis and Kreb's cycle, Electron Transport Chain and terminal oxidation, Lysosome: Structure, polymorphism and functions.  202.3
	*	To understand the Nucleus: Ultrastructure of nuclear membrane,     Structure and functions of nucleolus, Chromosome: Structure and     types, structure of nucleosome, Giant chromosomes: Lamp-brush and     polytene chromosome.
		<ul> <li>To understand the Ribosome: Structure, types, Lake's model and functions, Somatic cell division: Cell cycle and Mitosis, Meiosis (different phases and significance), synaptonemal complex, Cellular aging and cell death, Elementary idea of cancer and its causative agents.</li> </ul>
14	<b>Botany</b> Paper-I	<ul> <li>To make student understand fossils, Pseudo fossils, and its importance</li> <li>Knowledge about types of fossils.</li> </ul>

	Paleobotany, Pteridophytes ,Gymnosper msand Soil analysis		Details of Geological time scale.  Differentiation among the types of fossils.  Study the general characteristics of Pteridophytes and its classification.  Life history of Selaginaella. And Equisetum.  Classify the Gymnosperms, its characteristics and economic importance.  Understand the fossil gymnosperm.  Study the life cycle of Cycas and Pinus  Skill development and soil analysis.  Identification of types of soil on the basis of its color and texure.  Study the physical properties of soil.  Understand the pH of soil and nitrogen availability in it.
* */	Botany Paper-II Morphology of Angiosperms and Floriculture		Study the morphological characteristics of plants.  Identification of morphological characters of plants.  Study the modification occur in root, stem and leaf.  Study the reproductive morphology.  Study the types of inflorescences.  Study the calyx, corolla and Androecium  Understand the structure of gynoecium.  Study the fruit and its types.  Develop the skills of floriculture and cultivation.  Method of cultivation.
A TH	Botany Practical course	E - 9	Study of different root and stem modification and branching patterns. Study the types of leaf and its phyllotaxy, venation and modification. Understand the flower structure and position of calyx, corolla, androecim and gynoecium.
2.7	19	100	Third- Semester
15	Chemistry- I Paper-I Inorganic Chemistry (301)	301.1 301.2 301.3 301.4	Understand the concept of molecular orbital theory and VSEPR theory  Understand the properties of d and f block elements.  Understand the role of nonaqueous solvents.  Understand concept of errors and evaluation in chemical analysis.  Understand the concept of chemistry of Lanthanides and Actinides serious.
	Paper-II Organic Chemistry (302)	302.1	Understand the structure and chemical bonding in aryl, alkyl halides, aldehydes  Understand the structure and chemical bonding in alcohols and phenols.

	1	302.3	
		302.3	Understand the nomenclature, structure of the carbonyl group,
			synthesis of aldehydes and ketones
		302.4	symmetry and alternative
		•	Understand chemical reaction of carboxylic acids and its derivatives.
		303	·
	Chemistry	•	Verify theoretical principles experimentally
		•	Interpret the experimental data
	Practical	•	Improve analytical skills
	Course	•	Correlate the theory and experiments and understand their importance
	Physics	301.1	
16	Paper- 1	501.1	Understand the concept of group and phase velocities, formation of
	Sound		standing waves and diagrammatic introduction of human ear and its
	Waves,	100	responses.
	Applied	301.2	
	Acoustic,	•	Understand the working of transducers and their characteristics and
	Ultrasonic	201.2	the concept of acoustic and its applications.
	and Power	301.3	Had water dath a new dustion and small actions of ultrasonic manage
	Supply	301.4	Understand the production and applications of ultrasonic waves.
1.00	(301)	301.4	II 1 4 14 4 5 15 15 15 15 15 15 16
- 49	(301)	•	Understand the concept of voltage regulation and working of half,
		202.4	full and bridge rectifier.
John S	Donos II	302.1	
1000	Paper -II	•	Understand the concept of interference of light through thin film
1.6	Physical	•	Apply the concept of interference of light through thin film ir
52 III	Optics and		wavelength determination.
25.11	Electromagneti	302.2	
- 1	c Waves (302)	•	Understand the concept of diffraction, Resolving Power of grating and Rayleigh's criterion for resolution.
Date V		302.3	111
24.7	V 115.00	•	Understand the concept of polarization and double refraction.
	VW mm	302.4	TO HAVE SUMMED UNIT CONTROL OF POSITION WHITE DO NOT POSITION OF P
- 36	100	•	Understand the origin and characteristics of EM waves, Physical
	100	15.5	significance of Maxwell's equations, Characteristics impedance of
	78.00		dielectric and Poynting theorem.
		303	and a symmetric subsection
	Physics	-	Apply and demonstrate the theoretical concepts of Physics and to
	Practical (303)		develop scientific attitude.
		- 1	de , etop beteindte diddide.
	<b>Mathematics-</b>	301.1	
17	I	•	Students understand First order partial differential equation and
	Partial		solutions of pfaffian differential equation.
	Differential	301.2	
	equation	•	Learn about Integral surface passing through a given curve.
	and	301.3	
	Calculus of	•	Understand the concept of PDEq of second order and Linear PDEq with
	Variation		constant coefficient.
	(301)	301.4	
	,	•	Understand the concept of Calculus of Variation.
		<u> </u>	A

