



**Program Outcomes**  
**Course Outcomes**

**Academic session-2021-2022**

**Faculty of B. A, B. Com, B. Sc &  
B. Voc.**

**Bhiwapur Mahavidyalaya, Bhiwapur**  
**Course Outcome and Program Outcome**  
**Index**

**Department of Arts**

Session	Course	Semester	Sr. No.	Subject	Page No.
2020-2021	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	

**Department of Commerce**

Session	Course	Semester	Sr. No.	Subject	Page No.
2020-2021	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	

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

Session	Course	Semester	Sr. No.	Subject	Page No.
2020-2021	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	

**Department of B. Voc**

Session	Course	Semester	Sr. No.	Subject	Page No.
2020-2021	<b><u>Building Technology</u></b>	First	1	English & Communication Skill –I	
			2	Soft Skill Development-I	
			3	Aptitude Development-I	
			4	Bar, Bender & Fixer -I	
			5	Bar, Bender & Fixer -II	
		Second	6	English & Communication Skill –II	
			7	Soft Skill Development-III	
			8	Aptitude Development –II	
			9	Shuttering Carpenter -I	
			10	Shuttering Carpenter -II	
		Third	11	English & Communication Skill –III	
			12	Soft Skill Development-III	
			13	Aptitude Development –III	
			14	Mason -I	
			15	Mason -II	
		Fourth	16	English & Communication Skill –IV	
			17	Soft Skill Development –IV	
			18	Aptitude Development –IV	
			19	Painter & Decorator –I	
			20	Painter & Decorator –II	
		Fifth	21	English & Communication Skill –V	
			22	Soft Skill Development –V	
			23	Aptitude Development –V	
			24	Scaffolder -I	

			25	Scaffolder -II	
		Sixth	26	Applied Computer Skill -I	
			27	Applied Computer Skill -II	
			28	Applied Computer Skill -III	
			29	Project - Industry Based Project	
<b>Session</b>	<b>Course</b>	<b>Semester</b>	<b>Sr. No.</b>	<b>Subject</b>	<b>Page No.</b>
2020-2021	<b><u>Food Processing &amp; Engineering</u></b>	First	1	English & Communication Skill –I	
			2	Soft Skill Development-I	
			3	Aptitude Development-I	
			4	Fundamentals of Food & Nutrition	
			5	Introduction to Food Processing	
		Second	6	English & Communication Skill –II	
			7	Soft Skill Development-II	
			8	Aptitude Development –II	
			9	Food Microbiology	
			10	Dairy Technology	
		Third	11	English & Communication Skill –III	
			12	Soft Skill Development-III	
			13	Aptitude Development –III	
			14	Bakery and Confectionery	
			15	Emerging Technologies in Food Industry	
		Fourth	16	English & Communication Skill –IV	
			17	Soft Skill Development –IV	
			18	Aptitude Development –IV	
			19	Fruits, Vegetables and Post Harvest Technology	
			20	Beverages Processing	
		Fifth	21	English & Communication Skill –V	
			22	Soft Skill Development –V	
			23	Aptitude Development –V	
			24	Technology of Animal Foods	

			25	Cereals, Pulses Technology and Food Business	
		Sixth	26	Applied Computer Skill -I	
			27	Applied Computer Skill -II	
			28	Applied Computer Skill -III	
			29	Project - Industry Based Project	

Session	Course	Semester	Sr. No.	Subject	Page No.
2020-2021	<b><u>Software Development</u></b>	First	1	English & Communication Skill –I	
			2	Soft Skill Development-I	
			3	Aptitude Development-I	
			4	Computer Fundamentals & Networking	
			5	- C Programming	
		Second	6	English & Communication Skill –II	
			7	Soft Skill Development-III	
			8	Aptitude Development –II	
			9	Operating System Concepts & LINUX	
			10	Programming in ‘C++’	
		Third	11	English & Communication Skill –III	
			12	Soft Skill Development-III	
			13	Aptitude Development –III	
			14	Data Structures	
			15	Web Designing	
		Fourth	16	English & Communication Skill –IV	
			17	Soft Skill Development – IV	
			18	Aptitude Development –IV	
			19	Database Management System	
			20	Web Development in PHP	
		Fifth	21	English & Communication Skill –V	
			22	Soft Skill Development –V	
			23	Aptitude Development –V	

			24	System Analysis & Software Engineering	
			25	JAVA Programming	
		Sixth	26	Applied Computer Skill -I	
			27	Applied Computer Skill -II	
			28	Applied Computer Skill - III	
			29	Project - Industry Based Project	
<b>Session</b>	<b>Course</b>	<b>Semester</b>	<b>Sr. No.</b>	<b>Subject</b>	<b>Page No.</b>
2020-2021	<b><u>Hardware Technology and Networking</u></b>	First	1	English & Communication Skill –I	
			2	Soft Skill Development-I	
			3	Aptitude Development-I	
			4	Computer fundamentals	
			5	Computer & Network Organization -I	
		Second	6	English & Communication Skill –II	
			7	Soft Skill Development-II	
			8	Aptitude Development –II	
			9	Operating System	
			10	Computer & Network Organization -II	
		Third	11	English & Communication Skill –III	
			12	Soft Skill Development-III	
			13	Aptitude Development –III	
			14	Computer Hardware & Networking administration	
			15	Network Programming	
		Fourth	16	English & Communication Skill –IV	
			17	Soft Skill Development – IV	
			18	Aptitude Development –IV	
			19	Mobile Computing	
			20	Internet Routing Design	
		Fifth	21	English & Communication Skill –V	
			22	Soft Skill Development –V	
			23	Aptitude Development –V	



			24	- Information & Network Security	
			25	Linux OS Server	
		Sixth	26	Applied Computer Skill -I	
			27	Applied Computer Skill -II	
			28	Applied Computer Skill - III	
			29	Project - Industry Based Project	

**Department of Arts  
Semester – I**

**Department of English  
Compulsory English**

**Course Outcomes**

Students will be able to -

CO1- Develop interest in English language through interesting lessons

CO2- Understand the lives of successful entrepreneurs through life sketches

CO3- Appreciate poetry through prescribed poems

CO4- Apply rules of grammar with the help of prescribed grammar syllabus

CO5- Motivate themselves by reading and understanding the lives of great personalities

**Department of Marathi  
Course Objectives and Outcomes  
Compulsory Marathi (1kfgR;jax-Hkx&1**

**Unit I:**

**1k/;&1-mfn~"B& ^ik[kkyk ckGd ikaxqjo.ks\* ;k yhGsrhy ejkBh Hkk"ksph vksG[k o tk.kho fo|kF;kZauk d#.k ns.ks-**

**1k/;& fo|kF;kZauk yhGkpfj=krrhy x| ejkBh Hkk"ksph vksG[k o ekfgrh feGkyh-**

**1k/;&2-mfn~"B&f'k{k.k ikBkrwu egkRek Qqys ;kauh Hkkjrkrhy f'k{k.kkP;k dsysY;k iqjLdkjkph ekfgrh ns.ks**

**1k/;& Hkkjrkrhy cgqtulektkP;k f'k{k.kkph egkRek Qqysauh lkafxrysh mn~nh"Vs d'kh egRokph o mi;ksxh vkgsr ;kps eeZ fo|kF;kZauk dGwu vkys-**

**1k/;&3-mfn~"B& Lokeh foosdkuankuh lkaxhryS;k O;fDreRo fodklkfo" k;h fo|kF;kZauk cks/k dj.ks**

**1k/;& lkeF;Z gsp thou o nqcZyrk gkp e'R;q ;k Lokeh foosdkuankuh ;qodkalkBh dsysys ekxZn'kZukph tk.kho fo|kF;kZauk >kyh-**

**1k/;&4-mfn~"B& jk"V^lar rqdMksth egkjkt ;kauh lkafxryS;k l"VhP;k dk;n;kph o ifjorZukph ekfgrh fo|kF;kZauk ns.ks-**

**1k/;&^cnyk fdaok ejk\* gk l"Vhpkdk;nk vkgs o ifjorZu gs thoari.kkps y{k.k vkgs ;kph lk{k fo|kF;kZauk iVyh-**

**1k/;&5-mfn~"B& dksadjkph dFksrwu xks[kysauh y"djkrwu iGwu vkysY;k f'kojkeP;k thoukps fp=.k dj.ks-**

**1k/;& y"djh is'kkrhy dMd f'kLrph ekfgrh f'kojkeP;k O;fDreRokrwu fo|kF;kZauk >kyh-**

**Unit II:**

**dfork & 1-mfn~"B&**eqdqanjtkuh ek; ejkBh Hkk"ksps lkafxrysyh egRo o oSf'k"V;kaph vksG[k fo|kF;kZauk d#.k ns.ks

**lk/;&** ek; ejkBh dforsrwu ejkBh Hkk"ksps egRo o ejkBhph oSf'k"V;s fo|kF;kZauk letwu vkyh-

**dfork & 2- mfn~"B&** lar Kkus'ojkauh lkaxhryY;k vHkaxkrwu fojgh.khps egRo fo|kF;kZauk iVowu ns.ks-

**lk/;&** ?kuq okts ?kq.k?kq.kk o iSy rks xs dkÅ dksdrkgs ;k vHkaxkrwu HkDrkph Hkxoark'kh ,d:lk gks.;kph vks< o rGeGhph tk.kho fo|kF;kZauk >kyh-

**dfork & 3-mfn~"B&** naokps Fksac dforsrrwu ds'kolqrkauh js[kkVysY;k fulxkZrhy ?kVukaps o.kZu fo|kF;kZauk d#u lkax.ks-

**lk/;&** vkbZ o eqyxk ;kaP;krhy laoknkrwu fulxkZrhy fofHkUu ?kVukafo"k;hps dqrgwy ;kph ekfgrh fo|kF;kZauk >kyh-

**dfork & 4-mfn~"B&** Hkaxw ns dkfBU; ek>sa dforsrwu ij'es'ojk'kh toGhd lk/k.;kph dfoP;k bZPNsPkh fo|kF;kZauk tk.kho d:u ns.ks-

**lk/;&** ck- lh- e<sZdjkaush ij'es'ojk'kh toGhd lk/k.;klkBh Lor%P;k e;kZnk o mf.kokarwu eqDr gks.;klkBh ij'es'ojk'kh ?kkryY;k laoknkrwu ekfgrh fo|kF;kZauk feGkyh

**dfork& 5-mfn~"B&** pkj 'kCn dforsrwu dfous O;Dr dsysY;k visf{kr ifjorZukph tk.kho fo|kF;kZauk d#u ns.ks-

**lk/;&** ukjk;.k lqosZ ;kauh d"Vdjh]dkedjhaP;k LokHkhekukrwu ifjorZu ?kMwu ;sbZy ;kph ekfgrh fo|kF;kZauk feGkyh-

### **Unit III:**

**izdj.k & 1-mfn~"B& O;**kogkfjd ejkBhph vko';drk thou O;ogkjklkBh dk vkgs ;kph ;FkkFkZrk fo|kF;kZauk iVfo.ks-

**lk/;&** thou O;ogjkr O;kogkfjd ejkBhph mi;qDrrk vIY;kps fo|kF;kZauk dGys rlsp vusd O;ogkj {ks=kr O;kogkfjd ejkBhph mi;qDrrk vIY;kps Li"V >kys-

**izdj.k & 2-mfn~"B&**Hkkf"kd laokn O;ogkjP;k ewyrRokaph vksG[k o ekfgrh fo|kF;kZauk d#u ns.ks-

**lk/;&** Hkk"kk gs laoknks ek;/e vIwu ys[ku] okpu ] Jo.k o Hkk"kk;k ;krwu Hkk"kspk laokn O;ogkj pkyrks gs dGys lkscrp Hkkf"kd laokn O;ogkjP;k fofo/k eqyrRokph vksG[k fo|kF;kZauk >kyh-

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

### **Course Objectives**

The Students Will Be:

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

### **Course Outcomes**

The Students Will Be Able:

- 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

### **Department of Economics**

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

##### Unit – I

##### Introduction to Economics

Objective - To develop preliminary knowledge of economic concepts for understanding of Economics Nature, Definition and Method of Economics Analysis,

Outcomes – Students learnt preliminary knowledge of economic concepts and definition

##### Unit – II

##### Law of Demand and Law of Supply Demand

Objective - To provide orderly and objective way of thinking about economic Demand & Supply Theory

Outcomes- The students have learned the knowledge of Demand and Supply

##### Unit – III

##### Consumer Behavior Utility Analysis

Objective - To introduce the essential Basic principles of Economics To introduce the essential principles for Consumer Behavior Utility Analysis

Outcomes- The Knowledge gained Consumer Behavior and Utility Analysis

##### Unit – IV Production Function

Objective - Develop the ability to explain core economic various factor of production

Outcomes - Students learnt about the production function

### **Department of English**

#### **English Literature**

##### Course Learning Outcomes:

- CO1. Students should be familiar with characteristic literary texts within a given historical, geographical, and socio- cultural context.
- CO2. Students should be able to apply analytical skills to literary and cultural texts of multiple genres.
- CO3. Students should be able to identify, and describe the values, and themes present in the prescribed text.
- CO4. Students should be able to identify ideas, values, and themes which had made an impact on the socio- cultural ethos of the society in the past and in the contemporary society.

