



**Bhiwapur Mahavidyalaya, Bhiwapur**  
**Course Outcomes and Programme Outcomes**  
**Index**  
**Bachelor of Arts**

Session	Course	Semester	Sr. No.	Subject
2016-2017	B. A.	First	1	English
			2	Marathi
			3	Political Science
			4	Economics
			5	English Literature
			6	Sociology
			7	History
			8	Marathi Literature
			9	Ambedkar Thought
		Second	10	English
			11	Marathi
			12	Political Science
			13	Economics
			14	English Literature
			15	Sociology
			16	History
			17	Marathi Literature
			18	Ambedkar Thought
		Third	19	English
			20	Marathi
			21	Political Science
			22	Economics
			23	English Literature
			24	Sociology
			25	History
			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
			52	History
			53	Marathi Literature
			54	Ambedkar Thought

### Bachelor of Commerce

Session	Course	Semester	Sr. No.	Subject
2016-2017	B. Com.	First	1	English
			2	Marathi
			3	Financial Accounting- I
			4	Business Organization
			5	Company Law
			6	Business Economics- I
		Second	7	English
			8	Marathi
			9	Statistics and Business Mathematics
			10	Business Management
			11	Secretarial Practice
			12	Business Economics-II
		Third	13	English
			14	Marathi
			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
			34	Indirect Economics-II
			35	Human Resource Management
			36	Industrial Law

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

Session	Course	Semester	Sr. No.	Subject
2016-2017	B.Sc.	First	1	English
			2	Marathi
			3	Chemistry I & II
			4	Physics I & II
			5	Mathematics I & II
			6	Zoology I & II
			7	Botany I & II
		Second	8	English
			9	Marathi
			10	Chemistry I & II
			11	Physics I & II
			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
		Fourth	19	Botany I & II
			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

Department of English

Semester – I

Course Objectives and Course Outcomes

Compulsory English

### Programme Outcomes

- 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. A vailing job opportunities in translation, trans formation and media.
- PSO2. Developing acritical 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 skill so fessay 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 skill so fessay 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.उद्दिष्ट-** लीळाचरित्रातील मराठी भाषेची जाणीव विद्यार्थ्यांना करुण देणे.

**साध्य-** विद्यार्थ्यांना लीळाचरित्रातील गद्य मराठी भाषेची ओळख झाली.

**प्रकरण-२.उद्दिष्ट-** शिवकालीन 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.उद्दिष्ट-** महात्मा फुले यांनी भारतीय शेतकऱ्यांच्या उत्थानासाठी सांगितलेले उपाय.

**साध्य-** शेतकऱ्यांची प्रगती व्हावी म्हणून विद्यार्थ्यांनी म. फुल्यांनी शेतीबद्दल सुचविलेले उपाय समजून घेतले.

**प्रकरण-४.उद्दिष्ट-** साने गुरुजींनी सांगितलेली संस्कृती विषयी विद्यार्थ्यांना बोध करणे.

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

**प्रकरण-५.उद्दिष्ट-** शंभर दिडशे वर्षांपूर्वी समाजात स्त्रियांना सासूरवास कसा सहन करावा लागायचा याची जाणीव विद्यार्थ्यांना करणे.

**साध्य-** लक्ष्मीबाई टिळकांना झालेल्या सासूरवासाचे चित्रणामुळे विद्यार्थ्यांना सासूरवासाबद्दल जाणीव झाली.

**Unit II:**

**कविता- १.उद्दिष्ट-** संत ज्ञानेश्वरांनी हरिपाबातून सांगितलेल्या नामस्मरणाचे महत्व पटवून देणे.

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

**कविता-२. उद्दिष्ट-** हंस-नल संवादातून तेराव्या शतकातील पंडिती काव्यशैलीची ओळख विद्यार्थ्यांना करुण देणे.

**साध्य-** नल-दमयंती आख्यान काव्याची रघुनाथ पंडितांनी रचलेली आख्यान काव्याची ओळख विद्यार्थ्यांना झाली

**कविता-३.उद्दिष्ट-** घनःश्याम सुंदरा या भूपाळीतून शाहिरी काव्य व प्रातःसमयीचे रम्य वातावरणाची जाणीव करुण देणे.

**साध्य-** शाहीर होणाजी बाळा यांचे शाहिरी काव्यातूनच प्रभात समईचे रम्य वातावरणाची जाणीव विद्यार्थ्यांना झाली.

**कविता-४.उद्दिष्ट-** 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.

**कविता-५.उद्दिष्ट-** खेड्यातील रात्र कवितेतून बालकविंनी रेखाटलेल्या रात्रीचे भयानक चित्रणाची ओळख करुण देणे.

**साध्य-** पन्नास वर्षांपूर्वी व आजही अतिशय दुर्गम भागातील खेड्यातील परिस्थितीचे व रात्र कशी भयाकूल असते याची खात्री विद्यार्थ्यांना पटली.

**Unit III:**

**प्रकरण- १.उद्दिष्ट-** 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.उद्दिष्ट-** भाषिक संवाद व्यवहाराच्या मूलतत्वांची ओळख व माहिती विद्यार्थ्यांना करुण 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**

- Understood the basic concepts and ideological orientations of 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. 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. Aiding job opportunities in translation, transformation 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 to illustrate the nature of literary form like 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 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)–

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

## Unit II:

साहित्यप्रकार—कथा व कविता—

उद्दिष्ट—कथा व कविता या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना देणे.

साध्य—कथा व कविता हे साहित्यप्रकार कसे भिन्न आहेत याबद्दल 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.उद्दिष्ट—इरावती कव्याचे व्यक्तिचित्रणाची ओळख पाठाच्या आधारे करून देणे.

साध्य—पु.ल. देशपांडे यांनी इरावती कव्याचे ज्ञान, लेखन व संशोधन याबद्दल दिलेल्या माहितीमूळे विद्यार्थ्यांना कव्याची ओळख पटली व माहिती मिळाली.

प्रकरण— ७.उद्दिष्ट—संस्कार पाठातून नायकाच्या मनावर झालेल्या संस्काराचे चित्रण करून विद्यार्थ्यांच्या 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.उद्दिष्ट—ग्रेस पाठातून वेगळ्या व्यक्तिमत्त्वाची ओळख विद्यार्थ्यांना करून देणे.

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

प्रकरण—९.उद्दिष्ट—जात चोरीच्या आपत्तीमुळे कोणते संकटे येतात याची जाणिव विद्यार्थ्यांना करून देणे.

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

**प्रकरण—१०.उद्दिष्ट**—पुर्णिया या बिहार राज्यातील मागसलेल्या जिल्ह्यातील लोकांच्या दुःखी कष्टी जीवनाची माहिती विद्यार्थ्यांना देणे.

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

## **Unit II:**

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

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

**कविता—७.उद्दिष्ट**— जीवन मरणाबद्दल बहिणाबाईनी केलेल्या चिंतनाची सार्थकता पटवून देण.

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

**कविता—८.उद्दिष्ट**—राष्ट्रसंतांना गरीबाच्या झोपडीमधील सुखाची माहिती विद्यार्थ्यांना देणे

**साध्य**—महालातील सुखापेक्षा लहानशा झोपडीतील सुख हे महान असल्याची प्रचिती कवितेच्या भावार्थावरून विद्यार्थ्यांना आली.

**कविता—९.उद्दिष्ट**—माणसाच्या मनातील मोठेपना नाहिसा होण्याची कविची इश्वराकडे केलेली मागणीचे ज्ञान विद्यार्थ्यांना देणे.

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

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

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

## **Unit III:**

**प्रकरण—३.उद्दिष्ट**—पत्रलेखनाचे स्वरूप, पत्राचे प्रकार, पत्रलेखाचे घटक, वैशिष्ट्ये व पत्राचा नमूना विद्यार्थ्यांना समजावून देणे.

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

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

**साध्य**—विद्यार्थ्यांना सारांशलेखन करण्याची माहिती मिळाली तसेच दिलेल्या सारांशाचे एक तृतीयांश 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 the knowledge 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 Social Stratification and Social Mobility.

**Department of History**  
**Course Objectives and Course Outcomes**  
**History of India (1526 - 1761)**

**Course Objectives**

- To understand 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:**

**अश्रूंची झाली फुले— नाटक—**

**उद्दिष्ट—**अश्रूंची झाली फुले या नाटकातून मानवी जिवनातील कौटुंबिक, सामाजिक व शैक्षणिक क्षेत्रातील संघर्षप्रवण परिस्थितीविषयी विद्यार्थ्यांना बोध करणे.

**साध्य—**वसंत कानेटकरांनी नाटकाच्या कथानकातून व रेखाटलेल्या पात्रांतून मानवी जीवन कसे संघर्षशिल आहे याची माहिती विद्यार्थ्यांना मिळाली.

**Unit II:**

**साहित्यप्रकार—**कादंबरी, चरित्र, आत्मचरित्र.

**उद्दिष्ट—**कादंबरी, चरित्र, आत्मचरित्र या साहित्य प्रकाराची ओळख व माहिती विद्यार्थ्यांना देणे.

**साध्य—**कादंबरी, 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,भाग २**

**Unit I:**

**प्रकरण —१.उद्दिष्ट**—तेराव्या शतकातील दृष्ट्यांतपाठातील गद्य भाषाशैली, श्रीचक्रधरस्वामीचे चरित्र, महानूभाव पंथा विषयी माहिती देणे.

