# Programme Outcomes (POs) Faculty of Arts (UG)

Students after completion of their graduation from faculty of Arts/Humanities and Social Science at under graduate level will meet the following outcomes.

- PO1.Students will acquire knowledge of facts and figures from the study of Economics, History, Politics, Geography, Psychology and languages and will develop the ability for critical thinking.
- PO2. Language learning will make them to acquire skill for effective communication such as reading listening, speaking and writing.
- PO3.Study of Social issues through the syllabus will create curiosity and sympathy among students and they will take initiative in social interaction.
- PO4. The study of literature and social science will bring about civic sense and awareness regarding human rights that will turn them into effective citizenship to build better society and stronger nation.
- PO5.Students will learn about the Principle of morality, love, mercy, justice though literature that would inculcate ethical values among them in due period.
- PO6.Poems, stories, lessons, essays, reports in literature and social science related to environment will invoke the students to care for nature and environment and measures to be taken for is sustainability.
- PO7.Students will emerge as self directed individuals and will learn that the pursuit of knowledge is lifelong learning process that needs to put up untiring efforts with positive approach to live successful life.

# **Programme Outcomes (PG)**

Students after completion of their Post graduation faculty of Arts in English and Hindi will meet the following out come

- PO1.Student will acquire knowledge in department by referring text books, reference books research journals, magazine and IT resources.
- PO2.Students will know about the origin and gradate development of particular trend, theory movement and its impact on contemporary society.

- PO3.Students will gain information about the inflaming social political, natural economical elements on literature and the way of life of people of the days.
- PO4.Student will motivate themselves for creative writing out of which a few of them can emerge as great poet, playwright, and artist also.
- PO5.Certain unexplored areas from English and Hindi will be selected by the students for the specific research.
- PO6.Literature in English and Hindi will teach the students about human values that will help the society to remove barriers based on religion, caste and creed that will bring peace and harmony in the society.

# **Programme Specific Outcomes (PSOs)**

# **Department of English (UG)**

After graduation in Arts Faculty with English the students will be capable to:

- PSO1. Acquire four skills in English i.e. writing reading, listing and speaking.
- PSO2. Know the importance of human values and bring charges in their behavior towards society.
- PSO3.Learn about great men of letters in English and aspire for creative writing.

# **Department of English (PG)**

After Post Graduation in Arts Faculty with English the students will be capable to:

- PSO1. Develop research attitude among them.
- PSO2. Concept themselves to people using English as language of communication in the India and abroad
- PSO3. Earn on their own by searching opportunities in government, non government and corporate sector.

# **Department of Hindi (U.G)**

- PSO1. Students will be familiar with various forms of Hindi literature.
- PSO2. Students will be able to communicate properly via oral or written communication.
- PSO3. Students will learn about the techniques of story writing.
- PSO4. Students will understand their responsibility citizen of India.
- PSO5. Students will be able for comprehension, appreciation and values of literature.
- PSO6. Students will show literary interest.
- PSO7. Students will familiar with mechanism and functions of speech organs.

# **Department of Hindi (P.G)**

- PSO1. The course will deepen and enlarge the students' mastery on Hindi.
- PSO2.Students will be familiar with the knowledge of the story, Novel, Essay, and Drama.
- PSO3.Students will understand the elements, nature and types of Novel.
- PSO4. Students will be able to introduce poetry and its elements
- PSO5.Students will get knowledge of Hindi literature
- PSO6. The Students will aware the ability to understand Hindi spoken at normal speed and converse on everyday topics with reasonable accuracy and fluency

- PSO7. The Students will translate from Marathi into Hindi using correct grammar and spelling
- PSO8. The Students will develop the ability to write essays in Hindi presenting reasoned arguments
- PSO9. The Students will be possess a knowledge and understanding of Hindi grammar at an appropriate level for an advanced learner

# Department of Marathi (U.G)

- PSO1. Marathi literature developed Ethical, Moral and Social values among the students.
- PSO2.Students enables to understand Human Culture.
- PSO3.Students learns Marathi language through Scientific Attitude.
- PSO4. Students understand characteristic and forms of various types of Literature.
- PSO5.Students understands the features that took place in characteristics in literary creation in our language and to know the change in them.
- PSO6.Students understands how to know and appreciate the beauty in forms and contents of literary creations.
- PSO7. Students develop their ability to use bookish knowledge in daily routine.
- PSO8.Students able to communicate with various social sections through practical and students encourage involvement in practical work.

# **Department of Economics (U.G)**

- PSO1.Students will be acquainted with basic concepts of Economics.
- PSO2.Students will be able to analyze Economics behavior in reality.
- PSO3. Students will be capable to know about the economic way of thinking
- PSO4.Students will be able to understand Historical and current events from an economics perspective.
- PSO5.Students will be familiar with various transactions in banking sector.

# **Department of Political Science (U.G)**

- PSO1.Students will be familiar with the basic concepts of Political Science.
- PSO2. They will interpret and evaluate the political behavior in practice
- PSO3. The will follow the basic concepts in day to day life as per need.
- PSO4. The will evaluate the past and present current events in the political angle.
- PSO5. The will be capable to examine and express their political views.
- PSO6. The will know various approaches to understand and undertake measures to solve problems in practical politics.
- PSO7. They will be good citizens and political elites.
- PSO8. They will elucidate the foreign policy and international Relations with other countries.
- PSO9. Nationality will be developed among them.

# COURSE OUTCOMES (COs) ARTS FACULTY

# DEPARTMENT OF ENGLISH

F.Y.B.A.  Compulsory English.  1. Students will be capable to comprehend written texts. 2. The course will make them aware of the importance of communicat competence. 3. The course will develop the interest in English reading among the students. 5. The course will provide opportunity to learn English language Communication skills in and outside classroom situation 6. The course will help to practice English grammar and make correct everyday English communication  Optional English  1. The course will make them aesthetic pleasure of literate. 2. The course will introduce to the students the basic forms of poetry. 3. The course will create interest among students for literature in Eng 4. The course will introduce the basic forms of literature to the student students to use correct English grammar. 2. Will make the students to use correct English grammar. 3. The paper of Project writing will inculcate the skills of explanation interpretation and visualization in the students. 4. The papers of skill and ability enhancement are framed not only to	use in lish. nts.
competence.  3. The course will develop the interest in English reading among the students.  5. The course will provide opportunity to learn English language Communication skills in and outside classroom situation  6. The course will help to practice English grammar and make correct everyday English communication  Optional English  1. The course will make them aesthetic pleasure of literate.  2. The course will introduce to the students the basic forms of poetry.  3. The course will create interest among students for literature in English to the course will introduce the basic forms of literature to the students.  S.Y.B.A.  English for  Humanities  1. Will make the students to use correct English grammar.  2. Will introduce the students to the various forms of literature in English to the students to the various forms of literature in English to the students to the various forms of literature in English to the students to the various forms of literature in English to the va	use in lish. nts.
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Humanities  2. Will introduce the students to the various forms of literature in Eng 3. The paper of Project writing will inculcate the skills of explanation interpretation and visualization in the students.	
3. The paper of Project writing will inculcate the skills of explanation interpretation and visualization in the students.	
interpretation and visualization in the students.	
	,
4. The papers of skill and ability enhancement are framed not only to	
the students the use of language but how to use the language creative	zely
and professionally.	
5. The Paper of Compulsory English is specifically framed from the	
viewpoint of value education which is the basis of quality life.	1.6.1
16 <sup>th</sup> and 17 <sup>th</sup> Century 1. Will acquaint the students with the major dramatist, essayists of the	: 16th
English Literature and 17th century	
2. English literature.	4
3. Will learn students about history of English literature and its salien feature.	L
4. The special papers will open up traditional job opportunities for the	۵.
students but the papers of skill and ability enhancement will open u	
corporate, govt. and private sectors for the students of English liter	
18 <sup>th</sup> and 19 <sup>th</sup> Century 1. Student will collect basic ideas about 18th and 19th century English	
English Literature Literature with special reference to poetry and novel.	•
2. Students will be capable to grasp the content and critical appreciation	on of
the prescribed texts.	
SEC- English for 1. The papers of skill and ability enhancement are framed not only to	orient
Competitive the students the use of language but how to use the language creative	
Examinations and professionally.	
2. Selection of contents in all the courses will help the students to	
comprehend the worldly wisdom and commercial perception which	ı will
ultimately lead them to be successful and enjoy quality life.	
T.Y.B.A Developing 1. Students will develop their skill in written and spoken English.	
Communication 2. Students will gather knowledge about human values and moral lesion.	
Skill 3. The students understood various types of written communication lil	
letter writing, application for job, invitation, Congratulation letter, T	. manks
giving letter, Notice, Agenda and minutes of meeting. 4. They understood the technique of advertisement writing.	
5. They are able to comprehend the written matter and good at	
summarization.	
6. They can expand an idea.	
7. Many can compose a story.	

	20th Century English Literature	<ol> <li>Will explain the development of poetry in English</li> <li>The students will familiar with features and types of modern poetry, drama and novel</li> <li>The students will introduce with major poets, novelists and dramatists in modern English literature.</li> </ol>	
	Study of English Language DSE-4- A&B (Equivalent to previous S-40 Phonetics/Language	<ol> <li>The Course will introduce the properties, styles, and varieties of English language.</li> <li>Will acquaint with grammatical forms and functions in English language.</li> <li>The course will enable the students learn and practice morphological concepts and word formation processes.</li> </ol>	
	Indian Writing in English & American Literature	<ol> <li>Students will study the origin of drama dramatic art and the aspects, genre of drama.</li> <li>Students will collect information of the representative English dramatist.</li> <li>Students will trace the development in the field of linguistics.</li> <li>Students will familiarize with the recent trends in linguistics.</li> </ol>	
	SEC- English for Practical Purpose	<ol> <li>Will enable students to prepare for the competitive exams of various kinds especially meant for testing ability in English language.</li> <li>Will introduce students with the common question types asked in competitive examinations concerning English- grammar, vocabulary, comprehension, and other significant topics.</li> <li>Will encourage students to appear and prepare for the competitive exams.</li> <li>Will help the students to overcome the fear about English as a compulsory subject in various competitive exams.</li> </ol>	
	GE- Film & Literature	The course will introduce the students the concept of film and its origin and development.  1. To make the students able to understand the similarities and differences in film and literature  2. The course will enable the students to explore the process of adaptation and come to an understanding of how film interacts with other cultural forms such as theatre and fiction.  3. The course will help the students to analyze and judge film as an adaptation of literary text  4. The students will able to comprehend art of cinema making from a literary text.	
F.Y.B.Com.	English for Business	<ol> <li>Students will be familiar with technology enabled communication.</li> <li>Students will learn about complaints, claims and adjustments</li> <li>Students will acquire the skill of report writing.</li> </ol>	
	Optional English	<ol> <li>Students will gather the knowledge about the success stories of great business tycoons.</li> <li>Students will know about ethical and human values.</li> </ol>	
F.Y.B.Sc.	Optional English	<ol> <li>The students will be introduced with spoken and written English skills</li> <li>The course will acquaint the students with oral and written forms in English language communication</li> <li>The course will enable the students use correct English grammar in English language communication</li> </ol>	
S.Y.B.Sc.	Communicative English	<ol> <li>Students will be introduced with new techniques of technical communication.</li> <li>Students will be equipped with enough English to enable them to enter the usual profession open to them.</li> </ol>	