### **Department of sociology**

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

##### Unit - I Understanding Sociology

Objective - To Make Students know in details about Understanding Sociology

Outcomes - Student Understood the concept of Understanding Sociology

##### Unit - II Basic Concepts in Sociology

Objective - To Make Students Aware of Basic Concepts in Sociology

Outcomes -Student Understood the concept of Basic Concepts in Sociology

Unit - III Socialization

Objective - To Make Students Aware of Socialization

Outcomes - Student Understood the concept of Socialization

Unit - IV Social Structure

Objective - To Make Students know in details about Social Structure

Outcomes - Student Understood the concept of Social Structure

### Department of History

#### Course Objectives and Outcomes

<b>PROGRAMME OUTCOME</b>	
<b>Department of History</b>	<b>After successful completion of three year Degree Programme in History a student should be able to know</b>
Programme Outcome	<ul style="list-style-type: none"><li>➤ PO1: History has an unprecedented significance in human life</li><li>➤ PO2: The study of history preserves culture</li><li>➤ PO3: The study of history leads to socio-political awareness</li><li>➤ PO4: Learn about world events</li><li>➤ PO5: The study of history is important for competitive examination</li><li>➤ PO6: Conversational skills come and understand the importance of human society</li><li>➤ PO7: Studying history inspires patriotism</li><li>➤ PO8:: The study of history reveals the national-international relations of the country.</li></ul>
Programme Specific Outcome	<ul style="list-style-type: none"><li>➤ PSO1: Knowing the importance of culture gives you the ability to make decisions in yourself</li><li>➤ PSO2: Gains the ability to make decisions while living life</li><li>➤ PSO3: Employment opportunities are obtained through competitive examinations</li><li>➤ PSO4: New Values - Able generation is formed by acquiring moral</li></ul>

	Values.
Course	Outcome completion of the course students should be able to:
<b>B.A. -I Sem. - I History of India ( Beginning - 1525)</b>  1) To know information about Harappan culture, Vedic culture 2) To understand information about Jainism- Buddhism 3) Understanding slavery and sultanate 4) To get information about devotional movement and Sufi sect	<ul style="list-style-type: none"> <li>➤ Co-1 Students understood Harappan culture and Vedic culture</li> <li>➤ Co-2 I got detailed information about Jainism-Buddhism</li> <li>➤ Co-3 Understood the value of slavery and sultanate</li> <li>➤ CO-4 Understood information about devotional movement and Sufi sect.</li> </ul>

**Department of Marathi  
Marathi Literature**

Unit I: Ekk>h tUeBsi&- fo-nk- lkojdj ¼vkRepfj=½&

mfn~"B& Lokra«;foj fo-nk- lkojdj ;kaph Hkkjrh; Lokra™;krhy Hkwfedk o lkojdkaps  
O;fDreRo letkowu lkax.ks-  
lk/;& Lokra«;foj lkojdkaph Lokra™;izsjhr Hkwfedk o ;kaxnku rlsp R;kaps O;fDreRo ;kph  
lR;rk fo|kF;kZauk letyh-

Unit II:

izfrHkk lk/ku& uk-lh- QMdss  
mfn~"B& lkfgR;kph vfHk#ph o lkfgR;kph fufeZrhph vksG[k o ekfgrh fo|kF;kZauk ns.ks-  
lk/;&lkfgR; izdkj] vfHk#ph o fufeZrh o jlLokn ;kc/ny fo|kF;kZauk ekfgrh >kyh-

**Semester-II**

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

Students will be able to -

- CO6- Study lessons based on the themes humor, emotional bonding, ethics and values
- CO7- Motivate themselves even in adverse situations through reading the lives sketches of successful people
- CO8- Prioritize life's needs over wants
- CO9- Apply the grammar lessons to spoken English
- CO10- Grasp the nuances of learning a foreign language

**Department of Marathi  
Course Objectives and Outcomes  
Compulsory Marathi (lkfgR;jax-Hkx&1)**

Unit I:

izdj.k & 6-mfn~"B&Hkkjrh; yksd'kkghps HkforO; dk;\ ;k ikBkP;k vk/kkjs yksd'kkghph  
ekfgrh d#u ns.ks-  
lk/;& MkWa- ckcklkgsc vkacsMdj ;kauh Hkkjrh; yksd'kkgh vkf.k tkrhO;oLFkslaca/kh cgky  
dsysY;k fopjkaph fo|kF;kZauk vksG[k iVyh o ekfgrh feGkyh-

izdj.k & 7-mfn~"B& xkMxsckckauh ysf[kdsyk nk[foysY;k 'kkGspk ekxZ o Kkukpk izdk'kkph :to.kwd dj.ks-

lk/;&lhek lk[kjsaps O;fDreRo ?kM.;klkBh deZ;ksxh xkMxsckckauh nk[kfoysyk 'kkGspk ekxZ o Kkukpk izdk'k dlk mi;qDr Bjyk ;kph egrh fo|kF;kZauk iVyh- izdj.k & 8-mfn~"B&HkkjrjRu vVyfcgkjh oktis;h ;kaP;k O;fDreRokph vksG[k fo|kF;kZauk d#u ns.ks-

lk/;&vtrk'k=w vVyth ;kaP;k vkxG;k osxG;k O;fDrfp=.kkph 'kjin iokj ;kauh d#u fnysyh vksG[k ekfgrh fo|kF;kZauk >kyh- izdj.k & 9-mfn~"B&tkr pksjhP;k vkiRrheqGs dks.krs ladVs ;srkr ;kph tk.kho fo|kF;kZauk d#u ns.ks-

lk/;&ckcqjko ckxqy ;kauh vkiyh vLi''; egkj gh tkr yifoY;keqGs R;kauk vkysyk vuwHkokps o.kZu fo|kF;kZauk letwu vkys- izdj.k & 10-mfn~"B& iqf.kZ;k ;k fcgkj jkT;krhy ekxlysY;k fTYg;krhy yksdkaP;k nq%[kh d"Vh thoukph ekfgrh fo|kF;kZauk ns.ks-

lk/;&vfuy vopV ;kauh iwf.kZ;ke/kwu js[kkVysys fL;kaps cfnLr thou] 'kkGk] ukdÚ;kapk iz'u] jktdh; ifjLFkrh] etwj kaps gykdhps thou] miklekjh b-ph ekfgrh fo|kF;kZauk feGkyh-

Unit II:

dfork & 6-mfn~"B&eqDr i{kh ;k dforsrw fiatÚ;krhy i{kh Lokra= dk ukdkjrks ;kph ekfgrh ns.ks-

lk/;&xqykehph lo; tMY;keqGs i{kh fiaTÚ;krwu eqDr dsY;kojgh Lokra= ukdkjrks ;kph Kku fo|kF;kZauk izklr >kys- dfork & 7-mfn~"B& thou ej.kkc/ny cfg.kkckbZauh dsysY;k fparukph lkFkZdrk iVowu ns.k-

lk/;&tUee R;q fo"kh;h dof;=hus dforsr izxV dsysys fopkj ekuoh thoukph lkFkZdrk iVowu nsrkr ;kph fo|kF;kZauk [kk=h iVyh- dfork & 8-mfn~"B&jk"V@larkauk xjhckP;k >ksiMhe/khy lq[kkph ekfgrh fo|kF;kZauk ns.ks

lk/;&egkykrhy lq[kkis{kk ygku'kk >ksiMhrhy lq[k gs egku vLY;kph izfprh dforsP;k HkkokFkkZo#u fo|kF;kZauk vkyh- dfork & 9-mfn~"B&ek.klkP;k eukrhy eksBsiuk ukfglk gks.;kph dfoph b'ojkdMs dsysyh ekx.khps Kku fo|kF;kuk ns.ks-

lk/;&dfous vkiY;k thHksojpk yksHk tGw ns.;klkBh o eh i.kkps lkezkt; ukghls gks.;kph dfoph Hkkouk fo|kF;kZauk letyh- dfork & 10-mfn~"B&dqlqekxztkaP;k dforsrwu ekuoh lkeF;Z fulxkZoj dls ekr djrs ;kph vksG[k fo|kF;kZauk d:u ns.ka-

lk/;&dforsrhy uk;dkpk xaxk unhp;k iqjkeqGs lalkj m?oLr gksÅugh ljkP;k vkf'kZoknkph Fkki ekx.kkj uk;d izfrdwy ifjLFkrhoj ekr d#u lalkj mHkk djrks ;kph fo|kF;kZauk izsj.kk feGkyh-

Unit III:

izdj.k & 3-mfn~"B& i=ys[kukps Lo#i] i=kps izdkj] i=ys[kkps ?kVd] oSf'k"V;s o i=kpk uewuk fo|kF;kZuk letkowu ns.ks-

lk/;&fo|kF;kZauk i=kps L#i dls vlrs ]?kVd dks.krs] [ktxh i=s o dk;kZy;hu i=s d'kh fygkohr ;kps dkS'kY; o Kku izklr >kys-

izdj.k & 4-mfn~"B&lkjka'kys[ku dls djkos o lkjka'k ys[ku djrkauk dks.krh dkGth ?;koh o lkjka'kys[kukps Qk;ns ;kfo"kh;h fo|kF;kZuk ekfgrh ns.ks-

lk/;&fo|kF;kZuk lkjka'kys[ku dj.;kph ekfgrh feGkyh rlsp fnysY;k lkjka'kkps ,d r'fr;ka'k ys[ku dj.;kps dkS'kY; izklr gksÅu lkjka'kys[kukps Qk;ns letys-

## Course Objectives and Outcomes

### Course Objectives

The Students Will Be:

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

### Course Outcomes

The Students Will Be Able:

- 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

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

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

Objective- Explain the Kinds of Cost and Revenue Analysis Cost of Production

Outcomes – Demonstrate knowledge of Cost and Revenue Analysis

Unit – II: Market Structure and Perfect Competition Market

Identify Characteristics of Perfect Competition.

Outcomes – Write assignments that are coherent, organized, concise, grammatically correct and well-presented

Unit – III: Monopoly and Imperfect Competition Market

Objective- Identify and discuss the key concepts of Monopoly and Imperfect Competition Market.

Outcomes – Apply economic theory in the Monopoly and Imperfect Competition

Unit – IV: Factors Pricing and Statistics for Economics Factors Pricing:

Objective- Explain the contribution of Factors of production

Outcomes – Students learnt about the factor of production

### English Literature

#### Course Outcomes

CO6 - Students will be familiar with literary texts in a given historical, geographical and cultural context

CO7- Students should be able to apply critical theories to reading of multiple genres of literature

CO8- Students should be able to identify, analyze the critical ideas and themes

CO9- Students should be able to write analytically with the help of language competencies

CO10- Students should be able to imbibe, ethical, moral and cultural values

**Department of Sociology**  
**Course Objectives and Outcomes**  
**Themes and Perspectives**

Unit - I Culture and Society

Objective - To Make Students know in details about culture and society

Outcomes - Student Understood the concept of culture and society

Unit - II Social Deviation and Social Control

Objective – To Make Students Aware of Social Deviation and Social Control.

Outcomes – Student Understood the concept of Social Deviation and Social Control

Unit - III Social Stratification

Objective - To Make Students know in details about Social Stratification.

Outcomes - Student Understood the concept of Social Stratification.

Unit - IV Concept of Gender

Objective - To Make Students Aware of Concept of Gender.

Outcomes -Student Understood the concept of Concept of Gender.

**Department of History**  
**Course Objectives and Outcomes**

<b>B. A I Sem. -II History of India (1526 - 1761)</b> 1) How Mughal power was established in India. 2) How was the administration of Sher shah Suri 3) Mughal carpet administration 4) Information about Chhatrapati Shivaji and Mughal relationship 5) Why and why Panipat III war took place	<ul style="list-style-type: none"><li>➤ Co-1 Understood how the Mughal power was established in India.</li><li>➤ Co-2 Learned information about Sher Shah Suri and Mughal administration</li><li>➤ Co-3 I got information about Chhatrapati Shivaji and Mughal relationship</li><li>➤ Co-4 Understood the Panipat Third War and the arrival of the British.</li></ul>
---	---

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

Unit I:

uVlezkV&fo- ok- f'kjokMdj ¼ukVd½&

mfn~"B& uVlezkV ;k ukVdkrwu ekuoh thoukrhy dkSVqafcd]lkekftd o uVlwzkV vliklkgsc csyo.kdj ;kaps la?k"kZizo.k thoukph ekfgrh fo|kF;kZauk ns.ks-

lk/;& fo- ok- f'kjokMdjkaush uVlezkV ukVdkr js[kkVysY;k vliklkgsc csyo.kdjkaP;k O;fDreRokP;k vk/kjs ekuoh thoukph 'kksdkafdrk fo|kF;kZauk dGyh-

Unit II:

lkfgR;izdkj&dknacjh] pfj=]vkRepfj=-



mfn~"B& dknacjh] pfj=]vkRepfj=-;k lkfgR; izdkjkph vksG[k o ekfgrh fo|kF;kZauk ns.ks-

lk/;& dknacjh] pfj=]vkRepfj=-;k lkfgR; izdkjkph vksG[k o ekfgrh fo|kF;kZauk >kyh--

**B.A. Part -II**  
**Semester-III**  
**Course Objectives and Outcomes**

**Department of English**  
**Compulsory English**

- Unit I: Objective-Making students aware of the importance of Honesty.  
Outcome-Students tried to examine and applied through the various activities carried out in the class.
- Unit II: Objective- Making students realize about the beauties of nature and sublime.  
Outcome-Students tried to apply the values of nature and sublime.
- Unit III: Objective- Making students understand the social evils of the society and the values of Humanity.  
Outcome-Students were exposed to the social evils of the 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 Outcomes**  
**Compulsory Marathi**  
**lkfgR; laokn-Hkx-2**

Unit I:

izdj.k &1-mfn~"B& rsjkO;k 'krdkrhy n"VkarikBkrhy x| Hkk"kk'kSyh] JhpØ/kjLokehps pfj=] egkuwHkko iaFkk fo"k;h ekfgrh ns.ks-  
lk/;& n"VkarikBkrhy x| Hkk"kk'kSyh] JhpØ/kjLokehps pfj=] egkuwHkko iaFkkps lektkyk fnysys ;ksxnku fo|kF;kZauk letwu vkys-  
izdj.k &2-mfn~"B&L=h iq#"k rgyuk ;k ikBkrwu rkjkckbZ f'kans ghus ikjra™;kaP;k dkGkr fL=;kaP;k uf'kch ;s.kkÚ;k nqxqZ.kkaph tk.kho D#u ns.k-s  
lk/;& loZ izdkjps nqxqZ.k fL=;karp vlrkr ;k iq#"kkaP;k iwoZxzgnwf"kr fopkjkaph fo|kF;kZuk ekfgrh izklr >kyh-  
izdj.k &3-mfn~"B&;'kLoh oDrk gks.;klkBh iz-ds-v=s ;kauh lkaxhrsyk vuwHko fo|kF;kZuk lkax.ks-

lk/;& fo|kF;kZauh ;'kLoh oDrk gks.;klkBh vCE;kaP;k vuqHkokpk cks/k ?ksryk-  
izdj.k &4-mfn~"B&ia<jiwj o foB~Bykps n'kZukph ekfgrh fo|kF;kZauk d#u ns.ks-

lk/;& ia<jiwj o ikaMqjaxkps laiw.kZ o.kZu rsFkhy HkSxksfyd ifjflFkrhph ekfgrh fo|kF;kZauk izklr >kyh-

izdj.k &5-mfn~"B&jk"V<sup>a</sup>larkP;k ers f'k{kdk gkp jk"V<sup>a</sup>kpk HkkX;fo/kkrk vly;kph [kk=h fo|kF;kZauk d#u ns.ks-

lk/;& f'k{kdkps fo|kFkhZ] lektkizr dsysY;k laiw.kZ dk;kZph o'kS{kf.kd dk;kZph tk.kho fo|kF;kZauk dGyh-