**साध्य**—दृष्ट्यांतपाठातील गद्य भाषाशैली, श्री.चक्रधरस्वामीचे चरित्र, महानूभाव पंथाचे समाजाला दिलेले योगदान विद्यार्थ्यांना समजून आले.

**प्रकरण —२.उद्दिष्ट**—स्त्री पुरुष तुलना या पाठातून ताराबाई शिंदे हीने पारतंत्र्यांच्या काळात स्त्रियांच्या नशिबी येणाऱ्या दुर्गुणांची जाणीव करून देणे.

**साध्य**—सर्व प्रकारचे दुर्गुण स्त्रियांतच असतात या पुरुषांच्या पूर्वग्रहदूषित विचारांची विद्यार्थ्यांना माहिती प्राप्त झाली.

**प्रकरण —३.उद्दिष्ट**—यशस्वी वक्ता होण्यासाठी प्र.के.अत्रे यांनी सांगितलेला अनुभव विद्यार्थ्यांना सांगणे.

**साध्य**—विद्यार्थ्यांनी यशस्वी वक्ता होण्यासाठी अभ्यासाची अनुभवाचा बोध घेतला.

**प्रकरण —४.उद्दिष्ट**—पंढरपूर व विठ्ठलाचे दर्शनाची माहिती विद्यार्थ्यांना करून देणे.

**साध्य**—पंढरपूर व पांडुरंगाचे संपूर्ण वर्णन तेथील भौगोलिक परिस्थितीची माहिती विद्यार्थ्यांना प्राप्त झाली.

**प्रकरण—५.उद्दिष्ट**—राष्ट्रसंताच्या मते शिक्षक हाच राष्ट्राचा भाग्यविधाता असल्याची खात्री विद्यार्थ्यांना करून देणे.

**साध्य**—शिक्षकाचे विद्यार्थी, समाजाप्रती केलेल्या संपूर्ण कार्याची व शैक्षणिक कार्याची जाणीव विद्यार्थ्यांना कळली.

**Unit II:**

**कविता—१.उद्दिष्ट**—संत नामदेवांनी श्रीविठ्ठलाचे वर्णन, विठ्ठलभक्तिचे व नामस्मरणाचे महात्म्य विद्यार्थ्यांना सांगणे.

**साध्य**—अभंगाच्या निपनातून विठ्ठलाच्या अनंत लावण्याची शोभा, विठ्ठलभक्तिचे व नामस्मरणाचे महात्म्य विद्यार्थ्यांना कळले.

**कविता—२.उद्दिष्ट**—मारोपंतानी सत्संगतीचा वर्णन केलेला महिमा सांगणे.

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

**कविता—३.उद्दिष्ट**—भला जन्म हा तुला लाभला यातून राम जोशींनी सांगितलेल्या मानवी जीवनाचे सार्थकत्व पटविणे.

**साध्य**—उपदेशपर लावणीतून मानवी जीवनाची सार्थकता विद्यार्थ्यांना पटली.

**कविता—४.उद्दिष्ट**—शेतकरी—कष्टकऱ्यांची जीवनगाथा व परिस्थितीचे वर्णन करणे.

**साध्य**—विद्यार्थी ग्रामीण भागातला असून शेतकऱ्यांच्या परिस्थितीची जाणीव झाली.

**कविता— ५.उद्दिष्ट**—कवी अनिलांच्या विराणीतून कवी मनाच्या उदासीनतेचे दर्शन घडविणे.

**साध्य**—कविला लाभलेल्या दुःखामुळे कविच्या मनाला उदासिनता प्राप्त झाली याची विद्यार्थ्यांना प्रचिती आली.

**Unit III:**

**प्रकरण — १.उद्दिष्ट**—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.उद्दिष्ट**—प्रसारमाध्यमे आणि वृत्तलेखन याविषयी विद्यार्थ्यांना माहितीचे विश्लेषण करणे.

**साध्य**—दृक श्राव्य प्रसारमाध्यमांच्याद्वारे बातमी, बातमीचे लेखन व 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 the theory 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-**

**उद्दिष्ट-**संत तुकारामाच्या निवडक शंभर अभंगाच्या आधारे संत तुकारामाचे जीवन कार्य, काव्यशैली व तत्कालीन सामाजिक परिस्थितीची जाणीव विद्यार्थ्यांना करून देणे.

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

###### **Unit II:**

**उद्दिष्ट-**काव्यशास्त्र परिचय यातून काव्याची लक्षणे व काव्याच्या प्रयोजन काय याची माहिती विद्यार्थ्यांना देणे.

**साध्य-**काव्याची लक्षण व काव्याची प्रयोजने कोणती याचे ज्ञान व माहिती विद्यार्थ्यांना प्राप्त झाली

**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:**

**उद्दिष्ट**—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:**

**उद्दिष्ट**—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.

**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 of it.

**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.उद्दिष्ट**—मराठी माघ महिण्यातील मायावीपणाचे वर्णन विद्यार्थ्यांना करून देणे.

**साध्य**—मराठी माघ महिण्यातील निसर्गातील विविध बदलाचा विद्यार्थ्यांना अनुभव आला.

**प्रकरण — ७.उद्दिष्ट**—तपस्वीव्यक्ती कसा असतो याचे चित्रण विद्यार्थ्यांना करून देणे.

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

**प्रकरण — ८.उद्दिष्ट**—संताचे विचार आत्मसात करून मानसिक परिवर्तन घडून येण्याची आवश्यकता.

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

**प्रकरण — ९.उद्दिष्ट**—लपलेला तारा यातून अवकाशातील विविध ताऱ्यांची माहिती विद्यार्थ्यांना करून देणे.

**साध्य**—ग्रहमालेतील विविध ग्रह व तारे तसेच डायसनचा गोळा याची माहिती विद्यार्थ्यांना झाली.

**प्रकरण — १०.उद्दिष्ट**—समाजपरिवर्तनातून सामाजिक समता प्रस्थापीत करण्याचे डॉ. आंबेडकरांचे विचार विद्यार्थ्यांना सांगणे.

**साध्य**—डॉ. आंबेडकरांनी सांगितलेल्या सामाजिक समतेच्या विचाराचा बोध विद्यार्थ्यांनी घेतला.

**Unit II:**

**कविता— ६.उद्दिष्ट**—जनसामान्यांचे अनुभव कसे असतात याची कवितेतून माहिती देणे.

**साध्य**—कविच्या संघर्षप्रवण प्रवृत्तीचा अनुभव एका नव्या संघर्षात या कवितेतून विद्यार्थ्यांना आला.

**कविता — ७.उद्दिष्ट**—स्मरण या कवितेतून जीवनाचे अंतिम सत्य सांगणे.

**साध्य**—सुरेश भटानी मृत्यु हेच जीवनाचे अंतीम सत्य असल्याची जाणीव विद्यार्थ्यांना झाली.

**कविता— ८.उद्दिष्ट**—मानवी मनाचा निसर्गाशी असलेला संबंध उलघडणे.

**साध्य**—निसर्गाशी असलेले अतूट नाते व त्याच्याशी मानवी मनाचा साधलेला संवाद व्यक्त झाल्याची विद्यार्थ्यांना माहिती मिळाली.

**कविता — ९.उद्दिष्ट**—मानवी जीवनाच्या विविध टप्प्यावर वचितांच्या वाटयाला आलेल्या दुःखाची साक्ष पटविणे.

**साध्य**—मानवी जीवनाच्या विविध टप्प्यावर वचितांच्या वाटयाला आलेल्या दुःखाची विद्यार्थ्यांना साक्ष पटली.

**कविता— १०.उद्दिष्ट**—आदिवासिंच्या न्यायासाठी कविने मागीतलेल्या मागणीचा विद्यार्थ्यांना मार्ग सांगणे.

**साध्य**—आदिवासिंच्या न्याय व हक्कासाठी कविने मागीतलेल्या मागणीचा विद्यार्थ्यांनी मार्ग समजून घेतला.

**Unit III:**

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

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

**प्रकरण— ४.उद्दिष्ट**—मुलाखत लेखनाचे स्वरूप स्पष्ट करणे.

**साध्य**—व्यक्तिमत्वाचे दर्शन घडविणे हा मुलाखतीचा 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 relatrelationsitical 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 thecurrent 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 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. Shrinivas, D.P.Mukharjee)

**Outcome** - Student understood the concept of Social Change from Indian Perspective (M.N. Shrinivas, 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:**

उद्दिष्ट— कुसुमाग्रजांच्या 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:**

उद्दिष्ट—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.उद्दिष्ट—**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.उद्दिष्ट—**आगरकरांचा सुधारक काढण्याचा कोणता हेतू होता याची जाणीव करून देणे.

**साध्य—**अज्ञानी भारतीय समाजव्यवस्थेला सज्ञान करण्याच्या हेतून आगरकरांनी सुधारक वृत्तपत्र काढला याची जाणीव विद्यार्थ्यांना झाली.

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

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

**प्रकरण —४.उद्दिष्ट—**महाभारतातील मयसभेचे वर्णन व माहिती विद्यार्थ्यांना करून देणे.

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

**प्रकरण —५.उद्दिष्ट—**किडलेली माणसं या कथेतून माणसाच्या क्षुद्र विचाराचे दर्शन विद्यार्थ्यांना करून देणे.

**साध्य—**मानवी जीवनाचे दुःख व विचाराची क्षुद्रता यांची अनुभूती विद्यार्थ्यांना आली

**प्रकरण — ६.उद्दिष्ट—**चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करून देणे.

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

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

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

**प्रकरण** — ८.उद्दिष्ट—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.उद्दिष्ट— दाभोळकरांच्या अंधश्रद्धा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करून देणे.