		3. Students will be equipped to communicate effectively in the changed
		circumstances and the present business environment.
M.A. I	Paper I Literary	After successful completion of the course :
English	Theory and Concept	1. The students will demonstrate a solid understanding of the
_		foundational concepts and principles of literary Criticism.
		2. The students will analyze and interpret literary texts effectively.
		3. The students will recognize and evaluate the impact of different
		critical perspectives on literary analysis and interpretation.
		4. The students will employ analytical and interpretive skills to
		examine literary texts and identify underlying themes, symbols, and
		narrative techniques.
	Paper II Fiction in	After successful completion of the course
	English	1. The students will develop a comprehensive understanding of the
		historical, social, and cultural contexts that influenced the growth
		and development of Indian, American, and British Fiction in
		English
		2. The students will analyze themes, narrative techniques, and socio-
		political commentary depicted in the text.
		3. The students will device methods used to explore and analyze its
		themes, character development, and narrative style in a text
		4. The students will take interest in comparative analysis, drawing
		connections between the studied texts and recognizing common
	Paper III Drama in	themes, narrative techniques.  After successful completion of the course:
	English	The students will develop a comprehensive understanding of the
	Engisii	historical and cultural context of Drama in English
		2. The students will recognize the influence of traditions on the
		development of dramatic themes, styles, and techniques
		3. The students will critically evaluate a play and judge its artistic
		merit and contribution to world drama.
		4. The students will relate the knowledge of dramatic devices and
		technique to the texts.
	Paper I V An	After successful completion of the course students will be able to:
	Introduction to	1. The students will identify the essential properties of language,
	Linguistics	demonstrating an understanding of its role in human communication and cognition.
		2. The students will be able to comprehend the dynamic interaction
		between language and society by recognizing the impact of
		language on social structures, identities, and cultural diversity, and
		analyzing language variations in different contexts.
		3. The students will be able to apply the knowledge of language
		orientation, linguistic diversity, and grammar to articulate ideas
		effectively and coherently in oral and written forms.
	Paper V Translation	After successful completion of the course :
	Studies	1. The students will understand the concept of translation and its
		significance in bridging linguistic gaps.
		2. The students will analyze different types of translation
		3. The students will evaluate the social, cultural, and political influences on translation
		4. The students will grasp the unique features and characteristics of
		translation in different contexts.
	Paper VI Research	translation in different contexts.
	Methodology in	After successful completion of the course
	English	1. The students will identify research problems, questions, hypotheses
		and construct a research design

		2. The students will understand the various types and the methods
		employed in research in English
		3. The students will understand the parts and structures of Research paper/Dissertation, and ethics of Research
M.A. II	Paper I Literary	The students will use documentation style as per MLA Handbook     The students will get introduced to a wide range of critical approaches and
English	Theory and	literary theories.
English	Criticism.	The students will help the learners to develop logical thinking and
		analytical ability through intellectually challenging content.
		3. The students will familiarize the learners with the trends and cross-
		disciplinary nature of literary theories.
		4. The students will develop sensibility and competence in them for practical
		application of various critical theories in the analysis of literary and
		cultural texts.
	Paper II : Study of	1. The students will know the growth, trends, tendencies and development of
	Novel	English novel.
	Novel	2. The students will be familiar with trends and movements in English
		literature with special reference to English novel.
		3. The students will get introduced with major novelists in English literature.
		4. The students will be able to appreciate and analyze a novel critically.
	Paper III:	1. The Students will have comprehensive understanding of the important
	Academic and	aspects of research writing.
	Research	2. The Students will try to do research in language and literature.
		3. The students will know various theories and practices in academic and research writings
		4. The students will be familiar with the writing styles for academic and
		corporate purposes
	Paper IV:	The Students will be acquainted with the significance of American
	American Literature	literature.
		2. The Students will develop their interest in various aspects of American
		Literature.
		3. The students will know the growth, trends, tendencies and development of
		American literature.
		4. The students will know trends and movements in American literature with special reference to major poets and poetry.
		5. The students will take an interest in reading and reciting poems of major
		poets in American literature.
		6. The students will be aware of socio-political and cultural issues reflected
		in American literature.

# DEPARTMENT OF HINDI

Class	Course	Outcomes
F.Y.B.A.	DSC HIN A-1 /A-2 हिंदीकथा <b>साहित्य</b> MIL-I Hindi Writing	1.छात्र साहित्यिक और सांस्कृतिक विरासत से परिचित हुए।     2.छात्रोंकासाहित्यबोधऔरसौंदर्यबोधका विकास हुआ।     3.छात्रभारतीयसंस्कृतिएवं सभ्यता, मूल्य-संस्कार, समताएवं मानवतासेपरिचितहुए।     4.साहित्यकीविविधविधाओंकापरिचयछात्रोंकोहुआ।     5. छात्रोंमेंसं वाद, लेखनतथाअभिव्यक्तिकौशलकोविकसितहुई।     1. छात्ररचनात्मक लेखन कौशल्यऔरउसकेविविध रूपों सेसेअवगतहुए।
	Skills: Media and Literature लेखनकौशल्य – मीडियाऔरसाहित्य (लघूकथाएवंनवगीत)	श्रुवंक्षित्व तथा क्षेत्र क्षेत्र क्षेत्र विकास क्षेत्र
S.Y.B.AG-2 DSC	DSC-I (C)A /B Hindi कथेत्तरगद्यविधाएँ DSC-II (C) B श्रेष्ठहिंदीएकांकी	1.छात्रोंकोकथेत्तर गद्य विधा का विकासात्मक परिचय प्राप्त हुआ।     2. कथेत्तर गद्य विधा की कालजयी रचनाओं से छात्रों को परिचित हुए।     3.कथेत्तर गद्य विधा की रचनाओं के माध्यम से छात्रों में मूल्य संवर्धन एवंसामाजिक संवेदनशीलता का विकास हुआ।     4. छात्रों मेंकथेत्तर गद्य विधा की रचनाओं काविकासात्मकपरिचयहुआ।     5. छात्रोंकोएकां की विधा एवंप्रमुख एकां कीकारों का सामान्य परिचय्प्राप्तहुआ।
S.Y.B.A S-1 DSE-I	DSE-1 (C) A HINDI : भारतीयएवं पाश्चात्यकाव्यशास्त्र	चात्रोंकोकाव्यशास्त्र का सामान्य परिचय हुआ।     चात्रोंकोकाव्य की विविध विधाओं से परिचित हुए।     उ.छात्रोंकोकाव्य की विविध विधाओं से परिचित हुए।     उ.छात्रोंकोगद्य की विविध विधाओं से परिचित हुआ।     5.छात्रोंकोशब्दशक्तियों, छंद एवं रसों का परिचितहुए।     उ.छात्रोंकीआलोचना की क्षमता विकसित हुआ।
S.Y.B.A DSC-II	DSE -II ( B) Hindi उपन्यासविधा DSE -II (B) Hindi नाटकविधा	चात्रों कोहिंदी उपन्यास विधा का विकासात्मक परिचय हुआ।     चात्रों कोहिंदी उपन्यास विधा का विकासात्मक परिचय हुआ।     चात्रों को माध्यम से छात्रों को मानवीय जीवन में समय का महत्व, व्यक्ति की विश्वव्यापी स्वाधीनता, वृध्दों की समस्या, मूल्य संवर्द्धन, संयुक्त परिवार आदि से अवगत हुए।     उ.छात्रोंकोउपन्यास के माध्यम से सामाजिक उत्तरदायित्व के प्रति एहसासहुआ।     छात्रोंकोहिंदी नाटक विधा का विकासात्मक परिचय हुआ।     स. छात्रोंकोधरती आबा नाटक के माध्यम से आदिवासी समाज,आदिवासी साहित्य और संस्कृति से परिचितहुए।
S.Y.B.A SEC	SEC-I/II Hindi भाषिकसं प्रेषण / अनुवादविज्ञान	1.छात्रोंकोहिंदी भाषा के भाषिक स्वरूपसे अवगतहुए। 2. छात्रभाषिक संप्रेषण की सैध्दांतिकी से पेरचयहुआ। 3. छात्रसंप्रेषण के प्रमुख प्रकारऔरउसकीविशेषासेपरिचितिहुए। 4. छात्रअनुवाद विज्ञान की प्रविधि, सैध्दांतिकसेपरिचितहुए। 5. छात्रोंकोसाहित्यिक अनुवाद, मशीनी अनुवाद से छात्रों को अवगत हुए।
T.Y.B. MIL	MIL III Hindi संपादनलेखनऔरसाहित्यमृद्रित लेखन MIL IV हिंदीसिनेमाऔरसाहित्य	<ol> <li>छात्रों को संपादकीय कला से अवगत्हुए।</li> <li>छात्रसंपादक की योग्यता, दायित्व और महत्त्व से पिरिचित हुए।</li> <li>संपादकीय लेखन के तत्त्व और प्रविधि को दर्शाना।</li> <li>छात्रसिनेमा और भारतीय समाज के संबंध का पिरचयहुआ।</li> <li>'मोहनदास' की कहानी के माध्यम से सामाजिक यथार्थ को दर्शाना।</li> </ol>
T.Y. B. AG-3 DSC- E	DSC- E (A) Hindi विशेषविधा-यात्रासाहित्य	1. यात्रा साहित्य विधा के सैद्धां तिक विवेचन से छात्रों को अवगत हुए। 2. यात्रा साहित्य विधा के विकासात्मक परिचय से छात्रों को परिचित हुए।