Unit II:

dfork &1-mfn~"B&lar ukensokauh JhfoB~Bykps o.kZu] foB~ByHkfDrps o ukeLej.kkps egkRE; fo|kF;kZauk lkax.ks-

lk/;&vHkaxkkP;k fuWiukrwu foB~BykP;k vuar yko.;kph 'kksHkk] foB~ByHkfDrps o ukeLej.kkps egkRE; fo|kF;kZauk dGys-

dfork &2-mfn~"B& ekjksiarkuh lRlaxrhpk o.kZu dsysyk efgek lkax.ks-

lk/;& lRlaxrhr lektftoukyk mn~cks/ku dj.;kps lkeF;Z vkgs ;kph fo|kF;kZauk ekfgrh feGkyh-

dfork &3-mfn~"B&Hkyk tUe gk rgyk ykHkyk ;krwu jke tks'khauh lkaxhrysY;k ekuoh thoukps lkFkZdRo iVfo.ks-

lk/;& mins'kij yko.khrwu ekuoh thoukph lkFkZdrk fo|kF;kZauk iVyh-

dfork &4-mfn~"B&'ksrdjh&d"VdÚ;kaph thouxkFkk o ijhfLFkrhps o.kZu dj.ks-

lk/;&fo|kFkhZ xzkeh.k Hkkxkryk vluw 'ksrdÚ;kaP;k ijhfLFkrhph tk.kho >kyhs-

dfork& 5-mfn~"B& doh vfuykaP;k fojk.khrwu doh eukP;k mnlhursps n'kZu ?kMfo.ks-

lk/;&dfoyk ykHkysY;k nq%[kkekGs dfoP;k eukyk mnkflurk izklr >kyh ;kph fo|kF;kZauk izfprh vkyh-

Unit III:

izdj.k & 1-mfn~"B&bfro`Rr ys[ku] izdkj]i/nrh o ys[kukph dkGth ;kfo"k;h fo|kF;kZauk ekfgrh ns.ks-

lk/;&bfro`Rr Eg.kts lHksph uksan] izdkj i/nrh o ys[ku djrkaug ?;ko;kph dkGth ;kph fo|kF;kZauk ekfgrh feGkyh-

izdj.k & 2-mfn~"B&izlkjek;/es vkf.k o`Rrys[ku ;kfo"k;h fo|kF;kZauk ekfgrhps fo'ys"k.k dj.ks-

lk/;&n`d JkO; izlkjek;/ekaP;kOn~kjs ckreh] ckrehps ys[kuo o`Rri=h; ys[ku dls dsys tkrs ;kph ekfgrh fo|kF;kZauk >kyh-

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

Course Objectives

The Students Will Be:

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

Course Outcomes

The Students Will Be Able:

- To explain with the vital contemporary emerging issues of center-state relation, political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- To understand the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs.
- To attentive current political issues in 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.

**Department of Economic**  
**Course Objectives and Outcomes**

- Unit – I Introduction to Macro Economics  
Objective - Discuss and the Introduction of Macro Economics  
Outcomes - Demonstrate knowledge of Macro Economics
- Unit – II National Income  
Objective - Explain the Concept of National income  
Outcomes - Identify various Concept of National income
- Unit – III Money and Value of Money  
Objective Evaluate the value of money and Theories of Value of Money  
Outcomes – Students learnt Theories of Value of Money
- Unit – IV Output and Employment  
Objective - Introduce the theory of Employment  
Outcomes- Students will learn a theory of Employment

**Dept. of English**  
**Course Objectives and 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 about revolution and its effects.  
Outcome-Students realized about 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**  
**Foundations of Social thought**

- Unit - I Emergence of Sociology as a Discipline  
Objective - To Make Students know in details about Emergence of sociology as a Discipline  
Outcomes - Student Understood the concept of Emergence of sociology as a Discipline
- Unit - II Founders of Sociology I  
Objective - Student Understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer,)  
Outcomes - Student Understood the concept of Founders of Sociology-I (August Comte, Herbert Spencer)
- Unit - III Founders of Sociology II  
Objective - Student Understood the concept of Founders of Sociology-II (Charles of Horton Cooley, Emile Durkheim)  
Outcomes - Student Understood the concept of Founders of Sociology-II(Charles of Horton Cooley, Emile Durkheim)
- Unit - IV Founders of Sociology III  
Objective - Student Understood the concept of Founders of Sociology-III ( Karl Marx, Max Weber)  
Outcomes -- Student Understood the concept of Founders of Sociology-II( Karl Marx, Max Weber)

**Department of History**

<p><b>B.A.II (III -Sem) History of India(1764 - 1884)</b></p> <p>1) Battle of Buxar and English policy</p> <p>2) Kayamdhara Methods, Ryotwari , and Lord Wellesley</p> <p>3) The uprising of 1857 (independent war) results</p> <p>4) How did nationalism emerge in India?</p>	<ul style="list-style-type: none"> <li>➤ Co-1 The Battle of Buxar and how the British implemented their policy in India</li> <li>➤ Co-2 Gained information about working methods, Kaymdhara ,ryotwari and Mahalwari and Lord Wellesley deployment forces.</li> <li>➤ Co-3 The uprising of 1857 (independent war) result was known</li> <li>➤ Co-4 Learned how nationalism emerged in India</li> </ul>
--	---

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

**Unit I:** Battle of Buxar and English policy

1) Battle of Buxar and English policy

**Unit II:**

2) Kayamdhara Methods, Ryotwari , and Lord Wellesley

3) The uprising of 1857 (independent war) results

4) How did nationalism emerge in India?

**Semester-IV  
Department of English  
Course Objective and Outcomes  
Compulsory English**

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

Unit II: Objective- Making students realize about the discipline and struggle.  
Outcome-Students tried to apply the discipline and struggle in their lives.

Unit III: Objective- Making students understand the presence of 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  
Compulsory Marathi  
IkkhR;jax-Hkkx-2**

Unit I:

izdj.k & 1-mfn~"B&vkKki=kP;k vk/kkjs jktdrZO;s ikBkrwu f'koN=irhaP;k drcxkkjhp kcs/k fo|kF;kZauk d#u ns.ks-

lk/;& jktdrZO;s ikBkrhy f'kokthaP;k dk;Zdr`ZRokph fo|kF;kZuh tkf.ko >kyh o fo|kF;kuh cks/k ?ksryk-

izdj.k & 2-mfn~"B&LojkT; o lqjkT; ikBkrwu yksdekU; fVGdkaP;k Hkkjrh; Lokra«;klaca/kh ;ksxnkukph fo|kF;kZauk ekfgrh d#u ns.ks-

lk/;& Hkkjrh; Lokra«;kr yksdekU; fVGdkaP;k O;fDrfp=.kkrrwu fuHkZ;rk] fu%Li`grk] Toyar ns'kHkDrh ;k xq.kkapk izR;; fo|kF;kZauk vkyk-

izdj.k & 3-mfn~"B& ek/;kUg ;k ikBkrhy dqlqekorh ns'kikaMs ;kaps ek/;kUghP;k osGsrhy vuqHko fo|kF;kZauk lkax.ks-

lk/;& ek/;kUghP;k osGsrhy lersyi.kk] xaHkhjrk] vfHktr lkSan;Z o ckuan ;k xq.kkaph tk.kho fo|kF;kZauk >kyh-

izdj.k & 4-mfn~"B&vOnSrpk lk{kkRdkj ;krwu lkus xa:thaP;k lans'kkph fo|kF;kZae;/s #to.kwd dj.ks-

lk/;& lkus xq:thaP;k^ vOnSr Hkkjrh; laLd`rhp vkRek vkgs] ;k rRokph fo|kF;kZauk tk.kho >kyh-

izdj.k & 5-mfn~"B& vk/kkj ;k dFksrwu fo-l- tksx ;kauh js[kkVysY;k HkkÅdkdkaph 'kksdkafrdk fo|kF;kZauk lkax.ks-

lk/;&vhadjh] v/ke laLd`rhr okoj.kkÚ;k HkkÅdkdkap;k 'kksdkafrdspk fo|kF;kZauh cks/k ?ksryk-

Unit II:

dfork & 1-mfn~"B& vHkaxok.khrwu lar pks[kesGkdkyhu lkekftd fo"kerk o vU;k;dkjd okx.kwdhph ekfgrh ns.ks-

lk/;&rsjkO;k 'krdrhy lkekftd ifjLFkrh :<h ijaijkaph ekfgrh pks[kkesGkP;k vHkaxkrwu fo|kF;kZauk letwu vkyh-

dfork & 2-mfn~"B&Økarhpk t;t;dkj dforsrwu HkkjrkP;k Lokra™;klk Bh Økarhdkjdkauh fnysY;k ;ksxnkukph ekfgrh lkax.ks-

lk/;&dqlqekxztkauh O;Dr dsysyh Økarhdkjdkap;k eukrhy Lokra™;klaca/kh ns'kHkDrhph tk.kho fo|kF;kZauk >kyh-

dfork & 3-mfn~"B&IR; ;k ladYiusps Lo#i IR;kP;k tkrhyk dforsrwu fo|kF;kZauk lkax.ks-

lk/;&'kjPpanz eqfdrcks/k ;kaP;k dforsrwu la?"kZ'khy o`Rrh vkf.k foijhr fLFkrhry mrqax vk'kkokn ;kph ekfgrh fo|kF;kZauk feGkyh-

dfork & 4-mfn~"B& jkr>Mhpk ikÅl dforsrwu 'ksrkrY;k fulxkZ'kh dfoP;k o`Rrh rknkRE; iko.;kph lk{k iVfo.ks-

lk/;& izsekIDr vkf.k fulxkZIDr v'kk nksu #ikaph lk;qT;rk o ikÅlkph fo|kF;kZauk lk{k iVyh- dfork & 5-mfn~"B&ekÖ;k dforsph po dforsrwu dfoP;k dkO;fufeZrhps iz;kstu fo|kF;kZauk lkax.ks-

lk/;& banzfr Hkkysjko ;kauh O;Dr dsysyh dkO;fo'okph Hkqfedk fofo/k 'kCn izfrekarwu fo|kF;kZauh letwu ?ksryk-

Unit III:

izdj.k & 3-mfn~"B&iVdFkk o laoknys[ku ;kc/n~yph ekfgrh fo|kF;kZauk ns.ks-

lk/;& flusekr dFkk]iVdFkko laoknys[ku dls vlrs ;kph tk.kho fo|kF;kZauk >kyh- izdj.k & 4-mfn~"B& Lejf.kdsps laiknu o brj laiknudk;Z o Lo:i Li"V dj.ks-

lk/;&Lejf.kdsps laiknu dk;Z o ekfldkps dk;Z dk; vlrs gs fo|kF;kZauk dGys-

## Department Of Political Science Course Objectives and Outcomes

Course Objectives

The Students Will Be:

- Familiarized with the vital contemporary emerging issues of center-state relation,

political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.

- Analyze the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs and to retain constitutional protections.
- Locate current political issues in context of wider debates about democratic life in India and the capacity of political institutions.
- Acquainted with the basic understanding of concept and issues concerning Right to Information Act, Human Rights and Challenges.

#### Course Outcomes

The Students Will Be Able:

- To explain with the vital contemporary emerging issues of center-state relation, political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- To understand the strengths and weakness of Indian political processes, both in terms of their effectiveness in responding to public policy needs.
- To attentive current political issues in 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.

### **Department of Economics Course Objectives and Outcomes**

Unit -I: Commercial and Central Bank Commercial Banks:

Objective - Explain the function of Commercial and Central Bank and why it is importance

Outcomes – Students learn the function of Commercial and Central Bank and why it is importance

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

Objective - Introduce RBI And Innovation in Banking sector

Outcomes – Students learn about the structure of RBI and its function

Unit -III: Financial Market Money Market:

Objective - Define Financial Market

Outcomes – Students Will be identify Financial Market Function

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

Objective - Explain the importance of Health Economics and Statistics

Outcomes – Students will be well learn knowledge of Health Economics and Statistics

### **Department of English English Literature**

Course Objectives and Outcomes

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 about revolution and its effects.

Outcome-Students realized about 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  
Indian Sociological Tradition**

Unit - I Theoretical Roots of Caste in India

Objective - To Make Students Aware of Theoretical Roots of Caste in India (B.R. Ambedkar, G.S. Ghurye)

Outcomes - 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 Students Aware of Social Change from Indian Perspective(M.N. Shrinivas, D.P.Mukharjee)

Outcomes - 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 Students Aware of Indian Society and Contemporary Change ( R.K. Mukharjee, S.C. Dube)

Outcomes - 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)

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

**Department of History  
Course Objectives and Outcomes**

<b>B.A.II (IV -Sem) History of India(1885 -1947)</b> 1) How the National Congress was formed 2) What was the role of Jahal and Mawal ? 3) Non-cooperation, civil disobedience movement 4) Indian Independence Mountaineering Scheme	<ul style="list-style-type: none"><li>➤ Co-1 Learned about the establishment of the National Congress</li><li>➤ Co-2 Understood the role of Jahal and Mawal</li><li>➤ Co- 3 Information was received about non-cooperation, civil disobedience movement</li><li>➤ Co-4 Gained detailed knowledge of how India became independent</li></ul>
---	--

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

Unit I:

mfn~"B& dqlqekxztKp;k jl;k=k dfork laxzgp;k vk/kkjs fofo/k izdkjP;k dforkaph vksG[k o ekfgrh fo|kF;kZauk ns.ks-

Lkk/;&dqlqekxztkaP;k dforklaxzgrwu lkekftd dfork]jkt dh;] jk"V<sup>a</sup>h; dfork] izse dfork]fulxZ dfork o rRoKkuij dforkaph ekfgrh fo|kF;kZauk >kyh-

Unit II:

mfn~"B&dkO;'kkL= ifjp; ;krwu dkO;dkj.k o 'kCn'kDrh ;kfo" k;h fo|kF;kZauk ekfgrh ns.ks-

lk/;& fo|kF;kZauk dkO; fufeZrhps dkj.k o 'kCnkP;k vfHknk] O;atuk o y{k.kk ;k  
'kCn'kDrhph ekfgrh izklr >kyh-

**B. A. III**  
**Semester-V**  
**Department of Marathi**  
**Compulsory Marathi**  
**Course Objectives and Outcomes**

Unit I:

yhGkpfj= ,dkad -MkW- enu dqGd.khZ  
mf~"B& yhGkpfj=kP;k ,dkad xzaFkkP;k vk/kkjs rRdkyhu lkekftd ifjLFkrhpk vk<kok  
?ks.ks-

lk/;&yhGkpfj= ,dkad xzaFkkRwu yhGkaP;k vk/kkjs fo|kF;kZauk rRdkyhu lkekftd] /kkfeZd  
o jktdh; ifjLFkrh rls ,dwa lektftoukph vksG[k fo|kF;kZauk >kyh-

Unit II: nfyR lkfgR; osnuk o fonzksG& Hkkypanz QMds

mf~"B& nfyR lkfgR; osnuk o fonzksG ;krwu nfyR lkfgR;kP;k vH;klkps egRo lkfgR;krhy  
;ksxnku o egRp fo|kF;kZauk iVowu ns.ks-

lk/;& nfyR lkfgR;kpk mxel pGoG rls lkfgR;dkaps iszj.kkLFkku o dk;Z ;kph tk.kho  
fo|kF;kZauk >kyh-

Hkk"kkfoKkukpk ifjp;- MkW- ekyls] MkW- dqGd.khZ

mf~"B& Hkk"kkfoKkukpk ifjp; fo|kF;kZauk d:u ns.ks-

lk/;& izek.k Hkk"kk vkf.k cksyh rls Lihe o infopkj ;kaph ekfgrh fo|kF;kZauk >kyh-

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

Course Objectives

The Students Will Be:

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

Course Objectives

The Students Will Be Able:

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



**Department of Economics**  
**Course Objectives and Outcomes**

Unit – I Nature of Indian Economy

Objective - Introduction the the basic Knowledge of Indian Economy

Outcomes – Students will be learnt about the Knowledge of Indian Economy.