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

**प्रकरण** — १०.उद्दिष्ट—महिला ग्रामपंचायतीच्या निवडणूकीचे चित्रण विद्यार्थ्यांना सांगणे.

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

## Unit II:

**कविता**— १.उद्दिष्ट—संत तुकारामांनी अभंगाच्या आधारे समाजजीवनाचे वर्णन केलेले चित्रण विद्यार्थ्यांना सांगणे.

**साध्य**—अभंगाच्या आधारे तत्कालीन सामाजिक परिस्थितीची जाणीव विद्यार्थ्यांना झाली.

**कविता** — २.उद्दिष्ट—शशाहिर प्रभाकरांनी केलेले पंढरीवर्णन वर्णन करणे व महत्व प्रतिपादन करणे.

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

**कविता**— ३.उद्दिष्ट—चाफा या कवितेतून शुध्द प्रेमाचे भाववर्णन करणे.

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

**कविता**— ४.उद्दिष्ट—ध्येय आणि परिस्थितीया दोन्हीही ओढल्या जाणाऱ्या जीवाची ओढताण वर्णन करणे.

**साध्य**—कळा ज्या लागल्या जीवा यातून ज्याचे दुःख त्यालाच सहन करावे लागते याची जाणीव विद्यार्थ्यांना झाली.

**कविता**— ५.उद्दिष्ट—समाधान कवितेतून 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.उद्दिष्ट—ही निळी पांढरी कवितेतील शरद ऋतूतील दुपारचे वर्णन करून देणे.

**साध्य**—इंदिरा संतानी केलेलीशरद ऋतूतील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

**कविता** — ७.उद्दिष्ट—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.उद्दिष्ट—पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थ्यांना उलघडून दाखविणे .

**साध्य**—प्रेस कविने रेखाटलेले स्त्री वेदनेचे स्वरुप व स्त्री मनाच्या भावना याविषयीविद्यार्थ्यांना माहिती मिळाली.

**कविता**— ९.उद्दिष्ट—प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रण करून जाणीव करून देणे.

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

**कविता**— १०.उद्दिष्ट— 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.उद्दिष्ट**—संपादन प्रक्रिया, प्रेरणा व स्वरूप याविषयीची माहिती विद्यार्थ्यांना देणे.

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

**प्रकरण — २.उद्दिष्ट**—कार्यालयीन लेखनव्यवहाराविषयी विद्यार्थ्यांना माहिती देणे.

**साध्य**—कार्यालयीन लेखनव्यवहारात टिप्पणी, पध्दती व अिप्पणीचे प्रकार याची माहिती विद्यार्थ्यांना प्राप्त झाली.

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

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

**प्रकरण — ४.उद्दिष्ट**—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 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 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.

## 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**

- Understood the 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 Course Outcomes**  
**Marathi Literature**

**Unit I:**

**प्रकरण — ६.उद्दिष्ट**—चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करून देणे.

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

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

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

**प्रकरण — ८.उद्दिष्ट**—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.उद्दिष्ट**—दाभोळकरांच्या अंधश्रद्धा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करून देणे.

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

**प्रकरण — १०.उद्दिष्ट**—महिला ग्रामपंचायतीच्या निवडनूकीचे चित्रण विद्यार्थ्यांना सांगणे.

**साध्य**—ग्रामीण भागातील ग्रामपंचायत मधील निवडनूकीची माहिती व परिस्थितीची जाणीवविद्यार्थ्यांना आली.

**Unit II:**

**कविता— ६.उद्दिष्ट**—ही निळी पांढरी कवितेतील शरद ऋतूतील दुपारचे वर्णन करून देणे.

**साध्य**—इंदिरा संतानी केलेलीशरद ऋतूतील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

**कविता — ७.उद्दिष्ट**—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.उद्दिष्ट**—पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थ्यांना उलघडून दाखविणे .

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

**कविता— ९.उद्दिष्ट**—प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रण करून जाणीव करून देणे.

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

**कविता— १०.उद्दिष्ट**— 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.उद्दिष्ट**—ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे.

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

**प्रकरण — ४.उद्दिष्ट**—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 Marathi**  
**Course Objectives and Outcomes**  
**Compulsory Marathi**

**Unit I:**

**प्रकरण — ६.उद्दिष्ट—**चक्र या कथेतून महाभारतातील द्रौपदी या स्त्रीचे चित्रण विद्यार्थ्यांना माहित करून देणे.

**साध्य—** महाभारतातील द्रौपदीच्या मनातील गूढ वगुतागुतीचे भावनीक प्रसंगाची माहिती विद्यार्थ्यांना प्राप्त झाली.

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

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

**प्रकरण — ८.उद्दिष्ट—**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.उद्दिष्ट—** दाभोळकराच्या अंधश्रद्धा निर्मूलनाचे कार्याची माहिती विद्यार्थ्यांना करून देणे.

**साध्य—**वैज्ञानिक दृष्टिकोण व शास्त्रीय विचार पध्दतीने अंधश्रद्धा निर्मूलन करण्याचे घ्येय दाभोळकराचे होते याची माहिती विद्यार्थ्यांना झाली.

**प्रकरण — १०.उद्दिष्ट—**महिला ग्रामपंचायतीच्या निवडणूकीचे चित्रण विद्यार्थ्यांना सांगणे.

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

**Unit II:**

**कविता— ६.उद्दिष्ट—**ही निळी पांढरी कवितेतील शरद ऋतूतील दुपारचे वर्णन करून देणे.

**साध्य—**इंदिरा संतानी केलेली शरद ऋतूतील उन्हाची माहिती विद्यार्थ्यांना प्राप्त झाली.

**कविता — ७.उद्दिष्ट—**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.उद्दिष्ट—**पाऊस कवितेतून स्त्री मनाच्या विविध भावावस्था विद्यार्थ्यांना उलघडून दाखविणे .

**साध्य—**प्रेस कवीने रेखाटलेले स्त्री वेदनेचे स्वरूप व स्त्री मनाच्या भावना याविषयी विद्यार्थ्यांना माहिती मिळाली.

**कविता— ९.उद्दिष्ट—**प्रेम कवितेच्या आधारे कविने रेखाटलेले पीडितांचे चित्रण करून जाणीव करून देणे.

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

**कविता— १०.उद्दिष्ट—** 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.उद्दिष्ट**—ग्रंथपरीक्षण कसे करावे व ग्रंथवाचन करताना कोणते घटक बघावेत याची माहिती विद्यार्थ्यांना करणे.

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

**प्रकरण — ४.उद्दिष्ट**—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 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
- 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

उद्दिष्ट गरूड झेप मधील लेखकानी नोकरीसाठी ध्येयवेडा प्रवास कसा केला याची माहिती देऊन विद्यार्थ्यांना प्रेरित करणे.

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

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



उद्दिष्ट— प्राचीन मराठी वाङ्मयाचा इतिहासाच्या आधार संतसाहित्य, पंडिती साहित्य,शाहिरी साहित्य, बखर वाङ्मय या साहित्याची माहिती विद्यार्थ्यांना देणे

साध्य— संतसाहित्य, पंडिती साहित्य,शाहिरी साहित्य, बखर वाङ्मय या साहित्याची माहिती विद्यार्थ्यांना झाली.

भाषाविज्ञानाचा परिचय. डॉ. मालसे, डॉ. कुळकर्णी

उद्दिष्ट— 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 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

#### Course Objectives

- उद्दिष्टे:-
1. मराठी भाषेविषयी विद्यार्थ्यांमध्ये अभिरुची निर्माण करणे.
  2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
  3. विद्यार्थ्यांमध्ये असलेल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृद्धिंगत करणे.
  4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
  5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

#### Course Outcomes

- ध्येय:-
1. भावी काळात विद्यार्थ्यांमधून साहित्यनिर्मिती करणे.
  2. अध्यापन व अध्ययनात विद्यार्थ्यांना सहभागी करून संवादशील वातावरण निर्मिती करणे.
  3. विभागात विविध उपक्रमांचे आयोजन करून मराठी भाषेचा दर्जा वाढविणे.
  4. विद्यार्थ्यांमध्ये संशोधनवृत्ती वृद्धिंगत करणे.
  5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

CO1 भारतीय लोकशाहीचे मूल्य विद्यार्थ्यांमध्ये रुजविणे.

CO2 ग्रामीण जनजिवन व शेतीनिष्ठेशी विद्यार्थ्यांची नाळ जोळणे.

CO3 संताच्या व्यावहारिक विचारांचा परिचय घडविणे.

CO4 शाहू महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.

CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.

CO6 विद्यार्थ्यांमध्ये आधुनिक मूल्य रुजविणे

CO7 विद्यार्थ्यांमध्ये सामाजिक बांधिलकी निर्माण करणे.

CO8 विद्यार्थ्यांमध्ये सर्जनशीलता निर्माण करणे.

## Financial Accounting

### Course Objectives and Course Outcomes

Unit No.I - Financial Accounting.

- Objective- To makethe 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 makethe 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 Account Co-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 Managerial 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 understand the 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 students understand 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.