i	1	
	Mathematics-	302.1
	Modern	<ul><li>Understand the concept of Group theory and properties.</li><li>302.2</li></ul>
	Algebra	<ul> <li>Students understand the concept of Normal subgroup, Quotient group.</li> </ul>
	(302)	<ul> <li>302.3</li> <li>Students understand the definition and examples of Ring theory.</li> </ul>
		302.4
		Students develop more knowledge in Ring theory
	Zoology I &	301.1
18	Paper-I Life and Diversity of	<ul> <li>Understand the Protochordata: General characters and classification up to order, <i>Herdmania</i>: Structure, digestive system, ascidian tadpole and retrogressive metamorphosis, <i>Amphioxus</i>: Structure, digestive system,</li> <li>circulatory system, sense organs and protonephridia, Agnatha: General</li> </ul>
	Animals -	characters of Cyclostomata ( <i>Petromyzon</i> and <i>Myxine</i> ).
	Chordates	301.2
26	(Protochordate to Amphibia) (301)	<ul> <li>Understand the Pisces: Salient features of Chondrichthyes and Osteichthyes, Origin of paired fins in fishes, Migration and Accessory respiratory organs in fishes, Amphibia: General characters and classification up to order, Parental care and Neotony in Amphibia.</li> </ul>
110 /	7 1 ADW	301.3
*/	1 de 1	<ul> <li>Understand the Gametogenesis and type of eggs, Fertilization of egg, Post fertilization development of fish, Types of scales of fishes, Development of placoid scales.</li> <li>301.4</li> </ul>
*	तम	<ul> <li>Understand the Frog Embryology - Cleavage, blastulation and gastrulation, Fate map, Morphogenetic movements in gastrula of frog, Development of respiratory organs in frog, Development of Aortic arches of frog</li> </ul>
	Paper-II	302.1
38	Organic Zoology (302)	<ul> <li>Understand the Mendelian Principles- Dominant recessive relationships, Mendelian laws, Interaction of genes- Epistasis - dominant and recessive, codominance, incomplete dominance, Quantitative genetics – Polygenic traits, inbreeding and outbreeding, hybrid vigor, Extracellular genome – Presence and functions of mitochondrial DNA, plasmids.</li> <li>302.2</li> </ul>
		<ul> <li>Understand the concept of Cytoplasmic inheritance- <i>Kappa</i> particles in <i>Paramecium</i>, CO2 sensitivity in <i>Drosophila</i>, milk factor in mice, Linkage and crossing over – Basic concepts of linkage, types and theories, Concepts of genes – Cistron, muton and recon, Genetic disorders in human beings – Haemoglobin disorders – Thalassemia and Sickle cell anemia. Metabolic disorder: Phenylketonurea.</li> <li>302.3</li> </ul>
		<ul> <li>Understand the concept of Sex determination – ZZ, XY, XO, ZW</li> </ul>
		pattern, Sex determination in <i>Drosiphila</i> – Genic balance theory, Environmental sex determination in <i>Bonellia</i> , Chromosomal
		aberrations: addition, deletion, duplication and inversion, Gene
		mutations- Spontaneous and induced mutations, mutagenic agents,

		Disorders related to chromosomal number- Turner syndrome, Klinefelter syndrome and Down syndrome.  302.4  • Understand the Lethal genes – Concepts and consequences, Population genetics: Basic concepts in population genetics, Hardy Weinberg equilibrium and its significance, Genetic counseling – Introduction, purpose, hereditary diseases and disorders, Applied genetics - DNA fingerprinting, amniocentesis, sperm banks, karyotyping
19	Botany Paper - I Angiosper m Systematics , Embryolog y and Indoor Gardening (301)	<ul> <li>Understand the study of angiosperms, Fossil angiosperms, Angiosperm taxonomy.</li> <li>Understand the nomenclature.</li> <li>Study the trends in taxonomy.</li> <li>Understand the classification system of Benthem and Hooker, Engle and Prantle.</li> <li>Study the types of pollinaton and its significance</li> <li>Study the structure of anther, pollen grain and male gametophytic development.</li> <li>Study the types of ovules and female gametophyte.</li> <li>Understand the fertilization process.</li> <li>Study the skills of landscaping and gardening.</li> </ul>
X X	Paper-II Angiosperm anatomy and Horticulture (302)	<ul> <li>Understand anatomical features of plants and its organs.</li> <li>Study the tissue its types and functions.</li> <li>Study the primary and secondary growth I stem and root.</li> <li>Study the periderm growth rings, sap heartwood, leaf anatomy.</li> <li>Study the Senescence and Abscission.</li> <li>Study the techniques of horticulture, methods of propagation.</li> <li>Learn the technique of bonsai preparation.</li> </ul>
	Botany Practical Course	<ul> <li>Study the simplest and complex tissue from permanent micro preparation.</li> <li>Identification of types of vascular bundle.</li> <li>Anatomy of Dicot and Monocot stem with temporary or double stained</li> <li>Study the internal structure of dicot and monocot leaf.</li> </ul>
		Fourth- Semester
20	Chemistry -I Paper-I Inorganic Chemistry (401)	<ul> <li>401.1</li> <li>Understand the properties of coordination compounds. Chelates: classification and their application and valance bond theory of complexes.</li> <li>401.2</li> </ul>