Unit – II Agriculture

Objective - Explain the Importance of Agriculture Sector in Indian Economy.

Outcomes – Students learn the Importance of Agriculture Sector in Indian Economy

Unit – III - Industry

Objective - Explain Importance and Role of Industries in Economic Development

Outcomes – Students will be learnt about the Knowledge of Industries in Economic Development

Unit – IV- Employment and Poverty

Objective- To develop preliminary knowledge of Employment and Poverty

Outcomes – Students learnt preliminary knowledge Employment and Poverty

**Programme : B.A. English Literature Course : SEM-V**

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

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

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

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

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

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

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

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

**Department of sociology**  
**Course Objectives and Outcomes**

Indian Society: The Structural Issues

Unit - I Indian Society, Structure and Inequality

Objective - To Make Students know in details about Indian Society, Structure and

Inequality  
Outcomes - Student Understood the concept of Indian Society, Structure and Inequality

Unit - II Family in Contemporary India

Objective - To Make Students Aware of Family in Contemporary India

Outcomes - Student Understood the concept of Family in Contemporary India

Unit - III Tribal Issue and Problems in India

Objective - To Make Students Aware of Tribal Issue and Problems in India

Outcomes - Student Understood the concept of Tribal Issue and Problems in India

Unit - IV Rural Community in India

Objective - To Make Students know in details about Rural Community in India

Outcomes - Student Understood the concept of Rural Community in India

**Department of History**  
**Course Objectives and Outcomes**

<b>B.A.III (V-Sem) Modern World (1789 - 1920)</b> 1) What were the causes and consequences of the French Revolution? 2) How imperialism came into being 3) World War I - Treaty of Vasai 4) United Nations and performance	<ul style="list-style-type: none"><li>➤ Co-1 The French Revolution was also the first revolution in the world</li><li>➤ Co-2 What are the reasons for imperialism?</li><li>➤ Co-3 World War I - The Treaty of Vasai</li><li>➤ Co-4 Learned about the United Nations and its achievements and failures</li></ul>
--	---

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

Unit I:

yhGkpfj= ,dkad -MkW- enu dqGd.khZ  
mfn~"B& yhGkpfj=kP;k ,dkad xzaFkkP;k vk/kkjs rRdkyhu lkekftd ifjfLFkrhpk vk<kok  
?ks.ks-  
lk/;&yhGkpfj= ,dkad xzaFkkrwu yhGkaP;k vk/kkjs fo|kF;kZauk rRdkyhu lkekftd] /kkfeZd  
o jktdh; ifjfLFkrh rlsp ,dwi lektftoukph vksG[k fo|kF;kZauk >kyh-

Unit II: nfyR lkfgR; osnuk o fonzksG& Hkkypanz QMds

mfn~"B& nfyR lkfgR; osnuk o fonzksG ;krwu nfyR lkfgR;kP;k vH;klkps egRo lkfgR;krhy  
;ksxnku o egRp fo|kF;kZauk iVowu ns.ks-  
lk/;& nfyR lkfgR;kpk mxel pGoG rlsp lkfgfR;dkaps iszj.kkLFkku o dk;Z ;kph tk.kho  
fo|kF;kZauk >kyh-

Hkk"kkfoKkukpk ifjp;- MkW- ekyls] MkW- dqGd.khZ  
mfn~"B& Hkk"kkfoKkukpk ifjp; fo|kF;kZauk d:u ns.ks-  
lk/;& izek.k Hkk"kk vkf.k cksyh rlsp Lihe o infopkj ;kaph ekfgrh fo|kF;kZauk >kyh-

**SEMESTER-VI**  
**Department of Marathi**  
**Course Objectives and Outcomes**

## Compulsory Marathi

### Unit I:

izdj.k & 6-mfn~"B&pØ ;k dFksrwu egkHkkjrkrhy nzkSinh ;k L=hps fp=.k fo|kF;kZauk ekfgr d#u ns.ks-

lk/;& egkHkkjrkrhy nzkSinhP;k eukrhy xw< oxqarkxqarhps Hkkouhd izlaxkph ekfgrh fo|kF;kZauk izkir >kyh-

izdj.k & 7-mfn~"B&i{kxhku ikBkrwu i{;kaP;k lkSan;kZps n'kZu ?kMfo.ks--

lk/;&i{kxhku e/kwu fofo/k{kh} i{;kaph ?kjVh] R;kaph fiYys ;kaph ekfgrh o vksG[k fo|kF;kZauk >kyh-

izdj.k & 8-mfn~"B&vUoj'kk Qdhj ;k eqLyhe O;DrheRokph vksG[k fo|kF;kZauk d:u ns.ks-

lk/;&ygku eqs] L=h;k] ek.kls o vktqcktwP;k xkokrhy turslkBh mi;qDr vls vUoj'kk Qdhjkps O;fDreRo vIY;kps fo|kF;kZauk dGwu vkys-

izdj.k & 9-mfn~"B& nkHkksGdjKp;k va/kJ/nk fuewZyukps dk;kZph ekfgrh fo|kF;kZauk d#u ns.ks-

lk/;&oSKkfud n`F"Vdks.k o 'kkL=h; fopkj i/nrhus va/kJ/nk fuewZyu dj.;kps ?;s;

nkHkksGdjKaps gksrs ;kph ekfgrh fo|kF;kZauk >kyh-

izdj.k & 10-mfn~"B&efgyk xzkeiapk;rhP;k fuoMuwdhps fp=.k fo|kF;kZauk lkax.ks-

lk/;& xzkeh.k Hkkxkrhy xzkeiapk;r e/khy fuoM.kwdhph ekfgrh o ifjLFkrhph tk.kho fo|kF;kZauk vkyh-

### Unit II:

**dfork & 6-mfn~"B&** gh fuGh ika<jh dforsrhy 'kjin \_rwrhy nqikjps o.kZu d#u ns.ks-

lk/;&bafnjK larkuh dsysyh 'kjin \_rwrhy mUgkph ekfgrh fo|kF;kZauk izklr >kyh-

**dfork & 7-mfn~"B&** nksu T;ksrh ;krwu dfous o.kZu dsysY;k nksu T;ksrhpk my?kMk dj.ks

-

lk/;&d nq%[kkph T;ksr yky vlrs o nqljh nq%[kkph T;ksr dkGh vlwu rhps nq%[k dk;e fVd.kkjs vlrs ;kph tk.kho fo|kF;kZauk >kyh-

**dfork & 8-mfn~"B&**ikÅ dforsrwu L=h eukP;k fofo/k HkkokoLFkk fo|kF;kZauk

my?kMwu nk[fo.ks -

lk/;&xzsl dohus js[kkVysys L=h osnusps Lo#i o L=h eukP;k Hkkouk ;kfo"K;h

fo|kF;kZauk ekfgrh feGkyh-

**dfork & 9-mfn~"B&**isze dforsP;k vk/kkjs dfous js[kkVysys ihfMrkaps fp=u d#u tk.kho

d:u ns.ks-

lk/;& ekuoh lektjpusr ek.kwli.k foljr pkyk vlwu ihfMrkauk U;k; feGr ulY;kph lk{k

fo|kF;kZauk iVyh-

**dfork & 10-mfn~"B&** Vkgkjk dforsrwu vkfnoklh lektkyk dlk iq<kjh gok ;kph ekfgrh

fo|kF;kZauk ns.ks-

lk/;& dforsr o.kZu dsysyk vkfnokflap iq<kjh dfoyk gok vIY;kph tk.kho fo|kF;kZauk

>kyh-

### Unit III:

**izdj.k & 3-mfn~"B&**xzaFkijh{k.k dls djkos o xzaFkokpu djrkuk dks.krs ?kVd c?kkosr ;kph ekfgrh fo|kF;kZauk dj.ks-

lk/;& xzaFkijh{k.k djrkuk ifj{k.kkph ighyh ik;jh xzaFkokpu gks; R;kuarj brj ckchaDMs y{; |kos ;kph ekfgrh fo|kF;kZauk izklr >kyh-

**izdj.k & 4-mfn~"B&** baVjusV vkf.k ejkBh Hkk"kk o lkfgR; ;kph ekfgrh fo|kF;kZauk d#u ns.ks-

lk/;& lax.kd laokn]ejkBh ladsrLFkGs] baVjusVojhy ejkBh nSfuds] o ek;ksyh ;k ladsrLFkGkojhy ys[k] dfork] o brj ejkBh lkfgR;kph ekfgrh fo|kF;kZauk >kyh

**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 Outcomes**

Course Objectives

The Students Will Be:

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

Course Objectives

The Students Will Be Able:

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

### **Department of Economics Course Objectives and Outcomes**

Unit -I: Economic Development and Growth

Objective- Develop the ability to explain core economic Sector of Economic Development and Growth

Outcomes – Students learn and accepted the Knowledge of Economic Development and Growth

Unit –II: Planning and Policy

Objective - Introduce the theory of Planning and Policy

Outcomes - Students will be learnt a theory of Planning and Policy

Unit -III: Public Finance

Objective- To develop preliminary knowledge of Public Finance

Outcomes – Students learnt preliminary knowledge of Public Finance

Unit –IV: International Trade

Objective- Explain the theory of International Trade

Outcomes –Students learn about the theory of International Trade.

**Department of sociology**  
**Course Objectives and Outcomes**

Current Social Problems in India

Unit - I Education in Contemporary

Objective - To Make Students know in details about Education in Contemporary

Outcomes - Student Understood the concept of Education in Contemporary

Unit - II Displacement and Rehabilitation

Objective – To Make Students Aware of Displacement and Rehabilitation

Outcomes – Student Understood the concept of Displacement and Rehabilitation

Unit - III Intolerance, Riot Crime

Objective - To Make Students know in details about Intolerance, Riot Crime

Outcomes - Student Understood the concept of Intolerance, Riot Crime

Unit - IV Corruption

Objective - To Make Students Aware of Corruption

Outcomes -Student Understood the concept of Corruption

**Department of History**  
**Course Objectives and Outcomes**

**B.A.III (VI –Sem.) Modern World (1920 -1960)**

- 1) What were Russia's sfive-year plans?
- 2) Hitler - Mussolini's foreign policy
- 3) Causes of World War II
- 4) United Nations and performance Suez Canal

- Co-1 Learned about Russia's Five Year Plan
- Co-2 Hitler - Mussolini's foreign policy in detail
- Co-3 Learned the reasons for the Second World War
- Co-4 Received information about the United Nations and the performance of the Suez Canal, NATO SEATO , Warsaw Pact

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

Unit I:

Xk:M>si& Hkjr vka/kGs

mfn~"B x:M >si e/khy ys[kdkuh ukxdjhlkBh /;s;osMk izokl dlk dsyk ;kph ekfgrh nsÅu  
fo|kF;kZauk izsjhr dj.ks-  
lk/;& Hkjr vka/kGsP;k 'kS{kf.kd izxrhpk o Li/kkZ ijh{ksP;k dk;kZpk vk<kok ?ksÅu  
fo|kF;kZauh x#M>si vkRedFkukrwu isj.kk ?ksryh-  
izkphu ejkBh okM~e;kpk bfrgkl& y-jk- uf'kjkckndj-  
mfn~"B& izkphu ejkBh okM~e;kpk bfrgklP;k vk/kkj larlkfgr;] iafMrh lkfgr;]'kkfgjh  
lkfgr;] c[kj okM~e; ;k lkfgr;kph ekfgrh fo|kF;kZauk ns.ks  
lk/;& larlkfgr;] iafMrh lkfgr;]'kkfgjh lkfgr;] c[kj okM~e; ;k lkfgr;kph ekfgrh  
fo|kF;kZauk >kyh-  
Hkk"kkfoKkukpk ifjp;- MkW- ekyls] MkW- dqGd.khZ  
mfn~"B& Hkk"kkfoKkukpk ifjp; fo|kF;kZauk d:u ns.ks-  
lk/;& ejkBh eqGk{kjs] Lou o Loukarjs ;kaph ekfgrh fo|kF;kZauk >kyh-

**Department of commerce**  
**Semester -I**  
**Compulsory English**

Course Outcomes

Students will be able -

- CO1- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders
- CO2- To understand financial and business acumen through basic research skills for business
- CO3- To understand and value inclusivity in human nature
- CO4- To prioritize the importance of human life and wealth
- CO5- To understand horror stories with elements of surprise and irony
- CO6- To understand expansive and imaginative concepts
- CO7- To understand the meanings of motivation and indomitable spirit
- CO8- To take up tasks and not to worry about the end result for the larger benefit of Human kind
- CO9- To understand that tranquil temperament is the most potent weapon one can have against diversity
- CO10- To understand grammar and apply it in their writing skills