**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 विद्यार्थ्यांमध्ये रुजविणे.  
CO2 ग्रामीण जनजिवन व शेतीनिष्ठेशी विद्यार्थ्यांची नाळ जोळणे.  
CO3 संताच्या व्यावहारीक विचारांचा परिचय घडविणे.  
CO4 शाहू महाराजाच्या आरक्षण विषयी विचारांचा परिचय घडविणे.  
CO5 काव्यातील रसग्रहणक्षमता विकसीत करणे.  
CO6 विद्यार्थ्यांमध्ये आधुनिक मूल्य रुजविणे  
CO7 विद्यार्थ्यांमध्ये सामाजिक बांधिलकी निर्माण करणे.  
CO8 विद्यार्थ्यांमध्ये 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 students understand 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 वैशिष्ट्ये स्पष्ट करणे.  
 CO3 विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.  
 CO4 संत साहित्यातून सामाजिक, सांस्कृतिक, 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 aware of 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 & solved 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 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.

### **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 वैशिष्ट्य स्पष्ट करणे.  
 CO3 विनोदी लेखनात खेळकरवृत्तीचे दर्शन घडविणे.  
 CO4 संत साहित्यातून सामाजिक, सांस्कृतिक, 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 students understand 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, 80CCC, 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 students understand 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 students understand 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 & 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 students understand 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 students understand 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 students understand 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 Pointing 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 makethe students understand the Accounting of Correlation

Outcome - Students understood the following topics. Correlation Company

Unit No. 2 - Regression.

Objective- To makethe students understand Regression.

Outcome - Students understood the Regression.

Unit No. 3 - Index Number.

Objective - To makethe students to understand Index Number.

Outcome - Students understood the following topics Index Number.

Unit No. 4 - Time Series Analysis.

Objective - To makethe 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 studentsunderstand the Indian Agriculture.

**Outcome-**Students applied the knowledge.

#### **Unit II**

##### **Indian Industry**

**Objective-** To make the studentsunderstand 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.

**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**

- उद्दिष्टे:-
1. मराठी भाषेविषयी विद्यार्थ्यांमध्ये अभिरुची निर्माण करणे.
  2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
  3. विद्यार्थ्यांमध्ये असलेल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृद्धिंगत करणे.
  4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
  5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.
- ध्येय:-
1. भावी काळात विद्यार्थ्यांमधून साहित्यनिर्मिती करणे.
  2. अध्यापन व अध्ययनात विद्यार्थ्यांना सहभागी करून संवादशील वातावरण निर्मिती करणे.
  3. विभागात विविध उपक्रमांचे आयोजन करून मराठी भाषेचा दर्जा वाढविणे.
  4. विद्यार्थ्यांमध्ये संशोधनवृत्ती वृद्धिंगत करणे.
  5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

**Course Outcomes**

साहित्य सेतू

- CO1 विद्यार्थ्यांमध्ये साहित्य विषयक आवड निर्माण करणे  
CO2 वाचन संस्कृतीचा पुरस्कार करणे  
CO3 भारतीय संविधानाचे महत्त्व समजावून सांगणे  
CO4 मानवी मुल्यांची जपणूक करणे  
CO5 कविता लंखनाचे तंत्र अवगत करणे  
CO6 पर्यावरण विषयक जागृती निर्माण करणे  
CO7 व्यावहारिक मराठीचे महत्त्व 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

तमसो मा ज्योतीर्गमय

**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 Paper-I Inorganic Chemistry (101)	101.1	<ul style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><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 style="list-style-type: none"><li>Understand the Intermolecular forces, structure of liquid, structural difference between solid, liquid and gases.</li><li>Properties of liquid like surface</li></ul>

		tension, viscosity, refractive index.
	<b>102.4</b>	<ul style="list-style-type: none"> <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>
<b>F.Y. Chemistry Practical Course</b>	<b>103</b>	<ul style="list-style-type: none"> <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
<b>Paper 1:</b> Properties of Matter and Mechanics (101)	<b>101.1</b>	<ul style="list-style-type: none"> <li>• 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</li> </ul>
	<b>101.2</b>	<ul style="list-style-type: none"> <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>
	<b>101.3</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
	<b>101.4</b>	<ul style="list-style-type: none"> <li>• Understand the System of particles and conservation laws.</li> </ul>
<b>Paper 2:</b> Electrostatics, Time varying fields & Electric Currents (102)	<b>102.1</b>	<ul style="list-style-type: none"> <li>• Understand the concept of Electrostatic force, Electric field, Electric potential, Electric dipole, Electric dipole moment.</li> </ul>
	<b>102.2</b>	<ul style="list-style-type: none"> <li>• Understand the concept of polarization and capacitors with and without dielectric.</li> <li>• Apply Gauss law to parallel plate capacitor.</li> </ul>
	<b>102.3</b>	<ul style="list-style-type: none"> <li>• To understand the concept of electromagnetic induction and transformer.</li> <li>• Apply equation of continuity and Kirchoff's law to rise and decay of current in LR, CR and LCR circuits.</li> </ul>
	<b>102.4</b>	<ul style="list-style-type: none"> <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, <math>\Phi</math> and fr.</li> </ul>
Physics Practical (103)	<b>103</b>	<ul style="list-style-type: none"> <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

### 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
<b>FY Paper-I Algebra and Trigonometry 101</b>	<b>101.1</b>	Understand the basic concept related to Matrices and solve the problem based on a system of Linear equations
	<b>101.2</b>	Understand the general properties of equations and Solutions of Different equations
	<b>101.3</b>	Understand the basics of complex numbers and solve the problems
	<b>101.4</b>	understand Group theory and general properties
<b>FY Paper-II 102 Calculus</b>	<b>102.1</b>	Using Definition, verify the values of limit and continuity and solve the problem on Differentiation
	<b>102.2</b>	Understand the concept of Maclaurins and Taylor's theorem

		Identify Indeterminate forms and application of L'Hospital's Rule
	<b>102.3</b>	Understand the concept of partial differential equation, Euler's Theorem and Jacobians
	<b>102.4</b>	Identify the various types and methods to solve Integration and application of Reduction Formulae

### Department of Zoology

#### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):

<b>1.</b>	Graduates will pursue higher studies in related fields including management
<b>2.</b>	Graduates will perform as employers in private/government institutions rising up to top positions
<b>3.</b>	Graduates will become entrepreneurs.

#### PROGRAMME OUTCOMES (PO)

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

#### PROGRAMME SPECIFIC OUTCOMES

<b>1.</b>	Gain the knowledge of Zoology through theory and practicals.
<b>2.</b>	Use modern biological tools, Models, Charts and Equipment's.
<b>3.</b>	Know structure-activity relationship.
<b>4.</b>	Understand good laboratory practices and safety.
<b>5.</b>	Make aware and handle the sophisticated instruments/equipment.
<b>6.</b>	Develop research-oriented skills.
<b>7.</b>	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
<b>FY Paper-I Life and Diversity of Animals – Non- chordates (Protozoa to Annelida) (101)</b>	<b>101.1</b>	To understand general characters and classification up to classes of protozoa, structure and reproduction of <i>Paramoecium</i> , structure and life cycle of <i>Plasmodium</i> , parasitic Protozoans of Man ( <i>Entamoeba</i> , <i>Trypanosoma</i> , <i>Giardia</i> and <i>Leishmania</i> ). Mode of infection and its control.
	<b>101.2</b>	To understand the general characters and classification up to classes of porifera, Structure, reproduction and development, Canal system in sponges, General characters and classification up to classes of Coelenterata, structure and life cycle of <i>Obelia</i> , Polymorphism in hydrozoa.
	<b>101.3</b>	To Understand the Helminthes: General characters and classification up to classes, <i>Ascaris</i> : External morphology, reproductive system and life cycle, <i>Taenia solium</i> : Structure and life cycle, Elementary idea of parasitic adaptations in helminthes
	<b>101.4</b>	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
<b>FY Paper-II Environmental Biology (102)</b>	<b>102.1</b>	To understand the Atmosphere: Major zones and its importance, composition of air, Hydrosphere: Global distribution of water, Physico-chemical characteristics of water, Lithosphere: Types of rocks, formation of soil, Renewable and non-renewable energy sources
	<b>102.2</b>	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>102.3</b>	To understand the Biodiversity and its conservation, Causes of reduction 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
	<b>102.4</b>	To understand the Sources, effect and control measures of air 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
<b>F.Y. Zoology Practical Course</b>	<b>103</b>	<ul style="list-style-type: none"> <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 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 plant morphology and anatomy, 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 an understanding of the applications in human life.

**PO5.** Apply the knowledge 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 their position 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 unity and diversity of life on earth.