	401.3	Understand the concept of isomerism in coordination compounds.  Concept of oxidation and reduction and balancing of redox reaction.  Understand the concept of colorimetry and spectrophotometry.  Understand the concept of separation technique like chromatography ion exchange and solvent extraction.  Understand the concept of inorganic polymers.
Paper-II Physical Chemistr (402)	y •	Understand solid state and their classification and their laws.  To understand the concept of determination of crystal structure.
*	402.2 • 402.3 • 402.4	Understand electrochemistry of reversible and irreversible cells. Understand the concept of electrical transport and transport number.  Use spectroscopy for chemical analysis. Understand types of spectroscopies.  Understand the concept of quantum chemistry and wave function.
Chemistr Practical Course	403 • • • • • • • • • • • • • • • • • • •	Verify theoretical principles experimentally Interpret the experimental data Improve analytical skills Correlate the theory and experiments and understand their importance.
Physics Paper -1 Solid Star Physics, 2 and Laser (401)	X-ray	Understand the basic concept of crystallography, find various lattice parameters, find Miller Indices of the given plane and draw planes from the set of Miller Indices.  Understand main feature of continuous X-ray spectra and Characteristics X-ray spectra Apply Moseley's law to determine wavelength of X-ray.  Understand the basic concept of solid-state physics. Apply Bragg's law for wavelength determination and simple cubic structure determination. Calculate Miller indices of the given plane and identify the orientation of the plane from the given set of Millar indices.  Understand the concepts of LASER emission. Understand the construction and working of various types of LASER
Paper-II Solid Star Electronic and Mole Physics (402)	te •	Understand the construction and working and characteristics of various solid-state devices.  Understand the construction and working and characteristics of various FETs.

		•	Understand the concept of molecular physics.
		402.4	Understand and apply the Raman spectroscopy.
	Physics Practical (403)	403	Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.
	Mathematics-	401.1	develop scientific attitude.
22	I Real Analysis (401)	401.2	Understand the concept of ordinary Differential Equations in more thar two variables.
	(401)	401.2	Understand the Definition, types and examples of Sequences.
		401.4	Use Tests for convergence.
	3	401.4	Understand the concept of Riemann Integration and properties of integrable functions.
100	Mathematics- II Mathematic al Methods	402.1 • 402.2	Students learn about Power series solutions.
41	(402)	402.3	Understand the Legendres and Bessels Function  Understand the concept of Laplace tranceformation and properties.
1	1 2	402.4	Understand the concept of Fourier series with Even and Odd Functions
23	Zoology I & II Paper-I Life and Diversity of Animals –	401.1	Understand the Reptilia- Classification based on temporal vacuities, Poison apparatus, biting mechanism, snake venom and its importance, Aves – Comparison of Ratitae and Caranitae, Flight adaptations and migration, Mammals – General characters of Prototheria, Metatheria and Eutheria.
- 39	Chordates (Reptilia, Aves and Mammals) (401)	401.2	Understand the Modern theories of evolution: Darwinism and Neo-Darwinism, Adaptations – Cursorial, Aquatic, Terrestrial, Fossorial and Volant, Introduction to genetic basis of evolution – Species Deme, Variation, Races in Man (Caucasoid, Negroid, Mongoloid and Australoid).
		401.3	Understand the Comparative account of aortic arches and heart in Reptiles, Birds and Mammals, Structure of hen's egg, Development of chick up to premitive streak stage, Development of extra embryonic membranes in chick and functions.
		401.4	Understand the Frog Embryology - Cleavage, blastulation and gastrulation, Fate map, Morphogenetic movements in gastrula of frog, Development of respiratory organs in frog, Development of Aortic arches of frog.
	Paper-II	402.1	