**Department of Marathi**

**Course Objectives and out comes**

Marathi : Program Outcomes

- mfn'Vs%& 1- ejkBh Hkk"ksfo"k;h fon;kF;kZae;/; vfHk#ph fuekZ.k dj.ks-
- 2- lkfgr;ys[kukph o okpukph vkoM fuekZ.k dj.ks-
- 3- fon;kF;kZae;/;s vlysaY;k lqIr dykaxq.kkawk oko nsÅu R;kaP;kr lkfgr;fo"k;d o`f/naxr dj.ks-
- 4- lkfgr;krwu ekuorkoknh n`f"Vdks.k #tfo.ks-
- 5- lkfgr;krwu lektkrhy iz"ukawk okpk QksMwu R;kaps fujkdj.k dj.ks-
- /;s;%& 1- Hkkoh dkGkr fon;kF;kZae/kwu lkfgr;fufeZrh dj.ks-
- 2- v/;kiu o v/;;ukr fon;kF;kZauk lgHkkxh d#u laokn"kyh

okrkoj.k fufeZrh dj.ks-

3- foHkkxkr fofo/k midzekaps vk;kstu d#u ejkBh Hkk'kspk ntkZ  
ok<fo.ks-

4- fon;kF;kZae;/s la" kks/kuo`Rrh o`f/naxr dj.ks-

5- ejkBh Hkk'ksph iz;ksx"kkGk fuekZ.k dj.ks-

By the end of this course, the students will be able to:

CO1 Hkkjrh; yksd"kkghps ewY; fon;kF;kZae;/s #tfo.ks-

CO2 xzkeh.k tuftou o "ksrhfu'Bs"kh fon;kF;kZaph ukG tksG.ks-

CO3 larkP;k O;kogkjhd fopkjkapk ifjp; ?kMfo.ks-

CO4 "kkgw egkjtkP;k vkj{k.k fo'k;h fopkjkapk ifjp; ?kMfo.ks-

CO5 dkO;krhy jlxyzg.k{kkerk fodlhr dj.ks-

CO6 fon;kF;kZe;/s vk/kwfud ewY; #tfo.ks

CO7 fon;kF;kZe;/s lkekthd ckaf/kydh fuekZ.k dj.ks-

CO8 fon;kF;kZe;/s ltZu"khryk fuekZ.k dj.ks-

### **Financial Accounting Course Objectives and out comes**

Unit No. I - Financial Accounting.

Objective- To Make The students to understand Financial Accounting. Meaning,

Objective - Principals & Problem.

Outcomes Students get well understood the following topics.

Financial Accounting. Meaning, Objective, Principals & Problem.

Unit No 2- Hire Purchase Account.

Objective - To Make The students to understand Hire Purchase Account Meaning, Method & Problems.

Outcomes Students get well 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 Final Account of Co-Operative Societies

Introduction, Type, Co-Operative Legislation and Problems

Outcomes Students get well 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 to understand Join Venture Accounts Meaning, Method and Problem.

Outcomes - Students get well understood the following topics

Join Venture Accounts Meaning, Method and Problems.

### **BUSINESS ORGANISATION**

- To make the students to understand the concept, objective, importance of business.

- To acquaint the students with various forms of Business organisation and their functioning.

- To make the students understand the concept, functions of Organization and types of Organization.

- To make the students to understand 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 out comes**

Unit No. I - Background of New Company

Objective - To Make The students to understand Background of New Company Act 2013, Corporate Personality & Kinds of Company.

Outcomes - Students get well 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 to understand Memorandum of Association, Article of

Association and Prospectus.

Unit No 3- Shares and Share Capital

Objective- To Make The students to understand Shares and Share Capital.

Outcomes- Students get well understood the following topics  
Shares and Share Capital.

Unit No 4- Membership in a company, Director.

Objective - To Make The students to understand Membership in a company, Director.

Outcomes- Students get well understood the following topics  
Membership in a company, Director.

## **Business Economics- I**

### **Course Objectives and Outcomes**

Unit I-

Nature and Scope of Business Economics:

Objective- To make the students to understand the Concept of Business Economics.

Outcomes-Students get well understood the following topics:  
Business Economics.

Unit II-

Theory of Consumption:

Objective- To make the students to understand Law of Demand, Elasticity of Demand & Demand forecasting.

Outcomes-Students get well understood the following topics:

Law of Demand, Elasticity of Demand & Demand forecasting.

Unit III-

Theory of Production:

Objective- To make the students to understand the Theory of Production.

Outcomes- Students get well understood the Theory of Production.

Unit IV-

Theory of Cost and Revenue:

Objective- Students should be aware of Theory of Cost and Revenue.

Outcomes-Students get well understood Theory of Cost and Revenue.

## **Semester-II**

### **Compulsory English**

### **Course Objectives and Outcomes**



## Course Outcomes

Students will be able -

- CO1- To understand the meaning of Start-up through the prescribed Life Sketches of Start-up founders
- CO2- To understand financial and business acumen through basic research skills for business
- CO3- To understand and value inclusivity in human nature
- CO4- To prioritize the importance of human life and wealth
- CO5- To understand horror stories with elements of surprise and irony
- CO6- To understand expansive and imaginative concepts
- CO7- To understand the meanings of motivation and indomitable spirit
- CO8- To take up tasks and not to worry about the end result for the larger benefit of Human kind
- CO9- To understand that tranquil temperament is the most potent weapon one can have against diversity
- CO10- To understand grammar and apply it in their writing skills

## Department of Marathi Course Objectives and Outcomes

By the end of this course, the students will be able to:

- CO1 Hkkjrh; yksd"kkghps ewY; fon;kF;kZae;/s #tfo.ks-
- CO2 xzkeh.k tuftou o "ksrhfu'Bs"kh fon;kF;kZaph ukG tksG.ks-
- CO3 larkP;k O;kogkjhd fopkjkapk ifjp; ?kMfo.ks-
- CO4 "kkgw egkjktkP;k vkj{k.k fo'k;h fopkjkapk ifjp; ?kMfo.ks-
- CO5 dkO;krhy jlxyzg.k{kerk fodlhr dj.ks-
- CO6 fon;kF;kZe;/s vk/kwfud ewY; #tfo.ks
- CO7 fon;kF;kZe;/s lkekthd ckaf/kydh fuekZ.k dj.ks-
- CO8 fon;kF;kZe;/s ltZu"khryk fuekZ.k dj.ks-

## Statistics and Business Mathematics Course Objectives and out comes

Unit No. I - Statistics & Measures of Central Tendency

Objective - To Make The students to understand Background of Statistics & Measures of Central Tendency.

Outcomes - Students get well understood the following topics. Statistics & Measures of Central Tendency.

Unit No 2- Dispersion.

Objective - To Make The students to understand Dispersion.

Outcomes - Students get well understood the following topics Dispersion.

Unit No 3- Skewness

Objective - To Make The students to understand Skewness.

Outcomes - Students get well understood the following topics Skewness.

Unit No 4- Business Mathematics

Objective- To Make The students to understand Business Mathematics.

Outcomes - Students get well understood the following topics

## **BUSINESS MANAGEMENT**

-To make the students to 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 Co-ordination & Controlling.

-To expose the students for applicability of recent trends in management practices.

-To make students familiar with the modern management practices being used by the corporate world.

### **Secretarial Practice Course Objectives and out comes**

Unit No. I - Incorporation of Company

Objective - To Make The students to understand Incorporation of Company, Directors of Company.

Outcomes - Students get well 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 to understand Company Meeting, Company Agenda & Voting and Resolution.

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

Objective - To Make The students to understand Report Writings, Secretarial audit & E-Governance and E-Filing.

Outcomes - 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 to understand Key Management Personnel, Appointment of Director & Management Remuneration.

Outcomes - Students get well understood the following topics Key Management Personnel, Appointment of Director & Management Remuneration.

### **Business Economics II Course Objectives and Outcomes**

Unit I-

Market Structure:

Objective- To make the students to understand the Market structure.

Outcomes-Students get well understood the Market Structure.

Unit II-

Perfect & Imperfect Competition Markets:

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

Outcomes-Students get well understood Perfect & Imperfect Competition.

Unit III-

Theories of Distributions

Objective- Students should be aware of Theory of Distribution.

Outcomes-Students get well understood & they apply their knowledge.

Unit IV-

Business cycles & National Income:

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

Outcomes-Students get well understood Business cycles & National Income.

**Semester-III**  
**Compulsory English**  
**Course Objectives and Outcomes**

Course Outcomes

Students will be able -

CO1- To understand and value inclusivity in human nature

CO2- To prioritize the importance of human life and wealth

CO3- To understand horror stories with elements of surprise and irony

CO4- To understand expansive and imaginative concepts

CO5- To understand the meanings of motivation and indomitable spirit

CO6 To take up tasks and not to worry about the end result for the larger benefit of Human kind

CO7- To understand that tranquil temperament is the most potent weapon one can have against diversity

CO9- To understand grammar and apply it in their writing skills

**Department of Marathi**  
**Course Objectives and Outcomes**

---

By the end of this course, the students will be able to:

CO1 ekr`Hkk'ksph vkoM o tk.kho fuekZ.k dj.ks

CO2 izkfpu ejkBhps oSf''k'V@s Li'V dj.ks-

CO3 fouksnh ys[kukr [ksGdjo`Rrhps n''kZu ?kMfo.ks-

CO4 lar lkfgR;krwu lkekftd] lkaLd`rhd] vk;/kfRed yksd''kkg hpk iqjLdkj dj.ks-

CO5 L=h fo'k;d tkf.ko tkx`rh dj.ks-

CO6 o`Rr ys[ku o dYiuk foLrkj ra=kph ekfgrh voxr dj.ks-

---

**Financial Accounting-II**  
**Course Objectives and Outcomes**

Unit I-

**Consignment Accounts:**

**Objective-** Students should aware topic of Consignment Accounts.

**Outcomes-**Students get well understood & Solve the Problems.

Unit II-

**Hire Purchase:**

**Objective-** Students should aware topic of Hire Purchase.

**Outcomes-**Students get well understood & solve the Problems.

Unit III-

**Capital Structure & Issues of Shares.**

**Objective-** Students should aware topic of Capital Structure & Issues of Shares.

**Outcomes-**Students get well understood & solve the Problems of Issues of Shares.

**Unit IV-**

**Final Accounts of Joint Stock Companies**

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

**Outcomes-** Student get well understood & solve the problems.

**Unit I-**

**Consignment Accounts:**

**Objective-** Students should aware topic of Consignment Accounts.

**Outcomes-**Students get well understood & Solve the Problems.

**Unit II-**

**Hire Purchase:**

**Objective-** Students should aware topic of Hire Purchase.

**Outcomes-**Students get well understood & solve the Problems.

**Unit III-**

**Capital Structure & Issues of Shares.**

**Objective-** Students should aware topic of Capital Structure & Issues of Shares.

**Outcomes-**Students get well understood & solve the Problems of Issues of Shares.

**Unit IV-**

**Final Accounts of Joint Stock Companies**

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

**Outcomes-** Student get well understood & solve the problems.

## **Business Communication & Management**

### **Course Objectives and out comes**

Unit No. I - Meaning, Definition and concept of Communication, objective of Communication

Objective - To Make The students to understand Meaning, Definition and concept of Communication, objective of Communication

Outcomes - To Make The students to understand Meaning, Definition and concept of Communication, objective of Communication

Unit No 2- Business Communication.

Objective - To Make The students to understand Business Communication.

Outcomes- To Make The students to understand Business Communication.

Unit No 3- Technology and Business Communication

Objective - To Make The students to understand Technology and Business Communication.

Outcomes- Students get well understood the following topics  
Technology and Business Communication.

Unit No 4- M.S. Office Aided Communication.

Objective - To Make The students to understand M.S. Office Aided Communication.

Outcomes - Students get well understood the following topics  
M.S. Office Aided Communication.

## **Business Law**

### **Course Objectives and out comes**

-Student 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 to gain knowledge of various legal aspects of business.

- To make the students to understand laws that affect mercantile transactions.

- Students will be able to understand court interpretations on laws like, Prevention of Money Laundering Act-2002, Consumer Protection Act – 2002

### **Monetary Economics-I Course Objectives and outcomes**

Unit I-

Money:

Objective- To make the students to understand the concept of Evolution of Money & Functions of Money.

Outcomes-Students will be able to understand the concept of Evolution of Money & Functions of Money.

Unit II-

Inflation & Deflation:

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

Outcomes-Students will be able to develop their knowledge about inflation and deflation.

Unit III-

Money Market & Policies:

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

Outcomes-Students will be able to understand & they apply their knowledge.

Unit IV-

Public Finance:

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

Outcomes-Students will be able to apply & develop the knowledge.

### **Semester-IV**

### **Course Objectives and outcomes**

Course Outcomes

Students will be able -

CO1- To understand and value inclusivity in human nature

CO2- To prioritize the importance of human life and wealth

CO3- To understand horror stories with elements of surprise and irony

CO4- To understand expansive and imaginative concepts

CO5- To understand the meanings of motivation and indomitable spirit

CO6- To take up tasks and not to worry about the end result for the larger benefit of Human kind

CO7- To understand grammar and apply it in their writing skills

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

By the end of this course, the students will be able to:

CO1 ekr`Hkk'ksph vkoM o tk.kho fuekZ.k dj.ks

CO2 izkfpu ejkBhps oSf''k'Vas Li'V dj.ks-

CO3 fouksnh ys[kukr [ksGdjo`Rrhps n''kZu ?kMfo.ks-

CO4 lar lkfgR;krwu lkekftd] lkaLd`rhd] vk;/kfRed yksd''kkgphk iqjLdkj dj.ks-

CO5 L=h fo'k;d tkf.ko tkx`rh dj.ks-

CO6 o`Rr ys[ku o dYiuk foLrkj ra=kph ekfgrh voxr dj.ks-

### **Financial Accounting III**

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

Unit I-

Final Accounts of Banking Companies.

Objective-Students should be aware of Final Accounts of Banking Companies.

Outcomes-Students get well understood and solve the Problems.

Unit II-

Final Accounts of General Insurance Companies.

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

Outcomes-Student get well understood and solve the Problems.

Unit III-

Valuation of Goodwill:

Objective- Students should be aware the topic of Valuation of Goodwill.

Outcomes-Student get well understood and solve the Problems.