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

**PSO6.** Students 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 a livelihood 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
<b>FY Paper-I Viruses, Prokaryotes,Algae And Biofertilizers (101)</b>	<b>101.1</b>	<ul style="list-style-type: none"><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>
	<b>101.2</b>	<ul style="list-style-type: none"><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>
	<b>101.3</b>	<ul style="list-style-type: none"><li>• Understand life cycle of <i>Chara</i>, <i>Vaucheria</i>, <i>Ectocarpus</i>, and <i>Batrachospermum</i>.</li></ul>
	<b>101.4</b>	<ul style="list-style-type: none"><li>• To understand Scope and importance of Biofertilizers.</li><li>• Understand the microbes used in biofertilizers.</li></ul>
<b>FY Paper-II Fungi, Plant Pathology,Lichens, Bryophyta and Mushroom Cultivation (102)</b>	<b>102.1</b>	<ul style="list-style-type: none"><li>• Understand the Characteristics of fungi.</li><li>• Understand the reproduction and life cycle of <i>Albugo</i>, <i>Mucor</i>, <i>Puccinia</i> and <i>Cercospora</i>.</li></ul>
	<b>102.2</b>	<ul style="list-style-type: none"><li>• Pathogen study, control and causes of diseases : leaf curl of papaya, Citrus canker and red rot of sugarcane</li></ul>
	<b>102.3</b>	<ul style="list-style-type: none"><li>• Understand classification and general characteristics of Bryophyta.</li><li>• Life history of <i>Marchantia</i>, <i>Anthoceros</i> and <i>Funaria</i></li><li>• To Study the nutritional and medicinal values of edible and non-edible mushrooms. Technology of mushroom cultivation</li></ul>
<b>F.Y. Chemistry Practical Course</b>	<b>103</b>	<ul style="list-style-type: none"><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**

- उद्दिष्टे:-
1. मराठी भाषेविषयी विद्यार्थ्यांमध्ये अभिरुची निर्माण करणे.
  2. साहित्यलेखनाची व वाचनाची आवड निर्माण करणे.
  3. विद्यार्थ्यांमध्ये असलेल्या सुप्त कलांगुणांना वाव देऊन त्यांच्यात साहित्यविषयक वृद्धिंगत करणे.
  4. साहित्यातून मानवतावादी दृष्टिकोण रुजविणे.
  5. साहित्यातून समाजातील प्रश्नांना वाचा फोडून त्यांचे निराकरण करणे.

**Course Outcomes**

साहित्य सेतू

- ध्येय:-
1. भावी काळात विद्यार्थ्यांमधून साहित्यनिर्मिती करणे.
  2. अध्यापन व अध्ययनात विद्यार्थ्यांना सहभागी करून संवादशील वातावरण निर्मिती करणे.
  3. विभागात विविध उपक्रमांचे आयोजन करून मराठी भाषेचा दर्जा वाढविणे.
  4. विद्यार्थ्यांमध्ये संशोधनवृत्ती वृद्धिंगत करणे.
  5. मराठी भाषेची प्रयोगशाळा निर्माण करणे.

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

**Course Name: B. Sc.**

**Year/Semester: First/ Second**

**Subject: Chemistry**

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

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>FY Paper -I Organic Chemistry (201)</b>	<b>201.1</b>	<ul style="list-style-type: none"> <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>
	<b>201.2</b>	<ul style="list-style-type: none"> <li>Understand the concept of stereochemistry of organic compounds.</li> <li>To make the structure of Geometrical isomerism and conformational isomerism.</li> </ul>
	<b>201.3</b>	<ul style="list-style-type: none"> <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>
	<b>201.4</b>	<ul style="list-style-type: none"> <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>
<b>F.Y. Pape-II Physical Chemistry (202)</b>	<b>202.1</b>	<ul style="list-style-type: none"> <li>To understand the thermodynamics of chemical reactions.</li> <li>Understand free energy functions like work function, Gibb's free energy etc.</li> </ul>
	<b>202.2</b>	<ul style="list-style-type: none"> <li>To understand the concept of phase equilibria. Statement of phase rule and term. Application of phase rule</li> </ul>
	<b>202.3</b>	<ul style="list-style-type: none"> <li>Understand the concept of nuclear chemistry and molecular structure</li> </ul>
	<b>202.4</b>	<ul style="list-style-type: none"> <li>To Understand the concept of chemical kinetics and theories of chemical kinetics.</li> </ul>
<b>F.Y. Chemistry Practical course</b>	<b>203</b>	<ul style="list-style-type: none"> <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
<b>Paper 1:</b> Oscillations, Kinetic theory of gases and Thermodynamics (201)	201.1	<ul style="list-style-type: none"> <li>To understand the concept of linear and angular S.H.M., Damped harmonic oscillator</li> </ul>
	201.2	<ul style="list-style-type: none"> <li>To understand the concept of Forced oscillation with one degree of freedom and kinetic theory of gasses.</li> </ul>
	201.3	<ul style="list-style-type: none"> <li>To understand the Transport phenomenon in gases, Zeroth and First law of thermodynamics and Carnot's Theorem</li> </ul>
	201.4	<ul style="list-style-type: none"> <li>To understand second and third law of thermodynamics and Maxwell's general relationship and its applications</li> </ul>
<b>Paper 2:</b> Gravitation, Astrophysics, Magnetism and Magnetostatics (202)	202.1	<ul style="list-style-type: none"> <li>To understand Newton's laws of gravitation and the concept of Gravitational self-energy of the galaxy</li> </ul>
	202.2	<ul style="list-style-type: none"> <li>Know the constituents of universe (Solar system, Stars, Galaxies) and some physical aspects of universe</li> </ul>
	202.3	<ul style="list-style-type: none"> <li>To understand the concepts of Diamagnetism, Paramagnetism and Ferromagnetism and their applications</li> </ul>
	202.4	<ul style="list-style-type: none"> <li>To understand the Concept of magnetic field and to study various laws of magneto static and their applications.</li> </ul>
Physics Practical (203)	203	<ul style="list-style-type: none"> <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
<b>FY</b> <b>Paper-I</b> <b>201</b> <b>Geometry,</b> <b>Differential and</b> <b>Difference</b> <b>Equations</b>	201.1	Understand the concept of Solid Geometry
	202.2	Identify and solve the problems on Differential equations of first order
	203.3	Understand the Higher order linear differential equations with constant coefficient
	204.4	Understand the basic concept of Difference equation
<b>FY</b> <b>Paper-II</b> <b>202</b>	202.1	Students learn the concept of Vector differentiation and Line Integral
	202.2	Learn the evaluation of area by double Integral
	202.3	Apply integration to evaluate over surface and volume



	<b>202.4</b>	Evaluate Improper Integrals also study the gamma and Beta functions
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**Department of Zoology**  
**Course Outcomes (COs)**

**Course Name: B. Sc.**

**Year/Semester: First/Second**

**Subject: Zoology**

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

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>FY</b> <b>Paper -I</b> Life and Diversity of Animals – Nonchordates (Arthropoda to Hemichordata) (201)	<b>201.1</b>	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
	<b>201.2</b>	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
	<b>201.3</b>	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
	<b>201.4</b>	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>
<b>F.Y.</b> <b>Paper-II</b> Cell Biology (202)	<b>202.1</b>	To understand the 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
	<b>202.2</b>	To understand Ultrastructure of mitochondria, Oxidative phosphorylation – Glycolysis and Krebs' cycle, Electron Transport Chain and terminal oxidation, Lysosome: Structure, polymorphism and functions
	<b>202.3</b>	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
	<b>202.4</b>	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
<b>F.Y. Zoology</b>	<b>203</b>	<ul style="list-style-type: none"> <li>• Verify theoretical principles experimentally</li> <li>• Interpret the experimental data</li> </ul>

<b>Practical course</b>	<ul style="list-style-type: none"> <li>• Improve analytical skills</li> <li>• Correlate the theory and experiments and understand their importance</li> </ul>
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**Department of Botany**  
**Course Outcomes (COs)**

**Course Name: B. Sc.**

**Year/Semester: First/Second**

**Subject: Botany**

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

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>FY</b> <b>Paper -I</b> <b>Paleobotany, Pteridophytes,</b> <b>Gymnosperms and Soil</b> <b>Analysis (201)</b>	<b>201.1</b>	<ul style="list-style-type: none"> <li>• To make students understand fossils, Pseudofossils, and its importance.</li> <li>• Knowledge about types of fossils.</li> <li>• Details of Geological time scale.</li> <li>• Differentiation among the types of fossil.</li> </ul>
	<b>201.2</b>	<ul style="list-style-type: none"> <li>• Study the general characteristics of Pteridophytes and its classification.</li> <li>• Life history of <i>Selaginella</i>. And <i>Equisetum</i>.</li> </ul>
	<b>201.3</b>	<ul style="list-style-type: none"> <li>• Classify the Gymnosperms, its characteristics and economic importance.</li> <li>• Understand the fossil gymnosperm.</li> <li>• Study the life cycle of <i>Cycas</i> and <i>Pinus</i></li> </ul>
	<b>201.4</b>	<ul style="list-style-type: none"> <li>• Skill development and soil analysis.</li> <li>• Identification of types of soil on the basis of its color and texture.</li> <li>• Study the physical properties of soil.</li> <li>• Understand the pH of soil and nitrogen availability in it.</li> </ul>
<b>F.Y.</b> <b>Pape-II</b> <b>Morphology of</b> <b>Angiosperms and</b> <b>Floriculture</b> <b>(202)</b>	<b>202.1</b>	<ul style="list-style-type: none"> <li>• Study the morphological characteristics of plants.</li> <li>• Identification of morphological characters of plants.</li> <li>• Study the modification occur in root, stem and leaf.</li> </ul>
	<b>202.2</b>	<ul style="list-style-type: none"> <li>• Study the reproductive morphology.</li> <li>• Study the types of inflorescence.</li> <li>• Study the calyx, corolla and Androecium.</li> </ul>
	<b>202.3</b>	<ul style="list-style-type: none"> <li>• Understand the structure of gynoecium.</li> <li>• Study the fruit and its types.</li> </ul>
	<b>202.4</b>	<ul style="list-style-type: none"> <li>• Develop the skills of floriculture and cultivation</li> <li>• Method of cultivation.</li> </ul>