T.Y. B. A	DSC- F (A) Hindi विशेषविधा-भारतीयसं तसाहित्य DSE-III (A) Hindi	<ol> <li>यात्रा साहित्य विधा के प्रमुख साहित्यकार तथा उनके यात्रा वर्णन का ज्ञान छात्रों को प्राप्तहुआ।</li> <li>'मेरी जापान यात्रा' इस साहित्य कृति के माध्यम से छात्रों में यात्रा साहित्य लेखन की कला से पिरिचित हुए।</li> <li>छात्रोंकोभारतीय संत काव्य, उसकाविकासात्मक से पिरिचित हुए।</li> <li>भारतीय संत काव्य की विशेषताओं तथा उपलिब्धयों का पिरचय देना।</li> <li>हिंदी साहित्य का काल विभाजन तथा नामकरण से छात्रों को अवगत हुए।</li> </ol>
S-3 DSE-III	हिंदीसाहित्यकाइतिहास (आदि, भक्तिएवंरीतिकाल) DSE-III (B) Hindi साहित्यकाइतिहास (आधुनिककाल)	<ul> <li>2.आदिकाली, भिक्तकालीनएवं रीतिकालीनसाहित्य की प्रमुख परिस्थितियों, प्रवृत्तियों तथा प्रमुख रचनाकारों की रचनाओं से छात्रों को परिचित हुए।</li> <li>3. छात्रों कोहिंदी साहित्य इतिहास के आधुनिक काल के साहित्य से परिचित हुए।</li> <li>4. छात्रहिंदी साहित्य के आधुनिक काल कीप्रमुख प्रवृत्तियों तथा रचनाकारों से अवगत हुए।</li> </ul>
T.Y. B. AS- 4DSE-IV	DSE-IV (A) Hindi हिंदीभाषा DSE-IV (B) Hindi भाषाविज्ञान	1. भाषा की परिभाषाओं तथा विशेषताओं से छात्रों को अवगत हुए।     2. भाषा के विविध रूप, भाषा व्युत्पित्तसिध्दांत एवंविविध बोलियों के सामान्य परिचय का ज्ञान छात्रों को प्राप्तहुआ।     3.हिंदी के प्रचार एवं प्रसार में खान्देश के साहित्यकारों के योगदान से छात्रों को अवगत हुए।     4. भाषा विज्ञान तथा व्याकरण के तुलनात्मक अध्ययन का ज्ञान छात्रों कोप्राप्तहुआ।     5. ध्विन विज्ञान, पद (रूप) विज्ञान, वाक्य विज्ञान एवंअर्थ विज्ञान से संबंधित विविध मुद्दों से छात्रों को परिचित हुए।
T.Y. B. ASEC	SEC-III Hindi हिंदीव्याकरणतथाअभिव्यक्तिकौ शल्य SEC-IV Hindi हिंदीभाषाकामानकीकरणऔरअ शुद्धिसंशोधन	चात्रों को हिंदी भाषा की व्याकरणिक संरचना से अवगत हुए।     चात्रों को हिंदी शब्द संसाधन, संक्षेपण, पल्लवन करने की प्रक्रिया से अवगत हुए।     चात्रों कोवकृत्व, वाद-विवाद कला-कौशलकी जानकारी से छात्रों को परिचितहुए।     चात्रोंकोहिंदी भाषा के मानक रूप, देवनागरी लिपि तथा हिंदी वर्तनी संबंधी से परिचयहुआ।     चात्रोंकोशासकीय पत्र प्रारूप-लेखन, साक्षात्कार प्रणाली, शुद्ध-लेखन की क्षमता विकसित हुई।
T.Y. B. A.GE	GE- I (A) HINDI हिंदीकीराष्ट्रीयकाव्यधारा GE- II (B) HINDI खान्देशकालोकसाहित्य	<ol> <li>हिंदी की राष्ट्रीय काव्यधारा से छात्रपरिचित हुए।</li> <li>हिंदी की राष्ट्रीय काव्यधारा का विकासात्मक परिचय प्राप्तहुआ।</li> <li>हिंदी की राष्ट्रीय काव्यधारा के प्रमुख किवयों सामान्य परिचय हुआ।</li> <li>छात्रोंकोभारतीय स्वतंत्रता आंदोलन में हिंदी की राष्ट्रीय काव्यधारा के योगदान कीजानकारीप्राप्तहुई।</li> <li>लोकसाहित्य की सैद्धांतिकी से छात्र परिचित हुए।</li> <li>खानदेश के लोकसाहित्य और लोकसंस्कृति से छात्र अवगत हुए।</li> <li>छात्रों को खानदेश की प्रमुख बोलियाँ अहिराणी, लेवा और आदिवासी के साहित्य से अवगत हुए।</li> <li>लोकगीत, लोककथा, लोकनाट्य और लोकोत्सव आदि के माध्यम से खान्देश की लोकसंस्कृति सेपरिचितहुए।</li> </ol>
M.A. I Hindi Paper-I NEP 2023-24	DSC-1HIN 1011 कथासाहित्यकहानीएवं उपन्यास DSC-5 कथा साहित्य - निबंध और व्यंग्य	<ol> <li>उपन्यास विधा से छात्र को परिचित हुए।</li> <li>हिंदी साहित्य की श्रेष्ठ उपन्यासकारों की उपन्यासों से अवगत हुए।</li> <li>हिंदी की श्रेष्ठ उपन्यासों के माध्यम से छात्रों के व्यक्तित्व का विकास हुआ।</li> <li>हिंदी उपन्यासों के माध्यम से छात्रों में सामाजिक संवेदनशीलता, राष्ट्रीय एकात्मता, सामाजिक समरसता आदि मूल्यों के संदर्भ में जागृती निर्माण हुई।</li> <li>कहानी विधा से छात्रों को परिचित हुए।</li> <li>हिंदी साहित्य की श्रेष्ठ कहानीकारों की कहानियों से अवगत हुए।</li> <li>हिंदी की श्रेष्ठ कहानियों के माध्यम से छात्रों के व्यक्तित्व का विकास हुआ।</li> <li>हिंदी कहानियों के माध्यम से छात्रों में सामाजिक संवेदनशीलता, राष्ट्रीय एकात्मता,सामाजिक समरसता आदि मूल्यों के संदर्भ में जागृती निर्माण हुई।</li> <li>कथेतरसाहित्य, नाटकसाहित्यकेसामान्यपरिचयसेछात्रअवगतहुए।</li> </ol>

Danor II	I = = = 10011111	1	
Paper-II	<b>DSC</b> -102HIN 1112	1.	आदिकालीन एवं भक्तिकालीन हिंदी काव्य का प्रातिनिधिक कवियों की रचनाओं से छात्र
	आदिकालएवं भक्तिकालीनकाव्य	2	अवगत हुए।
	धारा	2.	आदिकालीन एवं भक्तिकालीन काव्य प्रवृत्तियों का छात्रों ने अध्ययन किया।
	DGG (	3.	छात्रों नें आदिकालीन एवं भक्तिकालीन प्रातिनिधिक कवियों के दार्शनिक सिध्दांतों का
	DSC-6		अध्ययन किया।
	रीतिकालीन काव्य	4.	छात्रों नें आदिकालीन कवि गोरखनाथ का परिचय प्राप्त किया तथा उनके काव्य का विस्तार से
	रा।तकालान काव्य	_	अध्ययन किया।
		5.	भक्तिकालीन प्रातिनिधीक कवि तुलसीदास का परिचय प्राप्त किया और उनके काव्य का
Daman III		_	विस्तार से अध्ययन किया।
Paper-III	DSC- 3 HIN 1113	1.	छात्रों ने भारतीय काव्याशास्त्र का सामान्य परिचय प्राप्त किया।
	भारतीयसाहित्यशास्त्रतथाआलो	2.	भारतीय काव्यशास्त्र के प्रमुख सिद्धां तों से छात्र अवगत हुए।
	चना	3.	हिंदी आलोचना से अवगत होकर छात्रों ने हिंदी के प्रमुख आलोचकों की आलोचनाओं का
	DCC 7		अध्ययन किया।
	<b>DSC-7</b> पाश्चात्यसाहित्यशास्त्र तथा		पाश्चात्य काव्याशास्त्र का विकासात्मक परिचय छात्रों को समझा।
			पाश्चात्य काव्याशास्त्र के प्रमुख सिद्धां तों से छात्र परिचित हुए।
	तथावाद		पाश्चात्य काव्य समीक्षा के आधुनातन आयामों को छात्रों ने जाना।
			पाश्चात्य काव्य समीक्षकों का सामान्य परिचय छात्रों को प्राप्त हुआ।
Paper-IV	DSC-4 HIN 414	1.	समकालीन हिंदी साहित्य में दलित विमर्श के सैध्दां तिक पक्ष का अध्ययन छात्रों ने किया।
	दलितविमर्शकाव्य		छात्रदलित साहित्य की प्रवत्तियाँ, प्रेरणास्त्रोंत से अवगत हुए।
	DCC 0 LUN 404	3.	छात्रों ने दलित विर्मश का आधुनिक परिदृष्य में आकलन एवं अध्ययन किया।
	DSC- 8 HIN 424		छात्रों ने समकालीन हिंदी साहित्य में आदिवासी विमर्श के सैध्दांतिकी का अध्ययन किया।
	आदिवासीविमर्शउपन्यास	5.	छात्रों ने आदिवासी साहित्य की विशेषताओं का अध्ययन किया।
		6.	छात्रों ने आदिवासी समाज कीसमसामायिक समस्याएँ और विकास नीति को जाना।
		7.	छात्रों द्वारा हिंदी साहित्य में चित्रित आदिवासी परंपरा का विस्तार से अध्ययन किया गया।
		8.	अनुवादविज्ञान, परिभाषा, स्वरूप, महत्वसेछात्रपरिचितहुए।
		9.	अनुवादकेप्रकारगुणउपकरणोंसेअवगतहुए।
		10.	वर्तमानकालमेंअनु वादकीआवश्यकताजानकरप्रायोगिकताकोसमझकरछात्रोंके व्यक्तित्व का
			विकास हुआ।
		11.	मराठी अथवा अं ग्रेजीसे हिंदी में अनुवादकरसक तेहैं।
Paper-V	DSE-1 A HIN 145	1.	छात्रों ने लोक साहित्य के स्वरुप और संकल्पना को भलीभाँती जाना और समझा
	लोकसाहित्य	2.	लोकगीत, लोककथा, लोकगाथा और प्रकीर्ण साहित्य के सैध्दांतिक पक्ष से छात्र परिचित हुए
		3.	छात्रों ने लोकोक्तियाँ, मुहावरें, कहावतें आदि का भाषिक सौंदर्य जानकर उसके उपयोग कला
	DSE-2 A HIN 125		को आत्मसात किया
	अनुवादविज्ञान	4.	छात्रों ने लोक साहित्य के महत्व को समझकर उसके उपादेयता को जाना
			अनुवादविज्ञान, परिभाषा, स्वरूप, महत्वसेछात्रपरिचितहुए।
		6.	अनुवादकेप्रकारगुणउपकरणों सेअवगतहुए।
			वर्तमानकालमें अनु वादकी आवश्यकताजानकर प्रायोगिकताको समझकर छात्रों केव्यक्तित्वकावि
			कासहुआ।
		8.	पराठीअथवाअंग्रेजीसेहिंदीमेंअनुवादकरसकतेहैं।
Paper- VI	RM HIN 416		अनुसंधानात्मक दृष्टिकोण का छात्रों में विकास हुआ
-	अनुसंधानप्रविधिएवं प्रक्रिया		ु । लेखन कौशल से छात्र अवगत हुए
			अनुसन्धान प्रविधि और प्रक्रिया का छात्रों को ज्ञान प्राप्त हुआ
M.A. II Hindi	HIN – 0231		महाकाव्य और खण्डकाव्य का तात्विक विवेचन कर उसके आधार पर साहित्य कृतियों का
			अध्यापन किया गया।
Paper-V	महाकाव्यऔरखण्डकाव्य	2.	प्रातिनिधिक कृतियों के माध्यम से भारतीय संस्कृति और परंपराओं के प्रति छात्रों के मन में
CBCS2021-22			आस्था एवं आदर्श उत्पन्न कर उनके मन राष्ट्र के प्रति गौरव और अस्मिता का भाव निर्माण
	HIN-0241		- and a first and a first and a first and and and and and and the first