	Molecular Biology and Immunology (402)	<ul> <li>Understand the DNA: Structure of DNA, forms of DNA, properties of DNA, DNA as a genetic material, RNA: Structure of RNA, types of RNA, RNA as a genetic material, Prokaryotic and eukaryotic gene structure, Recombination in Bacteria: Bacterial transformation – Griffith's experiment, Conjugation in bacteria, transduction.</li> </ul>
* * * *	* * * * * * * * * * * * * * * * * * *	<ul> <li>Understand the concept DNA replication: Semiconservative model, Meselson Stahl experiments. Process of replication – origin of replication, concept of replication, directionality of replication, Genetic code: Characteristics of genetic code, Wobble hypothesis, Protein synthesis: Transcription mechanism Initiation, elongation and termination of transcription. Translation – activation of amino acids, transfer of activated amino acids to tRNA, Initiation, elongation and termination of polypeptide chain; inhibitors of protein synthesis, Gene regulation models - Lac operon and tryptophan operon.</li> <li>Understand the Concepts of immunity – Innate and acquired immunity, organs of the immune system, Antigen - Structure, diversity, functions and types of antigens, Antibody- Structure, types and functions, Antigen-antibody interaction – Precipitation and agglutination.</li> <li>Understand the Types of immune response: B cell response (antibody mediated), T cell response (cell mediated), Complement system: Basic concepts of complement cascades, classical, alternative and MBL pathways, implications of complement system in immune defense, Cytokines- General account on cytokines, Cytokine related diseases, Autoimmunity and immunodeficiencies- Autoimmune diseases and their treatment, AIDS and other immunodeficiencies</li> </ul>
	4	
24	Botany -I Paper-I Cell biology, Plant Breeding, Evolution, and Technology (401)	<ul> <li>Understand the brief account of cell theory. Comparison between eukaryotic and prokaryotic cell.</li> <li>Structure and function of cell wall, Endoplasmic reticulum, Golgi complex, plasma membrane, Ribosome and Vacuole.</li> <li>Understand the structure and functions of chloroplast, Mitochondria and Nucleus.</li> <li>Understand the chromosome morphology, Molecular organization of chromosomes.</li> <li>Understand the sex chromosomes and cell division process.</li> <li>Understand plant breeding, methods of plant breeding.</li> <li>Understand the biostatistics and determine the Mean, Mode, Median.</li> <li>Understand the evolution process.</li> <li>Understand the seed development technology which is used to increase a commercial value of seeds.</li> </ul>

Paper-II Genetics, Molecular Biology and Plant Nursery Pant Nursery Pant Nursery Pant Nursery Pant Nursery Practical Course  Course  Chemistry-I Organic Chemistry (S01)  Chemistry (S01)  Paper-II Organic Chemistry (S01)  Understand the concept of pant nursery.  Paper-II Physical Chemistry (S02)  Understand duantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.  Understand Electromagnetic and Infrared absorption spectroscopy  Understand types of reversible electrodes  502.2  Understand quantum chemistry and various types of cells.  Understand types of reversible electrodes  502.2  Understand the concept of Photochemistry.  To study Raman Spectroscopy.		
Practical Course Prove the Mendel's law of segregation with help of color beads. Prove the Mendel's law of independent assortment. Study the different method of vegetative propagation. Study the method of soil sterilization for plant nursery.  Fifth- Semester   Chemistry I Paper-I Corganic Chemistry (501) Chemistry (501)  Duderstand the concept of organic compounds of nitrogen and amines. Understand heterocyclic compounds and their structure Soll.3 Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc. Understand reaction and structure of organometallic compounds  Soll.4  To study Spectroscopy. To understand Electromagnetic and Infrared absorption spectroscopy  Paper-II Physical Chemistry (502) Understand electrochemistry and various types of cells. Understand types of reversible electrodes  Soll.3 Understand quantum chemistry and molecular orbital theory.  Soll.3 Understand the concept of Photochemistry. To study Raman Spectroscopy.	Genetics, Molecular Biology and	<ul> <li>Understand the linkage and crossing over process.</li> <li>Understand the Mutation, chromosomal aberrations and variation in chromosome number.</li> <li>Understand the DNA damage and repair process.</li> <li>Study the concept of DNA and RNA.</li> <li>Understand the concept of gene, genetic code.</li> <li>Understand the process of protein synthesis and regulation of gene interaction.</li> <li>Study the skill development.</li> <li>Develop the skills related with plant nursery.</li> </ul>
Chemistry- I Paper-I Organic Chemistry (501)  Chemistry (501)  Discrete Chemistry (502)  Chemistry (502)  Chemistry (502)  Chemistry (501.2  • Understand heterocyclic compounds and their structure 501.3  • Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.  • Understand reaction and structure of organometallic compounds  501.4  • To study Spectroscopy. • To understand Electromagnetic and Infrared absorption spectroscopy  Paper-II Physical Chemistry (502)  • Understand electrochemistry and various types of cells. • Understand types of reversible electrodes  502.2  • Understand quantum chemistry and molecular orbital theory.  502.3  • Understand the concept of Photochemistry. • To study Raman Spectroscopy.	Practical	<ul> <li>Prove the Mendel's law of independent assortment.</li> <li>Study the different method of vegetative propagation.</li> </ul>
Chemistry- I Paper-I Organic Chemistry (501)  501.2  Understand heterocyclic compounds and their structure  501.3  Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.  Understand reaction and structure of organometallic compounds  501.4  To study Spectroscopy.  To understand Electromagnetic and Infrared absorption spectroscopy  Paper-II Physical Chemistry (502)  Understand electrochemistry and various types of cells.  Understand types of reversible electrodes  502.2  Understand quantum chemistry and molecular orbital theory.  502.3  Understand the concept of Photochemistry.  To study Raman Spectroscopy.	3//2	Fifth- Semester
Physical Chemistry (502)  Understand electrochemistry and various types of cells.  Understand types of reversible electrodes 502.2  Understand quantum chemistry and molecular orbital theory. 502.3  Understand the concept of Photochemistry.  To study Raman Spectroscopy.	Paper-I Organic Chemistry	<ul> <li>Understand the concept of organic compounds of nitrogen and amines.</li> <li>501.2 <ul> <li>Understand heterocyclic compounds and their structure</li> </ul> </li> <li>501.3 <ul> <li>Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.</li> <li>Understand reaction and structure of organometallic compounds</li> </ul> </li> <li>501.4 <ul> <li>To study Spectroscopy.</li> </ul> </li> </ul>
• To understand colligative properties and macromolecules.	Physical Chemistry	<ul> <li>Understand electrochemistry and various types of cells.</li> <li>Understand types of reversible electrodes</li> <li>502.2</li> <li>Understand quantum chemistry and molecular orbital theory.</li> <li>502.3</li> <li>Understand the concept of Photochemistry.</li> <li>To study Raman Spectroscopy.</li> <li>502.4</li> </ul>
• Verify theoretical principles experimentally	Chemistry	