<b>F.Y. Botany Practical course</b>	<b>203</b>	<ul style="list-style-type: none"> <li>• Study of different root and stem modification and branching patterns.</li> <li>• Study the types of leaf and its phyllotaxy, venation and modification.</li> <li>• Understand the flower structure and position of calyx, corolla, androecium and gynoecium.</li> </ul>
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**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-**

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>S.Y. Paper-I Inorganic Chemistry (301)</b>	<b>301.1</b>	<ul style="list-style-type: none"> <li>• Understand the concept of molecular orbital theory and VSEPR theory.</li> </ul>
	<b>301.2</b>	<ul style="list-style-type: none"> <li>• Understand the properties of d and f block elements.</li> </ul>
	<b>301.3</b>	<ul style="list-style-type: none"> <li>• Understand the role of nonaqueous solvents.</li> <li>• Understand concept of errors and evaluation in chemical analysis.</li> </ul>
	<b>301.4</b>	<ul style="list-style-type: none"> <li>• Understand the concept of chemistry of Lanthanides and Actinides series.</li> </ul>
<b>S.Y. Paper-II Organic Chemistry (302)</b>	<b>302.1</b>	<ul style="list-style-type: none"> <li>• Understand the structure and chemical bonding in aryl, alkyl halides, and aldehydes.</li> </ul>
	<b>302.2</b>	<ul style="list-style-type: none"> <li>• Understand the structure and chemical bonding in alcohols and phenols.</li> </ul>
	<b>302.3</b>	<ul style="list-style-type: none"> <li>• Understand the nomenclature, structure of the carbonyl group, synthesis of aldehydes and ketones</li> </ul>
	<b>302.4</b>	<ul style="list-style-type: none"> <li>• Understand chemical reaction of carboxylic acids and its derivatives.</li> </ul>
<b>S.Y. Chemistry Practical Course</b>	<b>303</b>	<ul style="list-style-type: none"> <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**

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

Paper	CO	Outcomes
<b>Paper 1:</b> Sound Waves, Applied Acoustic, Ultrasonic and Power Supply (301)	301.1	<ul style="list-style-type: none"> <li>Understand the concept of group and phase velocities, formation of standing waves and diagrammatic introduction of human ear and its responses.</li> </ul>
	301.2	<ul style="list-style-type: none"> <li>Understand the working of transducers and their characteristics and the concept of acoustic and its applications.</li> </ul>
	301.3	<ul style="list-style-type: none"> <li>Understand the production and applications of ultrasonic waves.</li> </ul>
	301.4	<ul style="list-style-type: none"> <li>Understand the concept of voltage regulation and working of the half, full and bridge rectifier.</li> </ul>
<b>Paper 2:</b> Physical Optics and Electromagnetic Waves (302)	302.1	<ul style="list-style-type: none"> <li>Understand the concept of interference of light through thin film</li> <li>Apply the concept of interference of light through thin film in wavelength determination.</li> </ul>
	302.2	<ul style="list-style-type: none"> <li>Understand the concept of diffraction, Resolving Power of grating and Rayleigh's criterion for resolution.</li> </ul>
	302.3	<ul style="list-style-type: none"> <li>Understand the concept of polarization and double refraction</li> </ul>
	302.4	<ul style="list-style-type: none"> <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	<ul style="list-style-type: none"> <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: Second/Third**

**Subject: Mathematics**

After successful completion of three-year degree programme in Mathematics students should be able to;

Paper	CO	Outcomes
<b>SY Paper-I 301</b> <b>Advanced Calculus, Sequences &amp; Series</b>	301.1	Students understand Mean Value theorem
	301.2	Learn about an envelope of a family of curves in the plane and study the Lagranges Multiplier method
	301.3	Understand the concept of sequence
	301.4	Use Tests for convergence
<b>SY Paper-II 302</b>	302.1	Understand the concept of Special Functions(Bessels and Legendre's function)
	302.2	Students understand the concept of Laplace Transform

<b>Differential Equation and Group Homomorphism</b>		and solve the problems
	<b>302.3</b>	Applications of Laplace Transform & Fourier Transform
	<b>302.4</b>	Students develop knowledge in group theory

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

**Course Name: B. Sc.**

**Year/Semester: Second/Third**

**Subject: Zoology**

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

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>S.Y Paper-I Life and Diversity of Animals - Chordates (Protochordata to Amphibia) (301)</b>	<b>301.1</b>	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, circulatory system, sense organs and protonephridia, Agnatha : General characters of Cyclostomata ( <i>Petromyzon</i> and <i>Myxine</i> )
	<b>301.2</b>	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
	<b>301.3</b>	Understand the Gametogenesis and type of eggs, Fertilization of egg, Post fertilization development of fish, Types of scales of fishes, Development of placoid scales
	<b>301.4</b>	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
<b>S.Y. Paper-II Organic Zoology (302)</b>	<b>302.1</b>	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
	<b>302.2</b>	Understand the concept of Cytoplasmic inheritance- <i>Kappa</i> particles in <i>Paramecium</i> , CO <sub>2</sub> 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
	<b>302.3</b>	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 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
	<b>302.4</b>	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
<b>S.Y. Zoology Practical Course</b>	<b>303</b>	<ul style="list-style-type: none"> <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 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-**

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>S.Y. Paper-I Botany (301)</b>	<b>301.1</b>	<ul style="list-style-type: none"> <li>• Understand the study of angiosperms, Fossil angiosperms, Angiosperms taxonomy.</li> <li>• Understand the nomenclature.</li> <li>• Study the trends in taxonomy.</li> </ul>
	<b>301.2</b>	<ul style="list-style-type: none"> <li>• Understand the classification system of Bentham and Hooker, Engler and Prantle.</li> </ul>
	<b>301.3</b>	<ul style="list-style-type: none"> <li>• Study the types of pollination 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> <li>• Understand the fertilization process.</li> </ul>
	<b>301.4</b>	<ul style="list-style-type: none"> <li>• Study the skills of landscaping and gardening.</li> </ul>
<b>S.Y. Paper-II Angiosperm anatomy and Horticulture (302)</b>	<b>302.1</b>	<ul style="list-style-type: none"> <li>• Understand anatomical features of plants and its organs.</li> <li>• Study the tissue its types and functions.</li> </ul>
	<b>302.2</b>	<ul style="list-style-type: none"> <li>• Study the primary and secondary growth I stem and root.</li> </ul>
	<b>302.3</b>	<ul style="list-style-type: none"> <li>• Study the periderm growth rings, sap heartwood, leaf anatomy.</li> <li>• Study the Senescence and Abscission.</li> </ul>
	<b>302.4</b>	<ul style="list-style-type: none"> <li>• Study the techniques of horticulture, methods of propagation.</li> <li>• Learn the technique of bonsai preparation.</li> </ul>
<b>S.Y. Botany Practical Course</b>	<b>303</b>	<ul style="list-style-type: none"> <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>

**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-**

Paper	CO	Outcomes
<b>S.Y.</b> <b>Paper-I</b> <b>Inorganic</b> <b>Chemistry</b> <b>(401)</b>	<b>401.1</b>	<ul style="list-style-type: none"><li>• Understand the properties of coordination compounds. Chelates: classification and their application and valence bond theory of complexes.</li></ul>
	<b>401.2</b>	<ul style="list-style-type: none"><li>• Understand the concept of isomerism in coordination compounds. Concept of oxidation and reduction and balancing of redox reaction.</li></ul>
	<b>401.3</b>	<ul style="list-style-type: none"><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>
	<b>401.4</b>	<ul style="list-style-type: none"><li>• Understand the concept of inorganic polymers.</li></ul>
<b>S.Y.</b> <b>Paper-II</b> <b>Physical</b> <b>Chemistry</b> <b>(402)</b>	<b>402.1</b>	<ul style="list-style-type: none"><li>• Understand solid state and their classification and their laws.</li><li>• To understand the concept of determination of crystal structure.</li></ul>
	<b>402.2</b>	<ul style="list-style-type: none"><li>• Understand electrochemistry of reversible and irreversible cells.</li><li>• Understand the concept of electrical transport and transport number.</li></ul>
	<b>402.3</b>	<ul style="list-style-type: none"><li>• Use spectroscopy for chemical analysis.</li><li>• Understand types of spectroscopy.</li></ul>
	<b>402.4</b>	<ul style="list-style-type: none"><li>• Understand the concept of quantum chemistry and wave function.</li></ul>
<b>S.Y.</b> <b>Chemistry</b> <b>practical</b> <b>Course</b>	<b>403</b>	<ul style="list-style-type: none"><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-**