	काव्यनाटकऔरनईकविता		किया गया।
		3.	आधुनिक हिन्दी की लंबी कविता तथा ग़ज़ल के सैध्दां तिकी से छन्न परिचित हो गए।
		4.	प्रातिनिधिक आधुनिक हिन्दी लंबी कविताओं और ग़ज़लों से छात्र परिचित हो गए।
		5.	हिन्दी की कालजयी लंबी कविताओं और ग़ज़लों से छात्र परिचित हो गए।
		6.	लंबी कविता और ग़ज़लों के माध्यम से छात्रों में संवेदनीलता सहदयता, राष्ट्रीयता, मानवता
		0.	आदि मानवीय मूल्य विकसित हो गई।
Paper-VI	HIN – 0232	1.	हिंदी भाषा के ऐतिहासिक पृष्ठभूमि से छात्र अवगत हुए।
Tupor VI	भाषाविज्ञानHIN - 0242	2.	हिंदी की उपभाषाएँ तथा बोलियों का सामान्य परिचय प्राप्त कर छात्र उससे अवगत हुए।
	हिंदीभाषा	3.	हिंदी शब्द रचना और रूप रचना संबंधी छात्रों को ज्ञानप्राप्त हुआ।
	। हदामापा 	3. 4.	हिन्दी भाषा प्रयोग के विविध रूपों को छात्रों ने आत्मसात किया।
		4. 5.	
			भाषा विज्ञान के सैद्धां तिक विवेचन से छात्र अवगत हुए।
		6.	भाषा विज्ञान के विविध अंगों को छात्रों ने समझा
Donor VII	LUNI 0000	7.	छात्रों को रूप, रूपिम, वाक्य तथा अर्थ विज्ञान का सामान्य परिचय हुआ।
Paper-VII	HIN -0233	1.	हिंदी साहित्य के इतिहास के नामकरण, लेखन पद्मतियाँ तथा विभाजन से छात्र परिचित हुए।
	हिंदीसाहित्यकाआदिकालएवं म	2.	
	ध्यकाल		अध्ययन किया
	HIN – 0243	3.	आधुनिक काल के प्रमुख काव्य प्रकारों की प्रवृत्तियों के विश्लेषण की नई दृष्टि छात्रों में निर्माण
			हुई।
	हिंदीसाहित्यकाआधुनिककाल	4.	आधुनिक काल के कथा साहित्य तथा कथेत्तर साहित्य का विकासात्मक परिचय छात्रों को
			हुआ।
		5.	विमर्शमूलक साहित्य तथा प्रवासी साहित्य का अध्ययन छात्रों ने किया।
Paper-VIII	HIN – 234 (B)	1.	छात्रों ने लोक साहित्य के स्वरूप और संकल्पना को भलीभाँति जाना और समझा।
	, ,	2.	लोकगीत, लोककथा, लोकगाथा और प्रस्तुति साहित्य के शास्त्रीय पक्ष से विद्यार्थी परिचित
	लोकसाहित्य		हुए।
	HIN – 0244 (C)	3.	छात्रों ने लोकोक्तियाँ, मुहावरें, कहावतें आदि का भाषिक सौंदर्य जानकर उसके उपयोग कला
	1		को आत्मसात किया।
	अनुवादविज्ञान	4.	छात्रों ने लोक साहित्य के महत्व को समझकर उसके उपादेयता को जाना।

# DEPARTMENT OF MARATHI

Class	Course	Outcomes
प्रथम वर्ष कला	DSC : मराठी	<ol> <li>विद्यार्थिनींनी कथा या वांग्मय प्रकाराचे स्वरूप आणि वैशिष्ट्रये यां चे आकलन करून घेतले</li> </ol>
सत्र	वाङ्मयीन मराठी आधुनिक	2. विद्यार्थिनींनी पद्य व गद्य वांग्मय प्रकाराचा परिचय करून घेतला.
XI-I	गद्य व पद्य वाङ्मय प्रकार	3. विद्यार्थिनींनी निवडक लेखकां च्या गद्य व पद्य वाङ्मय निर्मितीचा परिचय करून घेतला.
		<ol> <li>विद्यार्थिनींनी जीवन कौशल्य म्हणून भाषेचे महत्त्व समजून घेतले.</li> </ol>
	:स्वरूप विचार	<ol> <li>विद्यार्थिनींनी श्रवण व भाषण कौशल्याचे महत्त्व व त्याचे उदिष्टे समजून घेतले.</li> </ol>
		<ol> <li>विद्यार्थिनींनी वाचन व लेखन कौशल्याचे महत्त्व व उिद्धे समजून घेतले.</li> </ol>
द्वितीय वर्ष कला	MAR - 231( A)	1) विद्यार्थिनींनी मराठीतील वैचारिक गद्य लेखनाचा परिचय करून घेतला.
सत्र-Ш	वैचारिक गद्य लेखनाचा	2) विद्यार्थिनींनी महात्मा जोतीराव फुले यां चे जीवन, कार्य त्यां ची वैचारिक जडणघडण
	अभ्यास	आणि त्यां च्या सं पदेबाबत माहिती घेतली.
	(शेतकऱ्याचा असूड महात्मा	3) विद्यार्थिनींनी शेतकऱ्याचा असूड या वैचारिक गद्यलेखनातून वाङ्मयीन गुणवैशिष्ट्यांचा
	फुले)	शोध घेतला.
	• .	4) विद्यार्थिनींनी शेतकऱ्याचा असूड मधून आलेल्या वैचारिक मां डणीची समकालीन
	MAR-241 (A)	अर्थपुर्णता प्रात्याक्षिकां च्या माध्यमातून जाणुन घेतली.
	चरित्र-आत्मचरित्र लेखनाचा	5) विद्यार्थिनींनी चरित्र व आत्मचरित्र पर लेखनाचे वांग्मयीन दृष्ट्या महत्त्व समजून घेतले.
	अभ्यास	6) विद्यार्थिनींनी मराठीतील चरित्र व आत्मचरित्र लेखनाच्या परंपरेचा परिचय करून घेतला.
	(जीवनरंग संपादन)	7) विद्यार्थिनींनी जीवनरंग या पुस्तकातील निवडक चरित्रपर आणि आत्मचरित्र पर लेखां चे
		स्वरूप जाणून घेतले.
		8) विद्यार्थिनींनी जीवनरंग या पुस्तकातील चरित्र पर आणि आत्मचरित्रपर लेखाची वांग्मयीन
		गुणवैशिष्ट्ये समजून घेतली.
	MAAD 000	4) 0 0000 : 0 : 2 20 2 2 2 2
द्वितीय वर्ष कला	MAR-232	1) विद्यार्थिनींनी कादंबरी या वांग्मय प्रकाराचे स्वरूप वैशिष्ट्ये जाणून घेतले आणि आधुनिक
सत्र-(III)	आधुनिक वांग्मयप्रकार	मराठी कादंबरीच्या वाटचालीचा परामर्श घेतला.
	कादंबरी अवकाळी	2) विद्यार्थिनींनी अवकाळी पावसाचा दरम्यानची गोष्ट या कार्दबरीतील ग्रामीण जीवन
	पावसाच्या दरम्यानची गोष्ट	वास्तवाचे स्वरूप समजून घेतले. 3) विद्यार्थिनींनी अवघडली पावसाच्या दरम्यानची गोष्ट या कादंबरीचे मूल्यमापन
	आनंदविंगकर	केले.विद्यार्थ्यांनीनी कादंबरीचे वांग्मयीन आकलन व मूल्यमापन करून घेण्याची दृष्टी
	MAR -242	विकसित झाली.
	आधुनिक वाङ्मय प्रकार	<ol> <li>विद्यार्थिनींनी कविता या वांग्मय प्रकाराचे स्वरूप व वैशिष्ट्ये समजून घेतले. विद्यार्थिनींनी</li> </ol>
	कविता माझे विद्यापीठ	आधुनिक मराठी कवितेच्या वाटचालीचा परामर्श घेतला. विद्यार्थिनींनी माझे विद्यापीठ या
	नारायण सुर्वे	कवितासंग्रहातील विविध जीवन जाणिवां चाशोध घेतला.
	नारायण सुव	5) विद्यार्थिनींनी माझे विद्यापीठ या कवितासं ग्रहाचे वांग्मय मूल्यमापन केले.विद्यार्थ्यांनीनी
		कवितेचे वांग्मयीन आकलन व मूल्यमापन करण्याची दृष्टी विकसित झाली.
द्वितीय वर्ष कला	MAR -233	1) विद्यार्थिनींनी भारतीय आणि पाश्चात्य साहित्य विचारां चा परिचय करून घेतला आणि
	साहित्य विचार (भारतीय	, साहित्याचे स्वरूप समजून घेतले.
	आणि पाश्चात्य)	2) विद्यार्थिनींनी प्रमुख संस्कृत व पाश्चात्य साहित्य मीमां सकां नीसाहित्याच्या स्वरूपाविषयी
	MAR-243	मां डलेल्या विचारां चा परिचय करून घेतला आणि साहित्याच्या निर्मितीची विविध
		प्रयोजने जाणून घेतली.
	साहित्य विचार	3) विद्यार्थिनींनी साहित्य निर्मितीच्या प्रधान व गौण कारणां ची ओळख करून घेतली.
	(भारतीय आणि पाश्चात्य)	4) विद्यार्थिनींनी साहित्याच्या भाषेचे स्वरूप आणि शब्दशक्तीचे स्वरूप व प्रकार समजून
		घेतले.
		5) विद्यार्थिनींनी पाश्चात्य साहित्य मीमां सकांनीमां डलेल्या विविध संकल्पनां चापरिचय करून
		घेतला.
		6) विद्यार्थिनींनी साहित्यातील रस प्रक्रिया संस्कृत साहित्य मीमां सकांनी मां डलेल्या रस