1	Practical	١ .	Interpret the experimental data.
	Course		Improve analytical skills
	(503)	•	Correlate the theory and experiments and understand their importance
	Paper-I	501.1	correlate the theory and experiments and understand their importance
26	Atomic	301.1	Understand Vector atom Model, the concept of space quantization
	Physics, Free		Zeeman Effect and L-S and J-J coupling.
	Electron	501.2	Zeeman Effect and E-3 and 3-3 coupling.
	Theory and	301.2	Apply free electron theory and band theory of solid to classify solids as
	Statistical		conductor, semiconductor and insulator.
	Physics	501.3	conductor, semiconductor and insurator.
	(501)	301.3	Understand and apply Maxwell-Boltzmann statistics.
	(2 2 2)	501.4	Onderstand and appry Maxwen-Bonzmann statistics.
		301.4	Understand and apply Bose-Einstein statistics and Fermi-Dirac statistics
	Paper-II	502.1	Onderstand and appry Bose-Einstein statistics and remin-Dirac statistics
	Quantum	302.1	Understand the basics of quantum mechanics and apply it to explain the
	Mechanics,		phenomena like black body radiation and Compton Effect.
	Nanomaterial	502.2	phenomena like black body fadiation and Compton Effect.
	s and	302.2	Understand and apply Schrodinger's equation to free particle in a one
144	Nanotechnol	CCO.	and three dimension.
1.07	ogy	502.3	and three difficusion.
77. 3	(502)	302.3	Understand the basics of nanotechnology.
industry)	(0,2)	502.4	Onderstand the basics of nanotechnology.
25.9	1 55	302.4	Understand the synthesis and characterization techniques of nanc
1.0	1.556		materials.
30	1.00	503	materials.
200	Physics	503	Apply and demonstrate the theoretical concerts of Physics and to
- 3.40	Practical (503)		Apply and demonstrate the theoretical concepts of Physics and to
Test V	(0.00)		develop scientific attitude.
-1-7	Mathematics-	501.1	HITCHING THE PROPERTY OF THE
27	I I	•	Understand the concept of Fourier series.
- 36	Analysis	501.2	V
100	(501)		Understand the concept of Riemann-Stieltjes integral.
	2000	501.3	
	THE SECTION	•	Understand the concept of Analytics Functions.
		501.4	
	95	•	Students learn about Mobius Transformation
	<b>Mathematics-</b>	502.1	- A-3 (T)
	II	•	Students deal with the definition, properties and examples of countable
	Metric		and uncountable sets and understand the metric space.
	spaces,	502.2	•
	Complex		
	Integration & Algebra	•	Understand the concept of Completeness, Compactness and
	(502)	502.3	Connectedness.
	(= (=)	502.3	Understand the concept of Pine
			Understand the concept of Ring Analyze and demonstrate examples of ideals and quotient rings.
			maryze and demonstrate examples of ideals and quotient inigs.
		I	
		502.4	