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>Paper 1:</b> Solid State Physics, X-ray and Laser (401)	<b>401.1</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<b>401.2</b>	<ul style="list-style-type: none"> <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>
	<b>401.3</b>	<ul style="list-style-type: none"> <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 Miller indices.</li> </ul>
	<b>401.4</b>	<ul style="list-style-type: none"> <li>Understand the concepts of LASER emission.</li> <li>Understand the construction and working of various types of LASER.</li> </ul>
<b>Paper 2:</b> Solid State Electronics, and Molecular Physics (402)	<b>402.1</b>	<ul style="list-style-type: none"> <li>Understand the construction and working and characteristics of various solid state devices.</li> </ul>
	<b>402.2</b>	<ul style="list-style-type: none"> <li>Understand the construction and working and characteristics of various FETs.</li> </ul>
	<b>402.3</b>	<ul style="list-style-type: none"> <li>Understand the concept molecular physics.</li> </ul>
	<b>402.4</b>	<ul style="list-style-type: none"> <li>Understand and apply the Raman spectroscopy.</li> </ul>
<b>Physics Practical (403)</b>	<b>403</b>	<ul style="list-style-type: none"> <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: Second/Fourth**

**Subject: Mathematics**

After successful completion of three-year degree programme in Mathematics students should be able to;

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>SY</b> <b>Paper-I</b> <b>401</b> <b>Partial</b> <b>Differential</b> <b>Equations &amp;</b> <b>Calculus of</b> <b>Variation</b>	<b>401.1</b>	Understand the concept of ordinary Differential Equations in more than two variables
	<b>401.2</b>	Use the methods to solve the linear and nonlinear partial differential equations of first order
	<b>401.3</b>	Understand the concept of Higher Partial Differential Equations
	<b>401.4</b>	Find the distance between the curves and understand the concept of Eulers differential equation



<b>SY Paper-II 402 Mechanics</b>	<b>402.1</b>	Students learn about Coplanar Forces, Virtual Work and Catenary
	<b>402.2</b>	Understand the velocity, Acceleration and simple harmonic Motion
	<b>402.3</b>	Understand the concept of Lagranges Equations of motion
	<b>402.4</b>	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**

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

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>S.Y. Paper-I Life and Diversity of Animals – Chordates (Reptilia, Aves and Mammals) (401)</b>	<b>401.1</b>	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
	<b>401.2</b>	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)
	<b>401.3</b>	Understand the Comparative account of aortic arches and heart in Reptiles, Birds and Mammals, Structure of hen’s egg, Development of chick up to primitive streak stage, Development of extra embryonic membranes in chick and functions
	<b>401.4</b>	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
<b>S.Y. Paper-II Molecular Biology and Immunology(402)</b>	<b>402.1</b>	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
	<b>402.2</b>	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
	<b>402.3</b>	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, Antigen-antibody interaction – Precipitation and agglutination
	<b>402.4</b>	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
<b>S.Y. Zoology practical Course</b>	<b>403</b>	<ul style="list-style-type: none"> <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 Botany  
Course Outcomes (COs)**

**Course Name: B. Sc.**

**Year/Semester: Second/Fourth**

**Subject: Botany**

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

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>S.Y. Paper-I Cell biology, Plant Breeding, Evolution, and Technology (401)</b>	<b>401.1</b>	<ul style="list-style-type: none"> <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>
	<b>401.2</b>	<ul style="list-style-type: none"> <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>
	<b>401.3</b>	<ul style="list-style-type: none"> <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>
	<b>401.4</b>	<ul style="list-style-type: none"> <li>• Understand the seed development technology</li> </ul>

		which is used to increase a commercial value of seeds.
<b>S.Y. Paper-II (402)</b>	<b>402.1</b>	<ul style="list-style-type: none"> <li>• Understand the principle of Mendelism.</li> <li>• Understand the linkage and crossing over process.</li> </ul>
	<b>402.2</b>	<ul style="list-style-type: none"> <li>• Understand the Mutation , chromosomal aberrations and variation in chromosome number.</li> <li>• Understand the DNA damage and repair process.</li> </ul>
	<b>402.3</b>	<ul style="list-style-type: none"> <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>
	<b>402.4</b>	<ul style="list-style-type: none"> <li>• Study the skill development.</li> <li>• Develop the skills related with plant nursery.</li> <li>• Understand the nursery management techniques..</li> </ul>
<b>S.Y. Botany practical Course</b>	<b>403</b>	<ul style="list-style-type: none"> <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-**

<b>Paper</b>	<b>CO</b>	<b>Outcome</b>
<b>T.Y. Paper-I Organic Chemistry (501)</b>	<b>501.1</b>	<ul style="list-style-type: none"> <li>• Understand the concept of organic compounds of nitrogen and amines.</li> </ul>
	<b>501.2</b>	<ul style="list-style-type: none"> <li>• Understand heterocyclic compounds and their structure.</li> </ul>
	<b>501.3</b>	<ul style="list-style-type: none"> <li>• Understand quantitative analysis: Estimation of carbon, hydrogen and nitrogen etc.</li> <li>• Understand reaction and structure of organometallic compounds.</li> </ul>
	<b>501.4</b>	<ul style="list-style-type: none"> <li>• To study Spectroscopy.</li> <li>• To understand Electromagnetic and Infrared absorption spectroscopy</li> </ul>
<b>T.Y. Paper-II Physical Chemistry (502)</b>	<b>502.1</b>	<ul style="list-style-type: none"> <li>• Understand electrochemistry and various types of cells.</li> <li>• Understand types of reversible electrodes.</li> </ul>
	<b>502.2</b>	<ul style="list-style-type: none"> <li>• Understand quantum chemistry and molecular orbital theory.</li> </ul>

	<b>502.3</b>	<ul style="list-style-type: none"> <li>• Understand the concept of Photochemistry.</li> <li>• To study Raman Spectroscopy</li> </ul>
	<b>502.4</b>	<ul style="list-style-type: none"> <li>• To understand colligative properties and macromolecules.</li> </ul>
<b>T.Y. Chemistry Practical Course</b>	<b>503</b>	<ul style="list-style-type: none"> <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**

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

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>Paper 1: Atomic Physics, Free Electron Theory and Statistical Physics (501)</b>	<b>501.1</b>	<ul style="list-style-type: none"> <li>• Understand Vector atom Model, the concept of space quantization, Zeeman Effect and L-S and J-J coupling.</li> </ul>
	<b>501.2</b>	<ul style="list-style-type: none"> <li>• Apply free electron theory and band theory of solid to classify solids as conductor, semiconductor and insulator.</li> </ul>
	<b>501.3</b>	<ul style="list-style-type: none"> <li>• Understand and apply Maxwell-Boltzmann statistics</li> </ul>
	<b>501.4</b>	<ul style="list-style-type: none"> <li>• Understand and apply Bose-Einstein statistics and Fermi-Dirac statistics.</li> </ul>
<b>Paper 2: Quantum Mechanics, Nanomaterials and Nanotechnology (502)</b>	<b>502.1</b>	<ul style="list-style-type: none"> <li>• Understand the basics of quantum mechanics and apply it to explain the phenomena like black body radiation and Compton Effect.</li> </ul>
	<b>502.2</b>	<ul style="list-style-type: none"> <li>• Understand and apply Schrodinger's equation to free particle in a one and three dimension.</li> </ul>
	<b>502.3</b>	<ul style="list-style-type: none"> <li>• Understand the basics of nanotechnology.</li> </ul>
	<b>502.4</b>	<ul style="list-style-type: none"> <li>• Understand the synthesis and characterization techniques of nano materials.</li> </ul>
<b>Physics Practical (503)</b>	<b>503</b>	<ul style="list-style-type: none"> <li>• Apply and demonstrate the theoretical concepts of Physics and to develop scientific attitude.</li> </ul>

### 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
<b>TY Paper-I 501 Analysis</b>	<b>501.1</b>	Understand the concept of Fourier series
	<b>501.2</b>	Understand the concept of Riemann-Stieltjes integral
	<b>501.3</b>	Understand the concept of Analytics Functions
	<b>501.4</b>	Students learn about Mobius Transformation
<b>TY Paper-II 502 Metric spaces, Complex integration &amp; Algebra</b>	<b>502.1</b>	Students deal with the definition, properties and examples of countable and uncountable sets and understand the metric space
	<b>502.2</b>	Understand the concept of Completeness, Compactness and Connectedness
	<b>502.3</b>	Understand the concept of Ring Analyze and demonstrate examples of ideals and quotient rings
	<b>502.4</b>	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 the successful completion of the course students will be able to-

Paper	CO	Outcomes
<b>T.Y. Paper-I General Mammalian Physiology – I (501)</b>	<b>501.1</b>	Understand the Enzymes – Distribution and chemical nature of enzymes, General properties of enzymes, Classification of enzymes, Factors affecting enzyme activity
	<b>501.2</b>	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
	<b>501.3</b>	Understand the Respiratory pigments - Types , distribution and properties, Mechanism of Respiration, Transport of O <sub>2</sub> and CO <sub>2</sub> , Respiratory disorders and effects of smoking
	<b>501.4</b>	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
<b>T.Y. Paper-II Physical Zoology (502)</b>	<b>502.1</b>	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
	<b>502.2</b>	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
	<b>502.3</b>	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 - <i>Earias vitella</i> ,Stored grain pest- Rice Weevil, <i>Sitophilus oryzae</i> , Animal pest: Life cycle, damage and control of – House fly – <i>Musca nebulosa</i> , Stable fly – <i>Stomoxys calcitrans</i>
	<b>502.4</b>	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 cocoon processing for silk fabric - cocoon 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
<b>T.Y. Zoology Practical Course</b>	<b>503</b>	<ul style="list-style-type: none"> <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 Botany  
Course Outcomes (COs)**