Unit IV-

Liquidation of Company:

Objective- Students should be aware of Liquidation of Company.

Outcomes-Student get well understood & solve the Problems.

#### **Skill Development**

#### **Course Objectives and out comes**

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

Objective - To Make The students to understand Introduction- Basic Personality, Human

Growth and Behavior and Motivation.

Outcomes - To Make The students to understand Introduction- Basic Personality, Human

Growth and Behavior and Motivation.

Unit No 2- Communication Skill and Personality Development.

Objective - To Make The students to understand Communication Skill and Personality Development.

Outcomes - To Make The students to understand Communication Skill and Personality Development.

Unit No 3- Techniques in personality Development.

Objective - To Make The students to understand Techniques in personality Development.

Outcomes - Students get well understood the following topics Techniques in personality Development.

Unit No 4- Entrepreneurial Skill Development.

Objective - To Make The students to understand Entrepreneurial Skill Development.

Outcomes- Students get well understood the following topics Entrepreneurial Skill Development.

#### **Income tax**

#### **Course Objectives and out comes**

- To make the students to understand the basic concepts involved in Income tax act and also the basics of income tax.
- To make the students to understand the Taxable Salary and tax liability.
- Students get an exposure to provisions of taxation of house property.
- To make the students to understand Income Tax Slab Rates. They know how to deduct under section 80C, 80 CCC, 80CCD, 80D, 80DDB, 80E,80G, 80GG and 80U. Students get an 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 outcomes**

#### Unit I-

##### Commercial Banking:

Objective- To make the students to understand the concept of Commercial Banking & its functions

Outcomes-Students will be able to develop their knowledge

#### Unit II-

##### Banking and Core Banking:

Objective- To make the students to understand Banking and Core Banking

Outcomes-Students will be able to develop their knowledge & apply their knowledge

#### Unit III-

##### Banks and Customers Relationship and Services:

Objective- To make the students to understand the banks and customers relationship and services.

Outcomes-Students will be able to understand & they apply their knowledge.

#### Unit IV-

##### Central Bank:

Objective- To make the students to understand the concept of Central Bank & its functions.

Outcomes-Students will be able to develop the knowledge about Central Bank.

### **Semester-V** **Financial Accounting-IV** **Course Objectives and out comes**

#### Unit No. I - Amalgamations & Absorption of Companies.

Objective - To Make The students to understand Amalgamations & Absorption

Outcomes - Students get well understood the following topics. Amalgamations & Absorption

#### Unit No 2- Reorganization & reconstruction of Companies.

Objective - To Make The students to understand Reorganization & reconstruction problem.

Outcomes - Students get well understood the following topics  
Reorganization & reconstruction problem.

#### Unit No 3- Valuation of Shares

Objective - To Make The students to understand Valuation of Shares Problems.

Outcomes- Students get well understood the following topics  
Valuation of Shares Problems.

#### Unit No 4- Double Account system

Objective - To Make The students to understand Double Account system

Outcomes - Students get well understood the following topics  
Double Account system.

**Management Process**  
**Course Objectives and out comes**

Unit I-

Management and Administration:

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

Outcomes-Students will be able to apply the knowledge of Management and Administration.

Unit II-

Managerial Development & Group Dynamics:

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

Outcomes-Students will be able to create the knowledge of Managerial Development & Group Dynamics

Unit III-

Managerial Style:

Objective- To make the students to understand the Managerial Style.

Outcomes-Students will be able to develop the knowledge of Managerial Style.

Unit IV-

Motivation:

Objective- To make the students to understand the Motivation.

Outcomes- Students will be able to understand the meaning of Motivation and their types.

**Indian Economics**  
**Course Objectives and out comes**

Unit I-

Indian Economy & Planning:

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

Outcomes-Students will be able to understand Indian Economy & Planning.

Unit II-

Indian Economy & Policy:

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

Outcomes-Students will be able to understand Indian Economy & Policy.

Unit III-

Population & Unemployment:

Objective- To make the students to understand the population & unemployment

Outcomes-Students will be able to understand the population & unemployment

Unit IV-

India's Public Finance:

Objective- To make the students to understand the Public Revenue and Public Expenditure.

Outcomes-Students will be able to understand the Public Revenue and Public Expenditure.

**Computerize Accounting**  
**Course Objectives and out comes**

Objective - To Make The students to understand Introduction of Computerize Accounting, Advantage, Need and Accounting Groups.

Outcomes - Students get well understood the following topics.

Introduction of Computerize Accounting, Advantage, Need and Accounting Groups



Unit No 2- Accounting Software's.

Objective - To Make The students to understand Accounting Software's.

Outcomes - Students get well understood the following topics  
Accounting Software's.

Unit No 3- Accounts Info Menu, Accounts Groups.

Objective - To Make The students to understand Accounts Info Menu, Accounts  
Groups-

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

Outcomes - Students get well 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 to understand Inventory Info, Features of Inventory  
Info. Configure.

Outcomes - Students get well understood the following topics

Inventory Info, Features of Inventory Info. Configure.

### **Auditing**

#### **Course Objectives and out comes**

-Students learn 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.

- Learners learn Audit Planning and Audit Documentation and Evidence.

- To make the students to 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.

### **Semester-VI**

#### **Financial Accounting-V**

#### **Course Objectives and out comes**

Unit No. I - Accounting of Holding Company.

Objective - To Make The students to understand Accounting of Holding Company

Outcomes - Students get well understood the following topics Accounting of  
Holding Company

Unit No. 2 - Insurance Claims.

Objective - To Make The students to understand Insurance Claims

Outcomes - Students get well understood the following topics Insurance Claims

Unit No. 3 - Investment Accounts.

Objective - To Make The students to understand Investment Accounts

Outcomes - Students get well understood the following topics Investment Accounts

Unit No. 4 - Profit Prior to Incorporation.

Objective - To Make The students to understand Profit Prior to Incorporation.

Outcomes - Students get well understood the following topics Profit Prior to  
Incorporation.

### **Management Accounting**

#### **Course Objectives and out comes**

-To make the students to get a clear idea about the concept, objectives, importance and benefits of management accounting along with the basic advantages and significance of various techniques of management accounting and Break-Even Poing Analysis.

- A good idea of preparing various budgets like cash budget, flexible budgets and capital budgets help in drafting budget and budget control measures in organisations.

- 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 to understand and get clear idea of Fund Flow Statement.

### **Advanced Statistics**

#### **Course Objectives and out comes**

Objective - To Make The students to understand Accounting of Correlation

Outcomes - Students get well understood the following topics. Correlation Company

Unit No. 2 - Regression.

Objective- To Make The students to understand Regression

Outcomes - Students get well understood the following topics Regression

Unit No. 3 - Index Number.

Objective - To Make The students to understand Index Number

Outcomes - Students get well understood the following topics Index Number

Unit No. 4 - Time Series Analysis.

Objective - To Make The students to understand Time Series Analysis.

Outcomes- Students get well understood the following topics Time Series Analysis.

### **Indian Economics-II**

#### **Course Objectives and out comes**

Unit I-

Indian Agriculture

Objective- To make the students to understand the Indian Agriculture.

Outcomes-Students will be able to understand the Indian Agriculture

Unit II-Indian Industry

objective - To make the students to understand the Indian Industry. Outcomes-Students will be able to understand the Indian Industry

Unit III-

Indian service sector and International Trade:

Objective- To make the students to understand the Indian service sector and International Trade.

Outcomes-Students will be able to understand the Indian service sector and International

Unit IV-

Contribution of Indian Economic Thinkers:

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

Outcomes-Students will be able to understand the contribution of Indian Economic Thinkers.

### **Human Resource Management**

#### **Course Objectives and out comes**

Unit I-

Introduction:

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

Outcomes-Students will be able to understand the concept of Human Resources Management & Human Resource Manager.

Unit II-

Recruitment, selection and training:

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

Outcomes-Students will be able to understand the Recruitment, selection and training

Unit III-

Labour welfare and collective bargaining:

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

Outcomes-Students will be able to understand the Labour welfare and collective bargaining.

Unit IV-

Human Resource Planning and Accounting:

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

Outcomes-Students will be able to understand the Human Resource Planning and Accounting.

### **Industrial Law**

#### **Course Objectives and out comes**

- 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.

**Department of science (B.Sc.)**

**Semester-I**

**Department of English**

**Compulsory English**

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

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**

**Program Outcomes**

- mfn'Vs%& 1- ejkBh Hkk"ksfo"k;h fon;kF;kZae;/s vfHk#ph fuekZ.k dj.ks-
- 2- lkfgR;ys[kukph o okpukph vkoM fuekZ.k dj.ks-
- 3- fon;kF;kZae;/s vlysaY;k lqIr dykaxq.kkawk oko nsÅu R;kaP;kr  
lkfgR;fo"k;d o`f/naxr dj.ks-
- 4- lkfgR;krwu ekuorkoknh n`f"Vdks.k #tfo.ks-
- 5- lkfgR;krwu lektkrhy iz"ukawk okpk QksMwu R;kaps fujkdj.k dj.ks-
- /;s;%& 1- Hkkoh dkGkr fon;kF;kZae/kwu lkfgR;fufeZrh dj.ks-
- 2- v;/kiu o v/;;ukr fon;kF;kZauk lgHkkxh d#u laokn"khy  
okrkoj.k fufeZrh dj.ks-
- 3- foHkkxkr fofo/k midzekaps vk;kstu d#u ejkBh Hkk'kspk ntkZ  
ok<fo.ks-
- 4- fon;kF;kZae;/s la"kk/kuo`Rrh o`f/naxr dj.ks-
- 5- ejkBh Hkk'ksph iz;ksx"kkGk fuekZ.k dj.ks-

**Course Outcomes**

lkfgR; lsrw

- CO1 fon;kF;kZaue;/s lkfgR; fo"k;d vkoM fuekZ.k dj.ks
- CO2 okpu laLd~rhpq iqjLdkj dj.ks
- CO3 Hkkjrh; lafo/kkukps egRo letkowu lkax.ks
- CO4ekuoh eqY;kaph ti.kwd dj.ks
- CO5 dfork ya[kukps ra= voxr dj.ks
- CO6 i;kZoj.k fo"k;d tkx~rh fuekZ.k dj.ks
- CO7 O;kogkjhd ejkBhps egRo letkowu lkax.ks

**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.

#### **Program Specific Outcome (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 technique used in purification of compounds

#### **Program Outcomes (Po)**

- 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-**

<b>Paper</b>	<b>CO Name</b>	<b>Outcome</b>
<b>FY Paper-I</b>	<b>101.1</b>	<ul style="list-style-type: none"><li>• To understand the basic structure of atom.</li><li>• Understand shape of orbitals.</li></ul>

<b>Inorganic Chemistry (101)</b>		<ul style="list-style-type: none"> <li>Understand periodic properties such as atomic and ionic radii, ionization energy, electron affinity etc.</li> </ul>
	<b>101.2</b>	<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>
	<b>101.3</b>	<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>
	<b>101.4</b>	<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>
<b>FY Paper-II Physical Chemistry (102)</b>	<b>102.1</b>	<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>
	<b>102.2</b>	<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>
	<b>102.3</b>	<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 tension, viscosity, refractive index.</li> </ul>
	<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

#### Program 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.

#### Program 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.

#### Program Outcomes (Po)

- 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	Description
<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**

**Program 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 students build-up a successful career in Mathematics

**Program Specific Outcome (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



**Program Outcome (PO): 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 the 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 other subject.

**COURSE OUTCOMES (COs)****Course Name: B. Sc.****Year/Semester: First/First****Subject: Mathematics**

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

Paper	CO Name	Outcome
<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 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 Taylors theorem Identify Indeterminate forms and application of L'Hospitals Rule
	<b>102.3</b>	Understand the concept of partial differential equation, Eulers Theorem and Jacobians
	<b>102.4</b>	Identify the various types and methods to solve Integration and application of Reduction Formulae

**s Department of Zoology**

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

3.	Graduates will become entrepreneurs.
----	--------------------------------------

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

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

### COURSE OUTCOMES (COs)

Course Name: B. Sc.

Year/Semester: First/First

Subject: Zoology

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

Paper	CO Name	Outcome
FY Paper-I Life and Diversity of Animals – Non- chordates (Protozoa to Annelida) (101)	101.1	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.
	101.2	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.
	101.3	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

PROGRAM 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.