•	•	
		<ul> <li>Understand the basic concept of Complex Integration</li> <li>Evaluate integrals along a path - directly from the definition and also via the Fundamental Theorem of Contour Integration and Cauchy's Theorem</li> </ul>
28	Zoology I & II Paper-I General Mammalian Physiology –I (501)	<ul> <li>Understand the Enzymes – Distribution and chemical nature of enzymes, General properties of enzymes, Classification of enzymes, Factors affecting enzyme activity.</li> <li>Understand the Structure and functions of digestive glands - (Salivary, Gastric, Intestinal, Liver and Pancreas), Gastrointestinal hormones, Digestion and absorption of proteins, carbohydrates and lipids, Vitamins- Fat soluble and water-soluble vitamins; Sources, deficiency and diseases.</li> <li>Understand the Respiratory pigments - Types, distribution and properties, Mechanism of Respiration, Transport of O2 and CO2, Respiratory disorders and effects of smoking.</li> <li>Understand the Composition and functions of blood Placed electrics.</li> </ul>
te!	1/20	<ul> <li>Understand the Composition and functions of blood, Blood clotting –         Intrinsic and extrinsic factors, blood groups and Rh factor, Cardiac cycle, E.C.G. and Blood pressure.     </li> </ul>
* *	Paper-II Physical Zoology (502)	<ul> <li>Understand Site selection and construction, Pre stocking and post stocking management of nursery, rearing and stocking ponds, Breeding of fishes by bund and Chinese hatcheries. Induced breeding by hypophysetion. New generation drugs in induced breeding, Brief study of freshwater aquaculture system – Polyculture, cage culture, sewage fed fish culture, integrated fish farming, Fish products and byproducts, Fish preservation.</li> <li>502.2</li> <li>Understand the Prawn culture and Pearl culture, Fabrication and setting up of aquarium and its maintenance, Breeding of aquarium fishes – Live bearers and egg layers, Diseases caused by fungi, bacteria, protozoa and helminthes.</li> <li>502.3</li> <li>Understand the concept Chemical control: Insecticides - Pyrethroids, carbomate and HCN – mode of action, merits and demerits, Biological control – Biological agents – predators and parasites; merits and demerits, Crop pest: Life cycle, damage and control of Cotton spotted boll worm -Earias vitella,Stored grain pest- Rice Weevil, Sitophilus oryzae, Animal pest: Life cycle, damage and control of – House fly – Musca nebulo, Stable fly – Stomoxys calcitrans.</li> </ul>
		<ul> <li>Understand the Sericulture- Types of Silkworm. Life cycle and rearing of mulberry silkworm, <i>Bombyx mori</i>, Life cycle and rearing of non mulberry silkworm (Tasar), <i>Antheraea mylitta</i>; Brief idea of coccon</li> </ul>

		importance, Lac culture – Lac insect, <i>Laccifer lacca</i> - Life cycle, Lac processing, Lac products and Economic Importance.
29	Botany Paper-I Plant physiology, Mineral Nutrition and Hydrophonic s	<ul> <li>Understand water relation and its significance.</li> <li>Understand the Osmosis, Diffusion, Osmotic Pressure.</li> <li>Understand the ascent of sap.</li> <li>Understand the transpiration, phloem transport and mineral uptake.</li> <li>Understand the photosynthesis process, photosynthetic pigments.</li> <li>Understand the light and dark reaction of photosynthesis.</li> <li>Understand the respiration and its mechanism.</li> <li>Understand the fermentation process.</li> <li>Understand the nitrogen fixation by symbiotic and non-Symbiotic mechanism.</li> <li>Study the pant movements and photoperiodism.</li> <li>Study the circadian rhythms and Biological Clock.</li> <li>Understand the mineral nutrition, source and types.</li> <li>Study the role and deficiency symptoms Macronutrients and Micronutrients.</li> <li>Study the hydroponics, advantages and disadvantages of hydroponics.</li> </ul>
* *	Plant Ecology and Organic Farming	<ul> <li>Understand the concept of Ecology.</li> <li>Study the climatic, Edaphic and Physiographic factors.</li> <li>Study the ecosystem, components of Ecosystem.</li> <li>Understand the food chain, food web and ecological pyramids.</li> <li>Study the Autecology and Synecology.</li> <li>Understand the process of succession.</li> <li>Study the plant adaptations.</li> <li>Study the Biogeochemical cycles.</li> <li>Develop the skills of organic farming.</li> <li>Understand the methods of recycling of biodegradable kitchen, agriculture and industrial waste.</li> <li>Study to prepare organic manure.</li> </ul>
	Botany Practical	<ul> <li>Determining the Frequency, Density, and Abundance of community by Quadrate Method.</li> <li>Determining the homogeneity of vegetation by Raunkier's frequency.</li> <li>Study the frequency of herbaceous species in grassland to compare the frequency distribution with Raunkier's standard frequency diagram.</li> <li>Study the soil profile of different locations near by area.</li> <li>Study the salinity of different water samples.</li> </ul>
		Sixth- Semester
	Chemistry- I	601.1
30	Paper-I	Understand Metal ligand bonding in Transition Metal complexes.