**Course Name: B. Sc.**

**Year/Semester: Third/Fifth**

**Subject: Botany**

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

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>T.Y. Paper-I Plant physiology, Mineral Nutrition and Hydroponics (501)</b>	<b>501.1</b>	<ul style="list-style-type: none"> <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> </ul>
	<b>501.2</b>	<ul style="list-style-type: none"> <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> </ul>
	<b>501.3</b>	<ul style="list-style-type: none"> <li>• Understand the nitrogen fixation by symbiotic and Non-Symbiotic mechanism.</li> <li>• Study the plant movements and photoperiodism.</li> <li>• Study the circadian rhythms and Biological Clock.</li> </ul>

	<b>501.4</b>	<ul style="list-style-type: none"> <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>
<b>T.Y. Paper-II Plant Ecology and Organic Farming (502)</b>	<b>502.1</b>	<ul style="list-style-type: none"> <li>Understand the concept of Ecology.</li> <li>Study the climatic, Edaphic and Physiographic factors.</li> </ul>
	<b>502.2</b>	<ul style="list-style-type: none"> <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> </ul>
	<b>502.3</b>	<ul style="list-style-type: none"> <li>Understand the process of succession.</li> <li>Study the plant adaptations.</li> <li>Study the Biogeochemical cycles.</li> </ul>
	<b>502.4</b>	<ul style="list-style-type: none"> <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>
<b>T.Y. Botany Practical Course</b>	<b>503</b>	<ul style="list-style-type: none"> <li>Determining the Frequency, Density, and Abundance of community by Quadrant 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>

### 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-**

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>T.Y. Paper-I Inorganic Chemistry (601)</b>	<b>601.1</b>	<ul style="list-style-type: none"> <li>Understand Metal ligand bonding in Transition Metal complexes.</li> <li>Electronic spectra of Transition Metal Complexes.</li> </ul>
	<b>601.2</b>	<ul style="list-style-type: none"> <li>Understand Magnetic Properties of Transition metal Complexes.</li> <li>To study thermodynamic and kinetic aspect of metal complexes.</li> </ul>
	<b>601.3</b>	<ul style="list-style-type: none"> <li>Understand organometallic chemistry.</li> <li>Understand properties and structure of metal carbonyls.</li> </ul>
	<b>601.4</b>	<ul style="list-style-type: none"> <li>To study Bio-organic chemistry</li> <li>Understand the concept of s Hard and Soft acids and</li> </ul>

		bases.
<b>T.Y. Paper-II Organic Chemistry (602)</b>	<b>602.1</b>	<ul style="list-style-type: none"> <li>Understand NMR Spectroscopy</li> </ul>
	<b>602.2</b>	<ul style="list-style-type: none"> <li>Understand Organic Synthesis via Enolates.</li> <li>Carbohydrates: classification, reaction and mechanisms.</li> </ul>
	<b>602.3</b>	<ul style="list-style-type: none"> <li>Understand Amino acids, peptides and nucleic acids. To study Fats, oil and detergents.</li> </ul>
	<b>602.4</b>	<ul style="list-style-type: none"> <li>Understand synthetic dyes, synthetic drugs, syntheticpolymer.</li> </ul>
<b>T.Y. Chemistry Practical Course</b>	<b>603</b>	<ul style="list-style-type: none"> <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-**

<b>Paper</b>	<b>CO</b>	<b>Outcomes</b>
<b>Paper 1:</b> Relativity, Nuclear Physics and Bio Physics (601)	<b>601.1</b>	<ul style="list-style-type: none"> <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>
	<b>601.2</b>	<ul style="list-style-type: none"> <li>Understand the concept of nuclear physics.</li> </ul>
	<b>601.3</b>	<ul style="list-style-type: none"> <li>Apply the concept of nuclear physics to explain various decay processes.</li> </ul>
	<b>601.4</b>	<ul style="list-style-type: none"> <li>Understand the Principle, Construction and working of different bio instruments.</li> </ul>
<b>Paper 2:</b> Electronics, Fiber Optics, Communication and Digital Electronics (602)	<b>602.1</b>	<ul style="list-style-type: none"> <li>Understand the operations and applications of operational amplifiers.</li> </ul>
	<b>602.2</b>	<ul style="list-style-type: none"> <li>Understand the various basic structures of optical fibers and basic concept involved in propagation of light waves through optical fiber.</li> </ul>
	<b>602.3</b>	<ul style="list-style-type: none"> <li>Understand the concept of amplitude modulation and frequency modulation.</li> </ul>
	<b>602.4</b>	<ul style="list-style-type: none"> <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)	<b>603</b>	<ul style="list-style-type: none"> <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/Sixth**

**Subject: Mathematics**

After successful completion of three-year degree program in Mathematics Students should be able to;

Paper	CO	Outcomes
<b>TY</b> <b>Paper-I</b> <b>601</b> <b>Abstract</b> <b>Algebra</b>	<b>601.1</b>	Understand the concept of Group Automorphism
	<b>601.2</b>	Understand definition and examples of vector spaces
	<b>601.3</b>	Learn about algebra of linear transformation
	<b>601.4</b>	Find range, rank, kernel and nullity of matrix and also study about Inner product spaces
<b>TY</b> <b>Paper-II</b> <b>602</b> <b>Special Theory</b> <b>of Relativity</b>	<b>602.1</b>	Study the Newtonian Mechanics and understand the concept special theory of relativity
	<b>602.2</b>	Learn the Lorentz transformation and consequences
	<b>602.3</b>	Understand the concept of Tensors and Space –Time structure
	<b>602.4</b>	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 successful completion of the course students will be able to-**

Paper	CO	Outcomess
<b>T.Y.</b> <b>Paper-I</b> General Mammalian Physiology - II (601)	<b>601.1</b>	Understand the Types of neurons, E.M. structure of neuron, Conduction of nerve impulse, Ultrastructure of striated muscle, Sliding filament theory of muscle contraction, Properties of muscles (Twitch, Tetanus, Tonus, Summation, All or None Principle, Muscle fatigue)
	<b>601.2</b>	Understand Structure of uriniferous tubule, Mechanism of urine formation, Counter – current mechanism, Normal and abnormal constituents of urine; Elementary idea of dialysis
	<b>601.3</b>	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
	<b>601.4</b>	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
<b>T.Y.</b> <b>Paper-II</b> Applied Zoology –II (Biotechniques, Microtechnique, Biotechnology,	<b>602.1</b>	Understand the Concepts of sterilization: Filtration, autoclaving, dry heat sterilization, wet sterilization and radiation, Separation of biomolecules: Centrifugation (Sedimentation, density gradient); Chromatography (Elementary idea of thin layer, gel filtration and ion exchange - Principles and applications), Electrophoresis: Agarose gel electrophoresis, SDS-PAGE, Principles of

Bioinformatics and Biostatistics) (602)		colorimeter and spectrophotometers
	602.2	Understand the concept of Fixation, dehydration, clearing, embedding & 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)
	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, presentation of data, sampling errors, mean, mode, median, probability, standard error and standard deviation
T.Y. Zoology Practical Course	603	<ul style="list-style-type: none"> <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 Botany**  
**Course Outcomes (COs)**

**Course Name: B. Sc.**

**Year/Semester: Third/Sixth**

**Subject: Botany**

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

Paper	CO	Outcomes
Biochemistry, biotechnology And herbal technology Paper-I (601)	601.1	<ul style="list-style-type: none"> <li>• Study the lipids, role of fatty acids, oils and waxes.</li> <li>• Study the enzymes its classification and nomenclature.</li> <li>• Study the basic concepts of Enzymology.</li> <li>• Study the enzyme inhibitors.</li> </ul>
	601.2	<ul style="list-style-type: none"> <li>• Study the tissue culture techniques.</li> <li>• Study the process of sterilization.</li> <li>• Study the preparation of culture media..</li> </ul>
	601.3	<ul style="list-style-type: none"> <li>• Understand the techniques of genetic engineering.</li> <li>• Study the process of DNA library.</li> <li>• Study the types of DNA library.</li> <li>• Study the Agrobacteria mediated gene</li> </ul>

		transfer.
	601.4	<ul style="list-style-type: none"> <li>• Develop the skills of herbal technology.</li> <li>• Study the methods of Cultivation, Harvesting,</li> <li>• Understand the technique of dye yielding of herbal plants.</li> <li>• Study the used of herbs in cosmetics.</li> </ul>
<b>T.Y. Paper-II Phytogeography, Utilization of Plants, Techniques and Pharmacognosy (602)</b>	602.1	<ul style="list-style-type: none"> <li>• Study the phytogeography, climatic regions of India.</li> <li>• Study the Environmental pollution.</li> <li>• Study the Renewable and Non Renewable sources.</li> <li>• Understand the conservation strategies.</li> </ul>
	602.2	<ul style="list-style-type: none"> <li>• Study the morphology, utilization and important chemicals constituents of the plants.</li> <li>• Understand the concept of Ethnobotany.</li> </ul>
	602.3	<ul style="list-style-type: none"> <li>• Study the principle, types and application of microscope.</li> <li>• Study the various techniques.</li> </ul>
	602.4	<ul style="list-style-type: none"> <li>• Understand synthetic dyes, synthetic drugs, synthetic polymer.</li> <li>• Study the pharmacological plants</li> </ul>
<b>T.Y. Botany Practical Course</b>	603	<ul style="list-style-type: none"> <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>

Principal  
Bhiwapur Mahavidyalaya  
Bhiwapur, Dist.-Nagpur