			विचारां च्या आधारे जाणून घेतली.
		7)	विद्यार्थिनींनी साहित्यातून प्राप्त होणाऱ्या आनंदाचे स्वरूप आणि साहित्याची आस्वाद
		•	प्रक्रिया समजून घेतली.
द्वितीय वर्ष कला	MAR-234	1)	विद्यार्थिनींनी मुद्रित शोधानाचे स्वरूप आणि आवश्यकता समजून घेतली आणि मुद्रित
	SEC- लेखन कौशल्य मुद्रित		शोधनाचे कौशल्य आत्मसात केले. विद्यार्थ्यांनीनी मुद्रित शोधनाच्या खुणा व अर्थ समजून
	शोधन		घेतले आणि त्याचे उपयोजन केले. विद्यार्थिनींनी विरामचिन्हे आणि लेखन विषयक नियम
	MAR-244- SEC		यां चे स्वरूप समजून घेतले.
		2)	विद्यार्थिनींनी सर्जनशील लेखनाचे स्वरूप आणि वैशिष्ट्य समजून घेतली. विद्यार्थिनींनी
	लेखन कौशल्य सर्जनशील		कथालेखन आणि नाट्यात्मक लेखनाची निर्मिती प्रक्रिया समजून घेतली.
	लेखन	3)	विद्यार्थिनींनी कथालेखन आणि नाट्यात्म लेखनाचा सराव केला.
द्वितीय वर्ष कला	MAR 236	1.	विद्यार्थिनींनी वृत्तपत्र या मृत माध्यमाची वैशिष्ट्ये कार्य आणि उपयुक्तता समजून घेतली.
सत्र-Ш	MIL मुद्रित माध्यमां साठी	2.	विद्यार्थ्यांनीनी वृत्तपत्र माध्यमासाठी करावयाच्या बातमी लेखन जाहिरात लेखन वृत्तलेख
	लेखन MAR- 246		स्तंभ आणि सदर लेखनाचे स्वरूप आणि तंत्र आत्मसात केले.
	MIL- श्राव्य माध्यमासाठी	3.	विद्यार्थ्यांनी नभोवाणी माध्यमां साठी करावयाच्या भाषण लेखन श्रुतिका लेखन
			युवकां साठी कार्यक्रम लेखन आणि सरकार व खाजगी नभोवाणी माध्यमां साठी
	लेखन व संवाद		करावयाच्या निवेदनाचे सुरू व तंत्र आत्मसात केले विद्यार्थ्यांनी नाटक या वांग्मय प्रकाराचे
			स्वरूप जाणून घेतले.
		4.	विद्यार्थिनींनी नभोवाणी या श्राव्य माध्यमाची वैशिष्ट्ये कार्य आणि उपयुक्तता समजून
			घेतली. विद्यार्थिनींनी नभोवाणी माध्यमासाठी करावयाच्या भाषण लेखन श्रुतिका लेखन
			आणि सरकारी व खाजगी नभोवाणी माध्यमासाठी करावयाच्या निवेदनाचे स्वरूप व तंत्र
			आत्मसात केले.
तृतीय वर्ष कला	DSC-मराठी वाड:मय	1.	विद्यार्थिनींनी एकां किका नाट्य प्रकाराचेस्वरूप व त्याची वैशिष्ट्ये जाणून घेतली.
सत्र -V	मराठी	2.	विद्यार्थिनींनी मराठीतील एकां किका लेखनाची वाटचाल समजून घेतली विद्यार्थ्यांनीनी
	DSC -मराठी A		निवडक दलित एकां किकां चाअभ्यास लक्षात घेतला.
	MAR 351 एकां किका	3.	विद्यार्थिनींनी ललित गद्य या वांग्मय प्रकाराची संकल्पना त्याचे स्वरूप व त्याची वैशिष्ट्ये
	लेखनाचा अभ्यास निवडक		समजून घेतली.
	·	4.	विद्यार्थिनीनीमराठीतील नवीन युद्ध लेखनाच्या वाटचालीचा परामर्श समजून घेतला.
	दलित एकां किका	5.	स्त्री विषयक ललित गद्य लेखनाचा अभ्यास करून घेतला.
	MAR 353	1.	विद्यार्थिनींनी मध्ययुगीन मराठी वाङ्मयाच्या इतिहासाचा परिचय समजावून घेतला.
	DSC 3 मराठी A मध्ययुगीन	2.	विद्यार्थिनींनी मानभाव संप्रदायाच्या वांग्मय निर्मितीचे सर्वप्रथम त्याची वैशिष्ट्ये समजावून
	मराठी वाङ्मयाचा इतिहास		घेतली.
		3.	विद्यार्थिनींनी निवडक ग्रंथकारां च्यावांग्मय निर्मितीचा वा साहित्य कृतींचा परिचय
	DSE मराठी B		समजावून घेतला.
	MAR 363	4.	विद्यार्थिनींनी मध्ययुगीन मराठी वाङ्मयाच्या निर्मितीमागील प्रेरणा समजावून घेतली.
			विद्यार्थिनींनी वारकरी संप्रदायातील प्रमुख समता कवींच्या काव्य निर्मितीचे स्वरूप जाणून
	मध्ययुगीन मराठी वाङ्मयाचा	-	घेतले व त्याची वैशिष्ट्ये लक्षात घेतली.
	इतिहास	5.	विद्यार्थिनींनी बखर वाङ्मय निर्मितीचा परिचय समजून घेऊन त्याचे ठळक वैशिष्ट्ये जाणून
	MAD 204	1	घेतली.
	MAR 354	1.	विद्यार्थिनींनी भाषेचे स्वरूप आणि तिचे कार्य समजावून घेतले.
	DSE 4 मराठी A	2.	विद्यार्थिनींनी भाषाभ्यासाच्या विविध अंगा चापरिचय करून घेतला.
	मराठीचा भाषिक अभ्यास	3.	विद्यार्थिनींनी भाषाकुल संकल्पना समजून घेऊन मराठीच्याभाषाकुलाची माहिती घेतली.
	MAR 364	4.	विद्यार्थिनींनी मराठी भाषेच्या उत्पत्तीसंबंधीचेमते समजावृन् घेऊन मराठीची पूर्वपीठिका
	DSE 4 मराठी B	-	लक्षात घेतली.
	मराठीचा भाषिक अभ्यास	5.	विद्यार्थिनींनी मराठीच्या कालिक भेदां चे स्वरूप जाणून घेऊन त्यां ची वैशिष्ट्ये नोंद केली.
	TOTAL III THE STEAM	6.	विद्यार्थिनींनी मराठीच्या प्रांतिक भेदां ची माहिती करून घेतली. विद्यार्थिनींनी
			भाषाविषयक समज गैरसमज यां चे निराकरण समजून घेतले.

	7. विद्यार्थिनींनी मराठी वरील अन्य भाषां च्या प्रभावाचे स्वरूप समजावून घेतले.
GE मराठी	<ol> <li>विद्यार्थिनींनी लोकरंगभूमीची संकल्पना समजावून घेतली.</li> </ol>
GE मराठी A -B	<ol> <li>विद्यार्थिनींनी लोकरंगभूमीचे स्वरूप जाणून घेऊन वैशिष्ट्यां चापिरचय समजावून घेतला.</li> </ol>
मराठी लोकरंगभूमी	3. विद्यार्थिनींनी लोकसाहित्य आणि लोकरंगभूमी यां चे परस्पर संबंधसमजावून घेतले.
मराठी लोकरंगभूमी	4. विद्यार्थिनींनी खानदेश वही आणि कोकणी दशावतार या लोकरंगभूमीच्या प्रादेशिक
पराठा सावग्रसम्ब	प्रकारां ची स्वरूप वैशिष्ट्ये समजावून घेतली.
	5. विद्यार्थिनींनी तमाशा या लोक रंगभूमीच्या पारंपारिक रूपाची स्वरूप वैशिष्ट्ये समजावून
	घेतले.
	<ol> <li>विद्यार्थ्यांनी लोकनाट्य या लोक रंगभूमीच्या आधुनिक रूपाची स्वरूप व वैशिष्ट्ये</li> </ol>
	समजावून घेतले.
	7. विद्यार्थिनींनी पथनाट्य आणि रिंगण नाट्य या लोकरंगभूमीच्या आधुनिक रूपांची स्वरूप
	वैशिष्ट्ये समजून घेतले.
MIL माध्यमां साठी लेखन व	<ol> <li>दूचित्रवाणी या दृकश्राव्य माध्यमाचा विशेष परिचय विद्यार्थिनींनी करून घेतला.</li> </ol>
संवाद	2. दूचित्रवाणी या दृकश्राव्य माध्यमाचे कार्य आणि त्याची उपयुक्तता विद्यार्थिनींनी जाणून
MIL मराठी 3	घेतली.
दुकश्राव्य माध्यमासाठी	3. दूचित्रवाणीसाठी करवयाच्या जाहिरात लेखनाचे स्वरूप व तंत्र विद्यार्थिनींनी अवगत
े लेखन व संवाद	केली.
MIL मराठी 4	4. दूचित्रवाणीसाठी आवश्यक निवेदन कौशल्य व स्वरूप विद्यार्थिनींनी समजावून घेतले.
	5. विद्यार्थिनींनी आधुनिक समाज माध्यमां चा विशेष परिचय समजावून घेतला. आधुनिक
आधुनिक माध्यमां साठी	समाज माध्यमां चे कार्य आणि त्याची उपयुक्तता याबाबत विद्यार्थिनींनी जाणून घेतले.
लेखन व संवाद	6. इमेल ब्लॉग फेसबुक ट्विटर whatsapp youtube यावरील लेखनाचे स्वरूप समजावून
	घेतले.
650	1 0 00000: ) ) )
SEC मराठी लेखनकौशल्य	<ol> <li>विद्यार्थिनींनी निबंध लेखनाचे कौशल्य आत्मसात केले.</li> </ol>
SEC मराठी3	2. निबंध लेखनाचे स्वरूप व त्याचे घटक विद्यार्थिनींनी समजावून घेतले.
लेखन कौशल्य निबंध लेखन	3. निबंधाचे प्रकार लक्षात घेऊन त्यां च्या लेखनाचा विद्यार्थिनींनी सराव करवून घेतला.
SEC मराठी4	4. विद्यार्थिनींनी ग्रंथ परीक्षण लेखनाचे कौशत्य आत्मसात केले.
लेखनकौशल्य ग्रंथ परीक्षण	5. विद्यार्थ्यांनी ग्रंथ परीक्षण लेखनाचे स्वरूप व असे लेखनाची प्रक्रिया समजावून घेतले.
	<ol> <li>विविध प्रकारातील ग्रंथाचे परीक्षण लिहिण्याचा सराव विद्यार्थिनींनी केला.</li> </ol>