	Inorganic	•	Electronic spectra of Transition Metal Complexes.
	Chemistry	601.2	
	(601)	•	Understand Magnetic Properties of Transition metal Complexes.
		(01.2	To study thermodynamic and kinetic aspect of metal complexes.
		601.3	** 1
		•	Understand organometallic chemistry.
		•	Understand properties and structure of metal carbonyls
		601.4	
		•	To study Bio-organic chemistry
		•	Understand the concept of s Hard and Soft acids and bases.
	Paper-II	602.1	
	Organic	•	Understand NMR Spectroscopy
	Chemistry	602.2	refer
	(602)	•	Understand Organic Synthesis via Enolates.
	-36	•	Carbohydrates: classification, reaction and mechanisms.
	11 15	602.3	
	帯シニ	•	Understand Amino acids, peptides and nucleic acids. To study Fats,
	11	602.4	oil and detergents.
1.46	11/1/11/11	002.4	Understand synthetic dyes, synthetic drugs, synthetic polymer
	Chemistry		Verify theoretical principles experimentally
7	Practical		Interpret the experimental data
John J.	Course		
1000	(603)	•	Improve analytical skills
1.0	(003)	•	Correlate the theory and experiments and understand their
		c01.1	importance
31	Paper-I	601.1	
31	Relativity,	•	Understand the postulates of the special theory of relativity.
Date V.	Nuclear Nuclear		Apply the concept of relativity to explain Length contraction, Time
377.3	Physics and	#4 F	dilation, Velocity addition theorem, Variation of mass with velocity
1	Bio Physics	601.2	Mass energy equivalence.
- 36	(601)	601.2	
1.79	(001)		Understand the concept of nuclear physics.
	1000	601.3	YES THE MINE SHOULD BE SEEN TO SHOULD BE
	1000	•	Apply the concept of nuclear physics to explain various decay processes
		601.4	
	380	•	Understand the Principle, Construction and working of different bid
			instruments.
	D 17	602.1	The state of the s
	Paper-II	•	Understand the operations and applications of operational amplifiers.
	Electronics,	602.2	
	Fiber	•	Understand the various basic structures of optical fibers and basic
	Optics,		concept involved in propagation of light waves through optical fiber.
	Communica tion and	602.3	
		•	Understand the concept of amplitude modulation and frequency
	Digital		modulation.
	Electronics (602)	603.4	
	(602)	•	Understand various number systems.
		•	Construct the truth tables for various logic gates.
		•	Verify De Morgan's theorem
		<u> </u>	

	Physics	603	
	Practical (603)	•	Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.
	Mathematics-	601.1	develop scientific attitude.
32		001.1	II 1 4 14 4 60 A 4 11
32	I	-	Understand the concept of Group Automorphism.
	Abstract	601.2	
	Algebra	•	Understand definition and examples of vector spaces.
	(601)	601.3	
		•	Learn about algebra of linear transformation.
		601.4	
		•	Find range, rank, kernel and nullity of matrix and also study about Inner
			product spaces
	<b>Mathematics-</b>	602.1	and the Confe
	II	•	Study the Newtonian Mechanics and understand the concept special
	Special Theory	100	theory of relativity.
	of Relativity	602.2	
	(602)	002.2	Learn the Lorentz transformation and consequences.
	(002)	602.3	Learn the Lorentz transformation and consequences.
1.50	3 70 M S	002.3	Understand the concent of Tangers and Cases. Time atmesting
- 19	$YY \times X$	602.4	Understand the concept of Tensors and Space –Time structure.
		602.4	
John J.	1 1 10 10 10	•	Study the Mass Energy Equivalence, Energy momentum Tensor and
75.7	1 82		Maxwell's Equation of Electromagnetic theory in Vacuum
1.7	Zoology I &	601.1	
33	II	•	Understand the Types of neurons, E.M. structure of neuron,
HK. II.	Paper-I		Conduction of nerve impulse, Ultrastructure of striated muscle, Sliding
			filament theory of muscle contraction, Properties of muscles (Twitch,
C 0 10	General		Tetanus, Tonus, Summation, All or None Principle, Muscle fatigue)
DEA.	Mammalian	777	THE CONTRACTOR OF THE SECOND
-2.5	Physiology - II	601.2	THE RESERVE THE PARTY OF THE PA
	V.V	•	Understand Structure of uriniferous tubule, Mechanism of urine
- 36		100	formation, Counter – current mechanism, Normal and abnormal
10.77		11.5	constituents of urine; Elementary idea of dialysis.
	77/07/	601.3	constituents of urine, Elementary faca of diarysis.
	100	001.5	Understand the Structure and functions of pituitary gland, Structure
			and functions of thyroid and parathyroid gland, Structure and functions
	380		
		(01.4	of adrenal gland, Structure and functions of pineal gland.
		601.4	and and the second
		•	Understand the Oestrous and menstrual cycle, Male and female sex
			hormones, Causes of infertility in male and female, Contraceptives –
			Mechanical and hormonal; <i>In-vitro</i> fertilization
	Paper-II		
	Applied	602.1	
	Zoology –II		** 1 · 11 G
	Biotechniques,	•	Understand the Concepts of sterilization: Filtration, autoclaving, dry
	Microtechniqu		heat sterilization, wet sterilization and radiation, Separation of
	e,		biomolecules: Centrifugation (Sedimentation, density gradient);
	Biotechnology, Bioinformatics		Chromatography (Elementary idea of thin layer, gel filtration and ion
	and		exchange - Principles and applications), Electrophoresis: Agarose gel
	Biostatistics)		
	2100000000	1	