**PROGRAM 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 Name	Outcome
FY Paper-I Viruses, Prokaryotes, Algae And Biofertilizers (101)	101.1	<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>
	101.2	<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>
	101.3	<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>
	101.4	<ul style="list-style-type: none"><li>To understand Scope and importance of Biofertilizers.</li></ul>

		<ul style="list-style-type: none"> <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>102.4</b>	<ul style="list-style-type: none"> <li>.</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>

तमसो मा ज्योतीर्गमय

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

- Unit I: Objective-Making students conscious about innovations, life style, dignity and Courage.  
Outcome-Students tried to understand the importance of innovations, life style, and dignity and courage.
- Unit II: Objective- Making students understand about loss and opportunity, relation between Science and spiritual .  
Outcome-Students tried to understand about loss and opportunity, relation between Science and spiritual and their importance in life.
- Unit III: Objective-To make students understand the real meaning of proverb ‘All the glitters is not gold’, to give sanity in our life and dignity and safety of life.  
Outcome-Students tried to understood the real meaning of proverb ‘All the glitters is not gold’, to give sanity in our life and dignity and safety of life.
- Unit IV: Objective-To create the ability of writing Curriculum Vitae and paragraph.  
Outcome-Students attempted to write the Curriculum Vitae and paragraph

**Department of Marathi**  
**Course Objectives and Outcomes**

Program Outcomes

- 1- Hkk'ksfo"kh fon;kF;kZae;/s vfHk#ph fuekZ.k dj.ks-
- 2- lkfgR;ys[kukph o okpukph vkoM fuekZ.k dj.ks-
- 3- fon;kF;kZae;/s vlysaY;k lqIr dykaxq.kkawk oko nsÅu R;kaP;kr  
lkfgR;fo"kh;d o`f/naxr dj.ks-
- 4- lkfgR;krwu ekuorkoknh n`f"Vdks.k #tfo.ks-
- 5- lkfgR;krwu lektkrhy iz"ukawk okpk QksMwu R;kaps fujkdj.k dj.ks-

**Course Outcomes**

lkfgR; lsrw

- 1- Hkkoh dkGkr fon;kF;kZae/kwu lkfgR;fufeZrh dj.ks-
- 2- v/;kiu o v/;;ukr fon;kF;kZauk lgHkkxh d#u laokn"kh  
okrkoj.k fufeZrh dj.ks-
- 3- foHkkxkr fofo/k midzekaps vk;kstu d#u ejkBh Hkk'ksph ntkZ  
ok<fo.ks-
- 4- fon;kF;kZae;/s la"kk/kuo`Rrh o`f/naxr dj.ks-
- 5- ejkBh Hkk'ksph iz;ksx"kkGk fuekZ.k dj.ks-

**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-**

Paper	CO Name	Outcome
FY Paper -I Organic Chemistry (201)	201.1	<ul style="list-style-type: none"> <li>• To make student understand different organic compounds and the concept structure and bonding in organic compounds.</li> <li>• Understand mechanism of organic reaction.</li> </ul>
	201.2	<ul style="list-style-type: none"> <li>• Understand the concept of stereochemistry of organic compounds.</li> </ul>

		<ul style="list-style-type: none"> <li>To make the structure of Geometrical isomerism and conformational isomerism.</li> </ul>
	201.3	<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>
	201.4	<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>	202.1	<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>
	202.2	<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>
	202.3	<ul style="list-style-type: none"> <li>Understand the concept of nuclear chemistry and molecular structure</li> </ul>
	202.4	<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>	203	<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	Description
<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>

	<b>201.4</b>	<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)	<b>202.1</b>	<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>
	<b>202.2</b>	<ul style="list-style-type: none"> <li>Know the constituents of universe (Solar system, Stars, Galaxies) and some physical aspects of universe</li> </ul>
	<b>202.3</b>	<ul style="list-style-type: none"> <li>To understand the concepts of Diamagnetism, Paramagnetism and Ferromagnetism and their applications</li> </ul>
	<b>202.4</b>	<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)	<b>203</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: First/ Second**

**Subject: Mathematics**

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

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

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

**Course Name: B. Sc.**

**Year/Semester: First/Second**

**Subject: Zoology**

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

<b>Paper</b>	<b>CO Name</b>	<b>Outcome</b>
<b>FY Paper -I</b>	<b>201.1</b>	To understand the, Arthropoda : General characters and classification up to classes, Cockroach : Mouth



Life and Diversity of Animals – Nonchordates (Arthropoda to Hemichordata) (201)		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
	201.2	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
	201.3	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
	201.4	To understand Hemichordata : General characters and phylogeny, <i>Balanoglossus</i> : External features and digestive system, Reproduction in <i>Balanoglossus</i> , Tornaria larva, Affinities of <i>Balanoglossus</i>
F.Y. Paper-II Cell Biology (202)	202.1	To understand Ultrastructure of prokaryotic and eukaryotic cell, Plasma membrane: Structure- Fluid Mosaic Model and functions, Endoplasmic reticulum: Types, ultrastructure and functions, Golgi complex: Ultrastructure and functions
	202.2	To understand Ultrastructure of mitochondria, Oxidative phosphorylation – Glycolysis and Krebs' cycle, Electron Transport Chain and terminal oxidation, Lysosome: Structure, polymorphism and functions
	202.3	To understand the Nucleus: Ultrastructure of nuclear membrane, Structure and functions of nucleolus, Chromosome: Structure and types, structure of nucleosome, Giant chromosomes: Lamp-brush and polytene chromosome
	202.4	To understand the Ribosome: Structure, types, Lake's model and functions, Somatic cell division: Cell cycle and Mitosis, Meiosis (different phases and significance), synaptonemal complex, Cellular ageing and cell death, Elementary idea of cancer and its causative agents
F.Y. Zoology Practical course	203	<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: First/Second**

**Subject: Botany**

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

Paper	CO Name	Outcome
<b>FY Paper -I Paleobotany, Pteridophytes, Gymnosperms and Soil Analysis (201)</b>	201.1	<ul style="list-style-type: none"> <li>To make student 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>
	201.2	<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>
	201.3	<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>
	201.4	<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. Pape-II Morphology of Angiosperms and Floriculture (202)</b>	202.1	<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>
	202.2	<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>
	202.3	<ul style="list-style-type: none"> <li>Understand the structure of gynoecium.</li> <li>Study the fruit and its types.</li> </ul>
	202.4	<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>	203	<ul style="list-style-type: none"> <li>Study of different root and stem modification and branching patterns. <ul style="list-style-type: none"> <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> </li> </ul>

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

**Course Name: B. Sc.**

**Year/Semester: Second/Third**

**Subject: Chemistry**

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

Paper	CO Name	Outcome
<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, 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	Description
<b>Paper 1: Sound Waves, Applied Acoustic, Ultrasonic and Power Supply (301)</b>	<b>301.1</b>	<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>
	<b>301.2</b>	<ul style="list-style-type: none"> <li>Understand the working of transducers and their characteristics and the concept acoustic and its applications.</li> </ul>
	<b>301.3</b>	<ul style="list-style-type: none"> <li>Understand the production and applications of ultrasonic waves.</li> </ul>
	<b>301.4</b>	<ul style="list-style-type: none"> <li>Understand the concept of voltage regulation and working of half, full and bridge rectifier.</li> </ul>

<b>Paper 2:</b> Physical Optics and Electromagnetic Waves (302)	<b>302.1</b>	<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>
	<b>302.2</b>	<ul style="list-style-type: none"> <li>Understand the concept of diffraction, Resolving Power of grating and Rayleigh's criterion for resolution.</li> </ul>
	<b>302.3</b>	<ul style="list-style-type: none"> <li>Understand the concept of polarization and double refraction</li> </ul>
	<b>302.4</b>	<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)	<b>303</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/Third**

**Subject: Mathematics**

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

<b>Paper</b>	<b>CO Name</b>	<b>Outcome</b>
<b>SY</b> <b>Paper-I</b> <b>301</b> <b>Advanced</b> <b>Calculus,</b> <b>Sequences &amp;</b> <b>Series</b>	<b>301.1</b>	Students understand Mean Value theorem
	<b>301.2</b>	Learn about an envelope of a family of curves in the plane and study the Langranges Multiplier method
	<b>301.3</b>	Understand the concept of sequence
	<b>301.4</b>	Use Tests for convergence
<b>SY</b> <b>Paper-II</b> <b>302</b> <b>Differential</b> <b>Equation and</b> <b>Group</b> <b>Homomorphism</b>	<b>302.1</b>	Understand the concept of Special Functios(Bessels and Legendres function)
	<b>302.2</b>	Students understand the concept of Laplace Transform and solve the problems
	<b>302.3</b>	Applications of Laplace Transform & Fourier Transform
	<b>302.4</b>	Students develop the 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 Name</b>	<b>Outcome</b>
<b>S.Y</b> <b>Paper-I</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,

Life and Diversity of Animals - Chordates (Protochordata to Amphibia) (301)		digestive system, circulatory system, sense organs and protonephridia, Agnatha : General characters of Cyclostomata ( <i>Petromyzon</i> and <i>Myxine</i> )
	301.2	Understand the Pisces : Salient features of Chondrichthyes and Osteichthyes, Origin of paired fins in fishes, Migration and Accessory respiratory organs in fishes, Amphibia : General characters and classification up to order, Parental care and Neotony in Amphibia
	301.3	Understand the Gametogenesis and type of eggs, Fertilization of egg, Post fertilization development of fish, Types of scales of fishes, Development of placoid scales
	301.4	Understand the Frog Embryology - Cleavage , blastulation and gastrulation, Fate map, Morphogenetic movements in gastrula of frog, Development of respiratory organs in frog, Development of Aortic arches of frog
S.Y. Paper-II Organic Zoology (302)	302.1	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
	302.2	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
	302.3	Understand the concept of Sex determination – ZZ, XY, XO, ZW pattern, Sex determination in <i>Drosophila</i> – Genic balance theory, Environmental sex determination in <i>Bonellia</i> , Chromosomal aberrations: addition, deletion, duplication and inversion, Gene mutations- Spontaneous and induced mutations, mutagenic agents, Disorders related to chromosomal number- Turner syndrome, Klinefelter syndrome and Down syndrome
	302.4	Understand the Lethal genes – Concepts and consequences, Population genetics: Basic concepts in population genetics, Hardy Weinberg equilibrium and its significance, Genetic counseling – Introduction , purpose, hereditary diseases and disorders, Applied genetics - DNA fingerprinting , amniocentesis, sperm banks, karyotyping
S.Y. Zoology Practical Course	303	<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-

Paper	CO Name	Outcome
S.Y. Paper-I  Botany (301)	301.1	<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>
	301.2	<ul style="list-style-type: none"> <li>Understand the classification system of Bentham and Hooker, Engler and Prantle.</li> </ul>
	301.3	<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>
	301.4	<ul style="list-style-type: none"> <li>Study the skills of landscaping and gardening.</li> </ul>
S.Y. Paper-II Angiosperm anatomy and Horticulture (302)	302.1	<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>
	302.2	<ul style="list-style-type: none"> <li>Study the primary and secondary growth I stem and root.</li> </ul>
	302.3	<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>
	302.4	<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>
S.Y. Botany Practical Course	303	<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 Name	Outcome
S.Y. Paper-I Inorganic Chemistry	401.1	<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>

(401)	401.2	<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>
	401.3	<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>
	401.4	<ul style="list-style-type: none"> <li>Understand the concept of inorganic polymers.</li> </ul>
<b>S.Y. Paper-II Physical Chemistry (402)</b>	402.1	<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>
	402.2	<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>
	402.3	<ul style="list-style-type: none"> <li>Use spectroscopy for chemical analysis.</li> <li>Understand types of spectroscopy.</li> </ul>
	402.4	<ul style="list-style-type: none"> <li>Understand the concept of quantum chemistry and wave function.</li> </ul>
<b>S.Y. Chemistry practical Course</b>	403	<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-**

Paper	CO	Description
<b>Paper 1:</b> Solid State Physics, X-ray and Laser (401)	401.1	<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>
	401.2	<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>
	401.3	<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> </ul>

		<ul style="list-style-type: none"> <li>Calculate Miller indices of the given plane and identify the orientation of the plane from the given set of Miller indices.</li> </ul>
	401.4	<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)	402.1	<ul style="list-style-type: none"> <li>Understand the construction and working and characteristics of various solid state devices.</li> </ul>
	402.2	<ul style="list-style-type: none"> <li>Understand the construction and working and characteristics of various FETs.</li> </ul>
	402.3	<ul style="list-style-type: none"> <li>Understand the concept molecular physics.</li> </ul>
	402.4	<ul style="list-style-type: none"> <li>Understand and apply the Raman spectroscopy.</li> </ul>
Physics Practical (403)	403	<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 program in Mathematics a student should be able to;

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

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

**Course Name: B. Sc.**

**Year/Semester: Second/Fourth**

**Subject: Zoology**

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

Paper	CO Name	Outcome
-------	---------	---------



<p><b>S.Y.</b> <b>Paper-I</b> Life and Diversity of Animals – Chordates (Reptilia, Aves and Mammals) (401)</p>	<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
<p><b>S.Y.</b> <b>Paper-II</b> Molecular Biology and Immunology (402)</p>	<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 Name</b>	<b>Outcome</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 which is used to increase a commercial value of seeds.</li> </ul>
<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> </ul>

		<ul style="list-style-type: none"> <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 Name</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-**

Paper	CO	Description
<b>Paper 1:</b> Atomic Physics, Free Electron Theory and Statistical Physics (501)	501.1	<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>
	501.2	<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>
	501.3	<ul style="list-style-type: none"> <li>Understand and apply Maxwell-Boltzmann statistics</li> </ul>
	501.4	<ul style="list-style-type: none"> <li>Understand and apply Bose-Einstein statistics and Fermi-Dirac statistics.</li> </ul>
<b>Paper 2:</b> Quantum Mechanics, Nanomaterials and Nanotechnology (502)	502.1	<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>
	502.2	<ul style="list-style-type: none"> <li>Understand and apply Schrodinger's equation to free particle in a one and three dimension.</li> </ul>
	502.3	<ul style="list-style-type: none"> <li>Understand the basics of nanotechnology.</li> </ul>
	502.4	<ul style="list-style-type: none"> <li>Understand the synthesis and characterization techniques of nano materials.</li> </ul>
Physics Practical (503)	503	<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/Fifth**

**Subject: Mathematics**

After successful completion of three year degree program in Mathematics a Student should be able to;

Paper	CO Name	Outcome
<b>TY Paper-I 501 Analysis</b>	501.1	Understand the concept of Fourier series
	501.2	Understand the concept of Riemann-Stieltjes integral
	501.3	Understand the concept of Analytics Functions
	501.4	Students learn about Mobius Transformation
<b>TY Paper-II 502 Metric spaces, Complex</b>	502.1	Students deal with the definition, properties and examples of countable and uncountable sets and understand the metric space
	502.2	Understand the concept of Completeness, Compactness and Connectedness
	502.3	Understand the concept of Ring

<b>integration &amp; Algebra</b>		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-**

<b>Paper</b>	<b>CO Name</b>	<b>Outcome</b>
<b>T.Y. Paper-I</b> General Mammalian Physiology – I (501)	<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</b> Physical Zoology (502)	<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 nebulo</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 coccon processing for silk fabric - coccon boiling, reeling, rereeling,

		winding, doubling, twisting and weaving, Apiculture – Types of honey bees. Life cycle, culture, movable frame hive, bee product and its economic importance, Lac culture – Lac insect, <i>Laccifer lacca</i> - Life cycle, Lac processing, Lac products and Economic Importance
<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-**

Paper	CO Name	Outcome
<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 pant 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> </ul>

		<ul style="list-style-type: none"> <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 Quadrature 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-**

Paper	CO Name	Outcome
<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 bases.</li> </ul>
<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.</li> <li>To study Fats, oil and detergents.</li> </ul>
	<b>602.4</b>	<ul style="list-style-type: none"> <li>Understand synthetic dyes, synthetic drugs, synthetic polymer.</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>Description</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 a Student should be able to;

<b>Paper</b>	<b>CO Name</b>	<b>Outcome</b>
<b>TY Paper-I</b>	<b>601.1</b>	Understand the concept of Group Automorphism
	<b>601.2</b>	Understand definition and examples of vector spaces



<b>601 Abstract Algebra</b>	<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 Paper-II 602 Special Theory 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-**

<b>Paper</b>	<b>CO Name</b>	<b>Outcome</b>
<b>T.Y. Paper-I General Mammalian Physiology - II (601)</b>	<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. Paper-II Applied Zoology –II (Biotechniques, Microtechnique, Biotechnology, Bioinformatics and Biostatistics) (602)</b>	<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 colorimeter and spectrophotometers
	<b>602.2</b>	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)
	<b>602.3</b>	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
	<b>602.4</b>	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
<b>T.Y. Zoology 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 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-**

<b>Paper</b>	<b>CO Name</b>	<b>Outcome</b>
<b>Biochemistry, biotechnology And herbal technology Paper-I (601)</b>	<b>601.1</b>	<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>
	<b>601.2</b>	<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>
	<b>601.3</b>	<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 transfer.</li> </ul>
	<b>601.4</b>	<ul style="list-style-type: none"> <li>• Develop the skills of herbal technology.</li> <li>• Study the methods of Cultivation, Harvesting,</li> </ul>

		<ul style="list-style-type: none"> <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>	<b>602.1</b>	<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>
	<b>602.2</b>	<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>
	<b>602.3</b>	<ul style="list-style-type: none"> <li>• Study the principle, types and application of microscope.</li> <li>• Study the various techniques.</li> </ul>
	<b>602.4</b>	<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>	<b>603</b>	<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>

**Department of B.Voc.  
(Bachelor of vocational)**

**Building Technology**

**Semester-I**

**SOFT SKILL DEVELOPMENT-I  
COURSE OBJECTIVES AND OUTCOME**

**COURSE OBJECTIVES**

1. To know the process business communication.
2. To understand concept of marketing.
3. To know concept of motivation .
4. To understand team dynamics

**COURSE OUTCOMES**

1. Students will able to understand fundamental principle of effective business communication.
2. Students will apply the creative marketing techniques.
3. Students will be self-motivated.
4. Students will able to work in team.