# DEPARTMENT OF ECONOMICS

Class	Course	Outcomes
FYBA  SYBA – G-2	G – I General Economics Eco G-101 (A) Introductory Economics – I & Eco Gen. – 201 (A) Introductory Economics – II  DSC Eco-231 C	<ol> <li>To introduced the student's behavior of consumer producer in Economy price determination in market and also factor pricing.</li> <li>Student aware how to microeconomic concepts can be applied to analyze real life situation.</li> <li>Understand how factor market works illustrate basic tools in welfare economics and illustrate the concept of social is welfare functions and compensation principles.</li> </ol>
31BA - U-2	Indian Economy since 1980 DSC Eco-241 D Indian Economy since 1980	<ol> <li>To enable students to have understanding the various issues of Indian Economy.</li> <li>The student knows to develop the analyzing capability in the context of current Indian Economic problems.</li> <li>It helps in developing understanding of the students related to different sectors of Indian Economy.</li> <li>Student will be able to understand how planning and infrastructure support can develop on Economy.</li> <li>Grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failures and achievements as the foundation of the ongoing planning and economic reform taken by the government.</li> </ol>
	DSE Eco-232 A Agricultural Economics  DSE Eco-242 B Agricultural Economics	<ol> <li>The students would be able to understand the agricultural policies and its effect on agricultural development.</li> <li>Understand the globalization and its impact on agricultural development.</li> <li>Draw distinctive features of rural and urban economy of agricultural and non-agricultural which can influence the whole economy.</li> <li>Make them aware of the availability of rich natural endowments to achieve sustainable agricultural development with this knowledge they can challenge the problems of unemployment, inequality, shortage of food productions poverty and be useful to complete advanced agricultural economics.</li> </ol>
	DSE Eco-233 A Advanced Macro Economics  DSE Eco- 243 B Advanced Macro Economics Advanced Macro Economics	<ol> <li>To make student aware of the basic theoretical framework underlying the field of macroeconomics.</li> <li>It helps students to study the aggregates and to provide overall idea about national economic policies and its implications.</li> <li>Macro Economics paper provides theoretical foundation of some advanced issues and policies.</li> <li>The paper attempt to discuss the functional relationship between economic aggregates.</li> <li>The students understand the elementary theoretical foundation of key issue and policies.</li> </ol>
	SEC-I Skill Enhancement Course Research Methodology for Economics I and II Outcomes of Course	<ol> <li>Expose the students to research methodology used to social sciences.</li> <li>Understand the research process identification of research problems, formulation of objectives, construction of hypothesis, sampling technique data collection and data analysis hypothesis testing interpretation of sisals report writing.</li> <li>Identify and discuss the role and importance of research in the</li> </ol>

		<ul> <li>social sciences.</li> <li>4. Identify and discuss the issues and concepts salient to the research process.</li> <li>5. The students will be able to explain key Research concepts and issues. Read comprehend and explain research articles in their academic displine.</li> </ul>
T.Y.B.A	DSC-I Eco-351 & 361 Indian Economy since 1980 III & IV	<ol> <li>It will help in developing the conceptual framework of govt. policies and programmes.</li> <li>It will acquaint students with latest data and will enhance analytical skills.</li> <li>After studying the structure aspects of Indian Economy, Student will be exposed to economic reforms in India and problems of Indian Economy eg. Financial system in India, Money and Banking in India.</li> <li>To understand the various issues of Indian Economy.</li> </ol>
	DES III Eco – 352 A Economics of Public Finance I 362 B Economics of Public Finance II	<ol> <li>To help students understand the various issues of public finance and plaices.</li> <li>Student will be able to understand. How to develop the analyzing capability in the context of public finance and policies.</li> <li>To able the students for appearing MPSC, UPSC and other competitive examination.</li> <li>To know the application of public economics in analyzing various energy policies.</li> <li>To have conceptual clarity of public expenditure and revenue theories.</li> <li>To comprehend various types of public goods and its real world application.</li> </ol>
	Indian Economics Environment I and II GE I Eco – 355, 365	<ol> <li>Students would be able to realize the importance and influence of environment on the economics including the quality of manpower.</li> <li>Understand that environment problem is not the problem of a single country or region but global problem/issue. So policy formulation may be for all countries.</li> <li>Demonstrate the scientific management of waste materials; realize the role and importance of individual to keep the environment clear.</li> <li>The students know the Economics for Business and How to applicable in the Indian Economy.</li> <li>The students know about the information of Indian Economics Environment</li> </ol>
	SEC-III & IV Eco- 354, Eco-364 Skill Enhancement Course Modern Banking in Market	<ol> <li>Students understand the conditions of financial markets and its impact in the economy.</li> <li>Demonstrate the role and significance of foreign exchange rate and its markets with its impact on various sectors in the economy.</li> <li>Students would be able to explain the broad features of Indian financial institutions with its apex bank's objectives and purview.</li> <li>Students understand the instruments to central credit in the country.</li> </ol>
		5. Students identify that modern banking systems include both

	privately owned central banks.  6. Students know depth of knowledge in banking and finance with practical inputs and prepare them as a responsible customer of a bank.
DSE-IV (A and B) Eco-353, Eco-363 (A) Theory of International Trade and Practices – I and II	<ol> <li>The students would be able to identify the basic difference between inter-regional and international trade.</li> <li>Understand how international trade has helped countries to acquire goods at cheaper cost and explain it through the various international trade theories.</li> <li>Realize the benefits of international trade in a way how nations with strong international trade have become prosperous and have the power to control would economy and how global trade can be one of the major contributors of reducing poverty.</li> <li>Students know the importance of maintaining equilibrium in the balance of payments and suggest suitable measures to correct disequilibrium as well.</li> <li>Students should be aware of the changes in the composition as well as direction of foreign trade after international trade and know the causes and effects of deficits in the balance of payments, measures, adopted to correct the deficits and identify the need for having trade reforms.</li> </ol>

# DEPARTMENT OF POLTICAL SCIENCE

Class	Course	Outcomes
F.Y.B.A.	Introduction to Indian Constitution DSC 1 A  POL - G - 101 A - Indian Government	<ol> <li>They will know the basic ideas of Indian Constitution.</li> <li>They will understand their Fundamental Rights to create responsibility among Indian Citizenship.</li> <li>They will be able to explain the composition, powers &amp; functions of Government.</li> <li>They will identify the Center-State relationship.</li> <li>They will get information of various Amendments of the Indian Constitution.</li> <li>They will understand election process and role of election commission in the development of democracy.</li> <li>They will comprehend the emerging challenges before Indian Democracy.</li> <li>Students enable to explain the Government of Union and State.</li> </ol>
S.Y.B.A	Pol -232 DSE 1 A Reading Mhatama Gandhi  Pol-242 DSE 1 B Reading Dr.Ambedkar	<ol> <li>Students enable to understanding the Mahatma Gandhi's Truth, Non Violence, Satyagrah, Trusteeship and Hind Swaraj and Nationalism.</li> <li>Students enable to understand the Theory of State and Religion.</li> <li>Students enable to understand the Thought of Gandhiji Regarding Social Welfare.</li> <li>Students enable to understand the Gandhiji's View's on Health Cleanliness.</li> <li>Students enable to understand the Gandhi's View's on Farmer, Worker, Tribal Community and Minorities.</li> <li>Students enable to understand the Social Thoughts on Equality, Fundamental Rights, Social Justice and Reservation.</li> <li>Students enable to understand the Political &amp; Religion Thought.</li> <li>Students enable to understand the Thought on Education.</li> </ol>

		9. Students enable to understand the Dr. Ambedkar's Views on Political
		Parties, Freedom of Press.
		10. Students enable to understand the Dr. Ambedkar's Views on Labour
		Organization
	Pol-233 DSE 2 A	1. To introduce and help students understand the concept of government
	Government and	and politics or america and china
	Politics of	2. To introduce various perspective of government of America and china
	America	3. To inculcate feelings of Liberty equality and fraternity among students
	Pol-243 DSE – 2 B	4. Students enable to understand the Government and Administration of
	- (03)	America
	Government and	<ol><li>Students enable to understand the Political Parties and Party System of China.</li></ol>
	Politics of China	Cililia.
	1 oncies of china	1. To acquaint the students with historical background of local
	Pol-231 DSC 1 C	government in India
	Introduction to	2. Understand the significance of the role of local Self-governing
		Institutions in development administration
	Administration of	3. Realise the importance of popular participation in local government in
	Maharashtra	strengthening democracy
	Pol-241 DSC 1 D	4. To impart knowledge about the types of local government in India
	Introduction to	5. Students enable to understand the Rural and Urban Administration in
	Local & District	Maharashtra.
	Administration of	
	Maharashtra	
	SEC- 1 Research	1. Understand the Scientific Methodology, its meaning, nature, and
	Methodology in	fundamentals of scientific research, its objectivity, generality,
	Political Science	probability and neutrality.
		2. Understand the Research design, Literature review and its importance,
	SEC - 2	<ul><li>Hypotheses and Variables.</li><li>3. Understand Tools and Techniques of Data Collection – Observation,</li></ul>
	Election	Questionnaire, and Interviews.
	Management	<ol> <li>Understand Sampling, its meaning, significance, types and selection</li> </ol>
		etc
		5. Understanding the process of election management concepts and
		thoughts of election administration
	DSE 3 A ,B	1. Understand the classical tradition of western political thought and
	Western Political	grasp its relevance through a historical comparative approach
T.Y.B.A	Thinker Part - 1, 2	2. Perceive the unfolding of modernity through the stages of evolution of
	,	western political thought
		3. 3. Build their own thought process through a perception of political
		ideas evolving through the western classical tradition
		4. Understand the connection between the lives of the thinkers and the
		nature of their political thought through the internal assessment on the
	DSE 4 A,B	life-sketches of the political thinkers in the classical tradition.  1. Studying the concepts of Power, Authority and Legitimacy in the
	Political Sociology	context o society.
	Part - 1,2	<ol> <li>Classifying the different types of Political systems.</li> </ol>
		3. Discussing the approaches to the study of Political Culture.
		Evaluating the different agents of Political Socialization and their
		interrelationships.
		4. Studying groups in politics: political parties and pressure groups.
	DSC 1E,F Indian	1. Understand the thought of key Indian political thinkers in their
	Political Thinker	historical context
	Part - 1,2	2. Grasp the role & significance of Indian political thought in the
	i .	establishment of modern Indian polity