	(602)	electrophoresis, SDS-PAGE, Principles of colorimeter and spectrophotometers.
		602.2
		<ul> <li>Understand the concept of Fixation, dehydration, clearing, embedding &amp; section cutting, Difficulties encountered during section cutting (causes and remedies), Double staining with Haematoxylin and Eosin, Histochemical staining techniques for carbohydrates (Periodic acid schiff), proteins (Mercury-bromophenol blue) and lipids (Sudan black-B).</li> </ul>
		602.3
	*	<ul> <li>Understand the Basic concepts in recombinant DNA technology, Gene isolation method- Shotgun cloning, Isolation of gene- DNA manipulation enzymes: Nucleases, ligases, polymerases, Basic concepts of cloning vectors and splicing: Insertion of DNA and ligation using blunt ends, cohesive ends, Cloning vectors, Application of biotechnology: Insulin and vaccine production.</li> <li>602.4</li> </ul>
*/		<ul> <li>Understand the Bioinformatics: Definition, Basic concepts in bioinformatics, importance and role of bioinformatics in life sciences, Bioinformatics databases- introduction, types of databases, Nucleotide sequence databases, Elementary idea of protein databases, Biostatistics – Tabulation of data, presentation of data, sampling errors, mean, mode, median, probability, standard error and standard deviation</li> </ul>
24	, C**	The Table Control of the Control of
34	Botany	Study the lipids, role of fatty acids, oils and waxes.  Study the angument its classification and nomen altumn.
- 24	Paper-I Biochemistry	<ul> <li>Study the enzymes its classification and nomenclature.</li> <li>Study the basic concepts of Enzymology.</li> </ul>
Date V.	Biotechnolog	Study the basic concepts of Enzymology.      Study the enzyme inhibitors.
	y and Herbal	<ul> <li>Study the chizythe inhibitors.</li> <li>Study the tissue culture techniques.</li> </ul>
	Technology	<ul> <li>Study the tissue culture techniques.</li> <li>Study the process of sterilization.</li> </ul>
- 36	recimology	Study the preparation of culture media
100		<ul> <li>Understand the techniques of genetic engineering.</li> </ul>
	4200	Study the process of DNA library.
	146	Study the types of DNA library.
	rite	Study the Agrobacteria mediated gene transfer.
	100	<ul> <li>Develop the skills of herbal technology.</li> </ul>
		Study the methods of Cultivation, Harvesting,
		Understand the technique of dye yielding of herbal plants.
	D 11	Study the used of herbs in cosmetics.
	Paper-II Phytogograph	Study the phytogeography, climatic regions of India.
	Phytogeograph y, Utilization	<ul> <li>Study the Environmental pollution.</li> </ul>
	of Plants,	Study the Renewable and Non-Renewable sources.
	Techniques	Understand the conservation strategies.
	and	Study the morphology, utilization and important chemicals constituents
1	Pharmacognos	of the plants.
	у	<ul> <li>Understand the concept of Ethnobotany.</li> </ul>
	_	<ul> <li>Understand the concept of Ethnobotany.</li> <li>Study the principle, types and application of microscope.</li> <li>Study the various techniques.</li> </ul>

	<ul> <li>Understand synthetic dyes, synthetic drugs, synthetic polymer.</li> <li>Study the pharmacological plants</li> </ul>
Botany Practical Course	<ul> <li>Find out the level of noise pollution of different nearby area with the help of decimeter and compare it with tolerance limit</li> <li>Study the morphology, utilization, and important chemical constituents of plants.</li> <li>Study the Ethnobotanical importance of plants.</li> <li>Study the different adulterants used with reference to drug adultration.</li> </ul>