**APTITUDE DEVELOPMENT-I**

## **COURSE OBJECTIVES AND OUTCOME**

### **COURSE OBJECTIVES**

- 1 To know the arithmetic ability.
- 2 To understand concept of LCM & HCM.
- 3 To know concept of ecosystem.
- 4 To understand computer skill

### **COURSE OUTCOMES**

1. Students will able to understand and solve arithmetic problems.
2. Students will solve LCM HCM problems.
3. Students will take care of ecosystem.
4. Students will able to handle computer

## **SEMESTER-II**

### **SOFT SKILL DEVELOPMENT-II**

## **COURSE OBJECTIVES AND OUTCOME**

### **COURSE OBJECTIVES**

1. To study nature and concept of stress.
2. To understand different types of job stress.
3. To know how to overcome stress of employee.
4. To learn different relaxation techniques.

### **COURSE OUTCOMES**

1. Students will able to understand nature and concept of stress.
2. Students will able to understand job stresses.
3. Students will able to overcome stress.
4. Students will able to understand importance of relaxation techniques

## **APTITUDE DEVELOPMENT II**

## **COURSE OBJECTIVES AND OUTCOME**

### **COURSE OBJECTIVES**

- 1 To study simple interest.
- 2 To understand calendar.
- 3 To know concept of area.
- 4 To learn different economic issues.

### **COURSE OUTCOMES**

- 1 Students will able to solve simple interest problems.
- 2 Students will able to understand calendar.
- 3 Students will able to solve problems on area.
- 4 Students will able to understand economic issues.

## **SEMESTER-III**

### **SUBJECT: SOFT SKILL DEVELOPMENT-III**

## **COURSE OBJECTIVES AND OUTCOME**

### **COURSE OBJECTIVES**

1. To understand concept of stealers.
2. To study importance of planning.
3. To study concept of fatigue.
4. To learn concept of scheduling and planning.

### **COURSE OUTCOMES**

1. Students will able to understand importance of time stealers.
2. Students will apply to plan their academic work.
3. Students will develop technique to overcome fatigue.

4. Students will be able to differentiate in scheduling and planning

### **APTITUDE DEVELOPMENT-III**

#### **COURSE OBJECTIVES AND OUTCOME**

##### **COURSE OBJECTIVES**

- 1 To understand concept of charts.
- 2 To know artificial language.
- 3 To study concept of verbal reasoning.
- 4 To learn computer skill.

##### **COURSE OUTCOMES**

- 1 Students will be able to identify different charts.
- 2 Students will apply to understand coding language.
- 3 Students will learn verbal reasoning.
- 4 Students will be able to handle computer.

### **SEMESTER-IV**

#### **APTITUDE DEVELOPMENT-IV**

#### **COURSE OBJECTIVES AND OUTCOME**

##### **COURSE OBJECTIVES**

- 1 To study logical reasoning.
- 2 To analyze different arguments.
- 3 To study concept of nonverbal reasoning.
- 4 To understand comprehension.

##### **COURSE OUTCOMES**

- 1 Students will be able to solve logical reasoning problems.
- 2 Students can cope with arguments.
- 3 Students will be able to solve nonverbal problems.
- 4 Students will understand comprehension.

### **SEMESTER-V**

#### **SOFT SKILL DEVELOPMENT-IV**

#### **COURSE OBJECTIVES AND OUTCOME**

##### **COURSE OBJECTIVES**

1. To study corporate culture.s
2. To analyze different characteristics of leader.
3. To study concept of attitude.
4. To understand new trends in CRM.

##### **COURSE OUTCOMES**

1. Students will be able to follow corporate culture through simulation.
2. Students can cope with large group situation.
3. Students will develop their own positive attitude.
4. Students will understand CRM.

### **APTITUDE DEVELOPMENT-V**

#### **COURSE OBJECTIVES AND OUTCOME**

##### **COURSE OBJECTIVES**

- 1 To understand data interpretation methods.
- 2 To study number series
- 3 To know general awareness issues.

## COURSE OUTCOMES

- 1 Students can able solve data interpretation problems.
- 2 Students will acquire knowledge of number series solving skill.
- 3 Students will understand general awareness issues.

## COURSE OBJECTIVESs

1. To understand concept of selling.
2. To study call handling skill
3. To understand EPABX System.

## COURSE OUTCOMES

1. Students can able develop self-techniques for selling.
  2. Students will acquire knowledge of call handling skill
- Students will understand EPABX system.

### Software Development

#### **Semester –I**

#### **Paper -1-Computer Fundamentals & Networking**

##### **Course Outcome :**

1. Knowledge of computer equipment including both hardware and software
2. Able to identify, difference between number system and convert number from one system to another.
3. Awareness on the basics of computer networks, protocols used in communication and transmissions in computer networks.
4. Able to Understand knowledge of the services provided by operating systems.

#### **Paper -2 : C Programming**

##### **Course Outcome :**

1. Develop problem solving and programming skills
2. Understanding Various concepts of C language
3. Implement strings in your C program
4. Understand the basics of file handling mechanisms

#### **Semester –II**

#### **Subject – Paper -1: Operating System Concepts & LINUX**

##### **Course Outcome**

1. To learn objectives & functions of operating systems.
2. To learn and understand various memory and scheduling algorithms.
3. To learns linuxs operating system & basics syntax for a commands
4. To understand processes & its life cycle

#### **Subject – Paper -2 : Programming in C++**

##### **Course Outcome**

- 1.Understand basic concepts of OOPs and benefits of OOPs
- 2.Able to analysis and design of web based applications
3. Able to develop media content and graphics design
4. Able to design programming for the web.

### **Semester –III**

#### **Subject – Paper -1: Data Structures**

##### **Course Outcome :**

- 1.Learn the concept of various data structures, implementation and applications.
- 2.Demonstrate basic computer and internet including operating a computer.
- 3.Demonstrate knowledge of the foundational mathematical concepts in computing.
- 4.Demonstrate aptitude for analyzing information and making logical conclusions.

#### **Subject – Paper -2 : Web Designing**

##### **Course Outcome :**

- 1.Learn the conceptof HTML, implementation, Command and applications.
- 2.Demonstrate basic computer and internet including operating a computer.
3. Demonstrate knowledge of the foundational mathematical concepts in computing.
- 4.Demonstrate aptitude for analyzing information and making logical conclusions

### **Semester –IV**

#### **Subject – Paper -1: Database Management System**

##### **Course Outcome :**

- 1.Learn the basic priciples of database management system.
2. Understand the concepts of database manipulation using SQL and PL/SQL
- 3.Enable to design a database to solve real life applications.
- 4.Demonstrate aptitude for analyzing information and making logical conclusions

#### **Subject – Paper -2: Web Development in PHP**

##### **Course Outcome :**

- 1.To learn client side and server side scripting.
2. To learn PHP Programming.
- 3.To learn how to develop dynamic websites and interact with dadabases through Internet.
- 4.Demonstrate aptitude for analyzing information and making logical conclusions

### **Semester –V**

#### **Subject – Paper -1: System Analysis & Software Engineering**

**Course Outcome :**

- 1.Learn various software development, methodologies and practices.
2. Able to the understanding of the software.
- 3.Able to their understanding of highlevel design
- 4.Learn various evaluation methods in software development.

**Subject – Paper -2: JAVA Programming**

**Course Outcome :**

- 1.To review the concept of OOP.
2. To learn JAVA programming environments.
- 3.To practice programming in JAVA
4. To learn GUI application development in JAVA

**Hardware Technology and Networking**

**Semester-I**

**Paper –I:- Computer Fundamentals**

- 1.Able to describes the computer and it's general features.
2. Defines input and output units computer
- 3.Knows the terms motherboard , CPU, RAM ,ROM, BIOS, CMOS etc.
- 4.Able to understand operating system and understand its commands, Internal, External

**Paper- II :- Computer & Network organization-I**

- 1.Able to understand Basic network and its type
2. Able to understand networking devices like repeaters, NIC, Hub, switches, Routers, Bridges.
3. Understand and use correctly communication network.
4. Able to explain internet, and how it's work.

**Semester-II**

**Paper-I :-Operating System**

- 1.Understand the role of operating system as system software.
- 2.Able to understand directory commands; DIR,MD,RD
- 3.Defining I/O system, Device ,management policies and secondary storage structure.
- 4.Comparison of UNIX and windows based OS

**Paper -II :-Computer & Network Organization - II**

- 1.Able to understand used of LAN. By using LAN sharing the information.
- 2.Will study how to configure Pc's running Linux so that they receive Ip addresses.



3. Will be able to understand and build the skills of Sub netting and routing mechanisms.
4. Able to use Linux commands to understand how a pc is configured

### **Semester-III**

#### **Paper –I:-Computer Hardware & Network Administration**

1. Able to understand system input and output and its features.
2. Understand parts of CPU
3. Understand types of computer memory & its characteristics.
4. Able to explain secondary memory and how its formatting

#### **Paper- II :- Network Programming**

1. Understand a detailed knowledge of the TCP/UDP sockets.
2. Apply knowledge of Unix/Linux operating system to build robust client & server software.
3. Describe major technologies and protocols used network communications
4. Make use of different types I/O

### **Semester-IV**

#### **Paper -I :- Mobile Computing**

1. Able to understand mobile communication, and its characteristics.
2. Define mobile technologies in terms of hardware ,software and communication
3. Evaluate the effectiveness of different mobile computing framework.
4. Describe how mobile technology functions to enable other computing technologies.

#### **Paper-II :- Internet Routing Design**

1. Able to understand network , network routing, and internet service.
2. To understand client server architecture.
3. Able to understand types & switch , modes of switches
4. Understand the routing protocol.

### **Semester-V**

#### **Paper -I :- Information and Network Security**

1. Develop Policies and procedures to manage enterprise security risk
2. Analyze and resolve security issues in networks and computer system.
3. Able to understand wireless networks, methods and Procedures.
4. Able to understand firewalls network.

#### **Paper –II:- Linux of Server**

1. Able to understand basic information on Linux

2.Implement and administer a Linux server.

3.Implement file services.

4.Able to secure a Linux server

## **Food Processing & Engineering**

### **Semester-I**

#### **Paper-I- Fundamentals of Food & Nutrition**

1. summarize and critically discuss/ understand both fundamental and applied aspects of food science.

2.They will be able to explain functions of specific nutrients in maintaining health, identifying nutrient specific foods and apply principles from the various facets of food science and related disciplines to solve practical as well as real-world problems. –

3. use current information technologies to locate and apply evidence-based guidelines and protocols and get imparted with critical thinking to take leadership roles in fields of health, dietetics, special nutritional needs and nutritional counseling.

#### **Paper-I- Introduction to Food Processing**

CO1: Students will understand the basic concepts in food processing and engineering and will get knowledge of the different instruments used in food processing and engineering.

CO2: They will understand different unit operations used in food processing.

CO3: They will understand the basic of heat transfer and energy requirement in food industry, physical properties of water, water activity

### **Semester-II**

#### **Paper-I- Food Microbiology**

CO1: Students will understand the basic concepts in microbiology, principle and working of different instruments used in lab along with its application.

CO2: They will get the knowledge about the how bacteria grows, different factors which affect their growth, different requirements for bacterial growth, different isolation and purification methods used for bacteria

CO3: They will understand the principle and importance of different staining methods used for bacteria.

CO4: They will gain knowledge on different sources, types of bacteria that cause spoilage in food, various changes that occur during spoilage in food depending on their nutrient content.

CO5: Students will understand different methods that can be used to prevent and detect bacterial spoilage of food.

CO6: They will understand importance of preservatives different methods and its importance

### **Semester-III**

## **Paper-I Bakery and Confectionery**

CO1: Students will understand the basic terms and concepts related to bakery and confectionary products.

CO2: Students will gain the knowledge related to various machineries used in bakery.

CO3: Learn the role of different ingredients in bakery products.

Co4: To know the manufacturing details of bakery and confectionary products

Co5: Learn about the different parameters for setting up bakery unit.

Co6: Understand cost components like fixed cost and learn how to do the costing of the product

## **Semester-IV**

### **Paper-I- Fruits, Vegetables and Post Harvest Technology**

CO1: Students will understand the importance, current status, nutritional composition and reasons of spoilage of fruit and vegetables.

CO2: They will learn different preservation methods such as pasteurization, sterilization, canning, freezing, refrigeration etc.

### **English and Communication Skills**

CO1. To make students improve communicative Competence

CO2. To develop in students the ability to communicate in English according to situation and purpose

CO3. To expose students to make optimal use of listening, speaking, reading and writing skills.

CO4. To reinforce and help students acquire vocabulary through the acquired skills.

CO5. To provide students with an opportunity to personalize language by making use of their life experience and world knowledge