	<ul> <li>3. Understand the connection between the lives of the thinkers with the nature of their political thought through the internal assessment on the life-sketches of the Indian political thinkers</li> <li>4. Deepen their understanding of Indian Political Process and Political</li> </ul>
	Ideologies with the help of an insight in Indian political thought
SEC -3,4 Journalism and Mass Communication & Political Journalism	<ol> <li>The study equips the students with the basic journalistic skills in different mass media.</li> <li>To develop fundamental understanding of the way media function</li> <li>Impart journalistic and media skills to perform in any context</li> <li>To train to intervene through consistent campaign to address social issues in order to mobile public opinion for a common goal.</li> </ol>
	5. Students enable to understand Role of Media in Leadership
GE 1 A Indian Civil Services	Development.  1. Students enable to understand the Historical Background and Development of Civil services Characteristics of Civil Services and
GE 1 B	Function and Role of civil Services.  2. Students enable to understand the Recruitment, Training and Promotion.  3. Students enable to describe the features of Union and
Management and Good Governance	State Public Services. 4. Students enable to understand Role and Importance of System of
	Recruitment in India. 6. Students enable to understand the Retirement, Purpose, Kinds and Benefits
	<ul><li>7. Students enable to understand the Meaning and Definition, Silent Features of Good Governance.</li><li>8. Students enable to understand Meaning, Definition and Types of</li></ul>
	Management and Characteristic of Management  9. Students enable to describe the features of Functions of Management,
	POSDCORB and Test of Good Management and Importance 10. Students enable to understand Administrative Leadership.
	11. Students enable to understand Functions of Administrative Leadership.

# DEPARTMENT OF PSYCHOLOGY

Class	Course	Outcomes		
FYBA	G 1 -Foundation of Psychology	<ol> <li>Students are aware about out the history of development and scientific nature of psychology.</li> <li>Students are aware about different methods to study human behaviour.</li> <li>Students are aware about the scope of Psychology and career in Psychology.</li> <li>The students are aware about theories of personality and element of personality.</li> <li>Students are aware about to understand different cognitive processes</li> </ol>		
SYBA	G 2 - Human Developmental Psychology	<ol> <li>Students are aware about the concept of development.</li> <li>Students are aware about different Pre-natal and Post-natal stages in human development.</li> <li>Students are aware about hazards in developmental process.</li> <li>Students are aware about different theories of development.</li> <li>Students are aware about physical, psychological, social aspects of human development.</li> </ol>		
TYBA	G 3 - Management of Interpersonal Relations	<ol> <li>Students are aware about effective skills of communication.</li> <li>Students are aware about how to develop assertive communication style.</li> <li>Students are aware about how to establish intimate relationship and develop marital adjustment in life.</li> <li>Students aware about how to choose career.</li> <li>Students are aware about how to cope with occupational hazards.</li> </ol>		

# DEPARTMENT OF GEOGRAPHY

Class	Course Name	Course Outcome
F.Y.B.A	(DSC. A -1)  Gg101: Physical Geography Part - 1(Lithosphere)  (DSC.A-2)  Gg.201 Physical Geography Part -II (Atmosphere and Hydrosphere)	<ol> <li>Students will be able to apply geographical knowledge to everyday living.</li> <li>Students gain knowledge about the interior structure of the earth.</li> <li>Students understand the process of erosion and deposition and the resulting landforms process of weathering.</li> <li>To understand the composition of the earth and distribution of the continents and oceans.</li> <li>Acquire knowledge about different type of Rock and their origin influence of the rocks on landform and topography.</li> <li>To study the Latitudes and Longitudes measurement of time.</li> <li>To understand the effect of rotation of the earth. Students understand the structure of the atmosphere and the types of winds and global as well as local wind systems and rainfall.</li> <li>Students know the distribution of pressure belts and ocean floor and mechanism of ocean currents.</li> <li>To understand the structure and composition of the atmosphere the causes of uneven distribution of the insolation and temperature and forms of condensation and type of precipitation.</li> <li>At the end of this course students will be able to gain knowledge about physical geography.</li> </ol>
S.Y.B.A.	DSC.D (Gg.241)	<ol> <li>Students understand the relationship between man and environment.</li> <li>Students know about human life in various regions.</li> </ol>

	Human Geography.	3. Students know the racial groups of the world and India.
		4. Gain knowledge about the basic themes of human geography.
		5. Develop an idea about space and society.
		6. To understand classification of the major world race.
		7. Understand patterns and process of population growth distribution
		and rural and urban settlement.
T.Y.B.A.	Gg-351 (DSC-1E)	1. Students are able to develop critical thinking for shaping strategies for environmental protection and conservation of biodiversity.
	Environmental Geography.	2. Develop empathy for various life forms and appreciate the ecological linkage within the web of life.
	Gg-361 (DSC.1F)	3. Capacity to identify relevant environmental issues and developed a framework to make informed decisions.
	Population Geography.	4. To aware the students about the process and patterns in the natural environment.
		5. To acquaint the students with different environmental policies.
		6. At the end of this course the students will be responsible and sensitive
		towards the environment. They will develop observational skills and right decision making in protecting the environment.
		7. Students understand the recent problems of population in the world as well as nations.
		8. Students familiarise the students with different theories of population growth.
		9. Understand the components of population change.
		10. Develop skill to use population information in the planning process.
		11. Understand the impact of planning activities on population size, composition and distribution.

# DEPARTMENT OF HISTORY

Class	Course	Outcomes
FYBA	HIS- DSC A-1 History Of India (1857-1950)	<ol> <li>To introduce various perspectives of Indian Freedom Movement</li> <li>To develop the spirit of nationalism among students</li> <li>To bring awareness among the students as responsible citizens of the country</li> <li>To inspire students from different type colleges of social reformers and freedom fighters to bring positive changes in the society</li> <li>To inculcate rational thinking among the students</li> </ol>
SYBA	HIS- DSC- 231 History Of Marathas (1605-1750 A. D.)	<ol> <li>To create and enhance interest about regional history among students</li> <li>To inform student how Shivaji Maharaj created the Maratha empire in adverse circumstances</li> <li>To motivate students for the research work of Maratha history</li> <li>The course will study examine various aspect of Maratha history</li> </ol>
TYBA	DSC 1 E_HIS 351  History Of Modern Europe (AD1781-1945)	<ol> <li>To develop an interest in student about History as discipline</li> <li>To introduce and help students understand the concept of Modern European history</li> <li>To introduce various perspective of history of modern Europe</li> <li>To inculcate feelings of Liberty equality and fraternity among students</li> <li>To encourage students to pursue carrier in competitive examination.</li> </ol>

# **Programme Outcomes (B.Com.) Faculty of Commerce (UG)**

After graduating from commerce student should have:

- PO1. To inculcate the knowledge about different terminologies and concepts of commerce and management.
- PO2. To creates better sales personnel in changing business environment.
- PO3. To equips the students with changing environment in e-commerce, online business, e-payment system, global marketing techniques, increase the productivity.
- PO4.To provides management knowledge and self management knowledge for better living and to earn loving.
- PO5. Providing expert knowledge for employment and self-employment on these hard competitive days.
- PO6.To equips the students in the field of accountancy, costing and taxation field, in turn which create good accountants, tax advisors etc in business field.
- PO7. Providing knowledge about competitive exams which create employment opportunities for students.

# **Programme Outcomes (BCA)**

- PO1. Equiping students in the field of changing business era.
- PO2.Inculcating the specialized and expert knowledge in modern technology of computers , Internet etc.
- PO3. Helping the students to know online shopping e-commerce, e-business, e-payment etc.
- PO4. Helping to create Self employment opportunities in the girls students.
- PO5. Empowering the girls and women through higher education.
- PO6. Helping students to earn living and better life style.
- PO7. Cronting good, educated and self-respected society by providing education to pillers of society i.e. girls & women.

#### **Programme Outcomes (M.Com)**

- PO1. Specialized knowledge in the subjects of advanced accountancy and human resource.
- PO2. Improvement of soft skills among students for self development.
- PO3. Inculcating various management techniques among students finance management stress management, strategic management, event management etc.
- PO4. Giving opportunities to students in research and development through writing projects in different subjects and fields.
- PO5.Creating excellency on the higher education.
- PO6. Creating good personnel with higher ethics and value systems.
- PO7. Creating educated and experts girls and women in entrepreneurship.
- PO8. Developing self confidence and self-esteem in the girls students and thereby having attitude of self-employment and self respect.

# **Programme Specific Outcomes (PSOs)**

# **Department of Commerce and Management (UG)**

#### **Economics:**

- PSO1. Students will be able to handle various transactions in different Financial Agencies.
- PSO2. Students will understand in depth elements affecting economics development of the country.
- PSO3. The Graduates from this stream will be able to comprehend Monitory policy, Fiscal Policy, Inflation, deflation.
- PSO4. Students will be explaining Tax system, budget, and Finance commission.

# **Accountancy & Costing:**

- PSO1. The Students will be Master and industrial Banking Sector.
- PSO2. Students will Act as professional accountants and tax consultants on individual level.
- PSO3. Students will be able to get- opportunities for employment and self employment in various sectors.
- PSO4. Student will earn livelihood in business and entrepreneurship

#### **Business Administration:**

- PSO1. Develop the business and industrial sectors.
- PSO2. Increase professional competence in students.
- PSO3. Provide skilled and experts managers in business and industries.
- PSO4. Provide the knowledge about global market, e-business, e-commerce, online shopping etc.

#### **Management Studies:**

- PSO1. Increase knowledge about various issues in management techniques and tools
- PSO2. Help themselves in planning and decision making.
- PSO3. To creates themselves as professional managers for business and industries.
- PSO4. To develop the skills of students in career managements.

#### **Computer Management:**

- PSO1. Acquire knowledge Information Technology
- PSO2. Gain the computer knowledge for employment & self-employment.
- PSO3. Possesses analytical skills and use IT in professional field.

- PSO4. Students will be able to earn livelihood by acting as accountant on professional level.
- PSO5. Gather the knowledge of e-commerce.

# **Department of Commerce and Management (PG)**

# **Advanced Accountancy:**

- **PSO1.** Acquaint with the knowledge in Advanced Accountancy, Management Accountancy, etc.
- PSO2. Confident and expert professional accountants.
- PSO3. Seek opportunities for employment and self employment opportunities in global market and industries.
- PSO4. To apply the knowledge in various financial and banking sectors.

#### **Human Relations:**

- PSO1. Well versed in knowledge about human relations and manpower management.
- PSO2. Able to learn techniques to solve the personal and industrial problems of work force.
- PSO3. Able to grab job opportunities in human relations dept. of industries.
- PSO4. Able to apply the human relations knowledge on personal and professional life.
- PSO5. Eligible for themselves as efficient human relation managers.

# **Course Outcomes (COs)**

# DEPARTMENT OF **COMMERCE AND MANAGEMENT**

Class	Course	Outcomes
F.Y.B.Com	A) Financial Accounting and Costing	<ol> <li>Students will be able to understand the Accounting Standards.</li> <li>Students will be liable for the preparation of financial statements.</li> <li>Students will be able to know the concepts used in cost accounting.</li> </ol>
	B) Computing Skills & Quantitative Technique	<ol> <li>Students will be able to use essential computing skills</li> <li>Students will use Microsoft Office tools – Word, Excel and Power Point</li> <li>Students will be able to understand essential quantitative techniques</li> <li>Students will be able to mathematical logic, central tendency dispersion.</li> </ol>
	C) Modern Office Management	<ol> <li>Acquaint for operational skills of office management.</li> <li>Development in understanding office layout and environment in modern context.</li> <li>Development in the knowledge of office appliances, machines, meetings &amp; Proceedings.</li> </ol>
	D) Marketing & Advertising	<ol> <li>Students can establish link between business, marketing and advertising.</li> <li>Knowledge of relevance of marketing and advertising in modern competitive world.</li> <li>Students can understand basic concepts of digital marketing &amp; advertising.</li> </ol>
	E)Essentials of e - Commerce	1. Students will be able to understand key aspects of e-commerce 2. Students will be prepared in online pavements and e-communication 3. Students will be able to understand important practices of e-banking 4. Students will be prepared for key aspects of M-Commerce, e-CRM and e-SCM
	F) Corporate Laws	<ol> <li>Learning legal aspects of accounts and audit of company.</li> <li>Enlighten the student's knowledge on administration of company's Law Including Corporate Structure.</li> <li>3- Understanding about different business company form of business organization.</li> </ol>
S.Y.B.Com	A) Business Skills	<ol> <li>Understand the significance and essence of a wide range of soft skills</li> <li>Learn how to apply soft skills in a wide range of routine social and professional settings.</li> <li>Learn how to employ soft skills to improve interpersonal relationships.</li> <li>Learn how to employ soft skills to enhance employability and ensure workplace and career success.</li> </ol>
	B)Business and Tax Laws	<ol> <li>Describe the legal system and the legal environment of business.</li> <li>Describe the relationship of ethics and law in business.</li> <li>To Develop Knowledge on various provisions of companies Law.</li> </ol>

	C) Corporate Accounting	1.	To provide awareness on conceptual aspects of Corporate
	) corporate recounting	1.	Account.
		2.	The ability to account for a range of advanced financial accounting issues
		3.	The ability to prepare consolidated accounts for a corporate group.
	D) Computing	1.	Students can choose the profession in GST, Cost
	Management and Cost		Accounting.
	Accounting	2.	It will be develop problem solving skills among the
	recounting		students.
		3.	Student will be able to calculate the wages of workers in
	E) D :	1	the industries by the different methods.
	E) Business	1.	To develop knowledge skills and attitude to enhance their
	Entrepreneurship	2.	entrepreneurial activity. to products or services to market
		3.	to understand different methods that can be used to
		3.	minimize uncertainties at different stages of the
			entrepreneurial process
	F) Retail Management	1.	Identify the key stakeholders and the roles/responsibilities of retail towards these stakeholders
		2.	Explain the central role of retail in industrialized
			societies, and the impact of key market/retail trends upon
			this sector in the local and global contexts.
		3.	
			evaluating and applying appropriate retail management models and theories to generate strategic and tactical
			solutions
	G)Consumer Protection	1.	Identify causes for complaint
	and Business Ethics	2.	Apply legislation
	and Business Buries	3.	Present oral or written complaint File and record details
		4.	Carry out simple research into consumer products.
	H)Production	1.	Support manufacturing decisions based upon data derived
	Management		from leading edge information technology systems.
		2.	Evaluate cost effectiveness of manufacturing products,
		2	processes and operations.
		3.	
			guidelines based upon an assessment of the environmental, legal and safety implications of
			manufacturing practice.
T.Y.B.Com	A) Principles & Practices	1.	Acquired knowledge about vouching of cash and credit
	of Auditing		transactions, verification of assets and liabilities.
		2.	Comprehend the knowledge about appointment, rights,
			duties and responsibility of auditor.
		3.	1
			evidence
	B) Income Tax and Goods	1.	Understand the various provisions relating to Income Tax
	& Service Tax	2.	Determine the basic concepts of the Income Tax Act 1961 Students will learn basic precedure under GST
		3. 4.	Students will learn basic procedure under GST. Compute Income and Tax of an Individual assesses
		→.	under the Act
	C)Business Management	1.	Understand the significance and essence of management
	,		concepts, principles and skills.
		2.	Learn how to apply Management concepts, principles and
			skills in business setting and improving business
			environment.

		3.	1 5 &
	D)Human Resource	1.	employability and ensure workplace and career success.  Students can know concepts, principles and practices of
	Management Management	1.	HRM.
	Wanagement	2.	
			recruitment and selection.
		3.	Development in total personality of students as future
			human resource of India.
	77.7	4.	ı Ü
	E) Introduction to	1.	Students will be able to understand and appreciate
	Business Research	2.	importance of Business Research. Student will be able to conduct Business Research.
		3.	Student will be able to suggest solutions to business
		3.	related problems.
	F)Advanced Accountancy	1.	Understand the various concepts of Advanced
	,		Accounting
		2.	Utilize working knowledge with application skill of Advanced Accounting.
		3.	To impart the knowledge about accounting methods,
		4.	procedure and techniques.  Developing techniques of reconstruction of Companies
		4.	financial statement
	G)Business	1.	To acquaint the students with the concepts and issues in
	Administration		Business Administration.
		2.	To enable the students to understand the nature and scope
			of Business Administration.
) ( C )	12.5	3.	1
M.Com.I	A) Strategic Management	1.	To know and understand main concepts & level of
		2.	Strategic Management.  To understand co-operate level strategies in the
		2.	competitive situation.
		3.	To know the modern techniques concepts of strategic
			control and evaluation.
		4.	To develop recommendation that address the unique
			strategic issue of organization.
	B)Research Methodology	1.	To study Research Methodology for decision making in
	D)Kesearch Methodology	1.	business.
		2.	To overview the methods of Data Collection.
		3.	To understand process of research by students for
			preparation of research report.
		4.	To know the hypothesis testing techniques
	C) Advanced accountancy	1.	To obtain knowledge about Disclosure requirements of AS 20, 21, 22 and 23.
		2.	Prepare Statement of Affairs, Draw Deficiency Account
		2	and prepare liquidators final statement of account.
		3.	Understand the provisions of Insurance Act requiring
			preparation of financial statements for the insurance business and maintenance of records of policies.
		4.	
		т.	Reporting Standards and need to converge to IFRS from
			Ind -AS
	D) Human Resource	1.	To endow the student with a broad perspective on themes
	Management		and issues of Human Resource Management.
		2.	To apply theories of social science disciplines to work

			place icones
		2	place issues.
		3. 4.	To understand the importance of training and morale.  To know the role of Ethics in HRM.
	F) Case Studies in	1.	To understand the different environment of business
		1.	organization through practical cases.
	Strategic Management	2.	To solve the situational problem and understand the
		۷.	importance.
		3.	•
M. Com. II	A) Management	1.	Get the insight of the philosophy and framework of
Wi. Com. II	Accounting	1.	financial analysis.
	Accounting	2.	· · · · · · · · · · · · · · · · · · ·
			financial statements.
		3.	Pursue their career in the arena of accounting information
			system.
		4.	
			knowledge effectively in future while dealing with real
			life business situation. \
	B) Entrepreneurship and	1.	To encourage and inspire the students to become an
	Project Management		Entrepreneur
		2.	3
			new venture
		3.	To provide theoretical foundation for executing various
		4	projects
		4.	To highlight the support system for Entrepreneurship
		- 1	Management
	C) Organization Behavior	1.	To get an overview of organizational behavior and the
		2	challenges and opportunities.
		2.	To understand the concept of behavior – individual and Organizational Behaviors
		3.	<del>-</del>
		Э.	emotions
		4.	To gain knowledge of Motivation and Leadership and its
			various theories
	D) Advanced	1.	Understand basic knowledge about Accounting Standard
	Accountancy	2.	Understand the advanced aspects of accounting for Lease
	recountaincy	3.	Know the basic concepts of Government Accounting and
			related concepts
		4.	Understand the method of presenting Financial Statement
			of Credit Cooperative Societies
	E) Human Resource	1.	Understand the value and importance of human resources
	Management		in an organization.
		2.	8 8
			& Industrial Relations
		3.	Impart the students with the knowledge of laws & how
	T. C.	-	law affects the industry & labor
	F) Corporate Social	1.	To understand the Concept, Philosophy and Mechanics of
	Responsibilities	2	Corporate Social Responsibility
		2.	To know the concept of business ethics in relation to CSR
		3.	To study the relationships of stability and equality with stakeholders related to the company, mainly shareholders,
			employees, providers, distributors, clients and society.
	G) Modern Retail	1.	To acquaint the students with the various concepts and
		1.	theoretical aspect of retail management
	Management	2.	To introduce the most modern techniques and practices of
		۷.	retailing for employment opportunity
			remning for employment opportunity

		3.	To understand dynamics of modern organized retail trade
	H) Information System	1.	Analyze and model the flow of information through
	for Business		business processes
		2.	Formulate plans and architectures for the capture, storage and retrieval of data
		3.	Develop computer programs to support or automate business processes
FYBCA	101 Fundamentals of	1.	To understand fundamental concepts of financial
Sem I	Accounting		accounting.
Sem 1	recounting	2.	To understand the basics of cost accounting.
		3.	To maintain and record financial transactions in books of accounts.
		4.	To prepare final accounts of sole proprietary business.
		5.	To prepare Cost Sheet and record the transactions of
			materials
	102 Fundamental of	1.	Acquire the knowledge of fundamentals of Computer and
	Computer		Operating System.
		2.	Develop problem solving skill through algorithms and
		2	flowcharts.
		3.	1
	102 Programming in C. I	1	internet.
	103 Programming in C – I	1.	Understand the basic concepts of C Programming for problem-solving and illustrate the C data types, syntax
			and constructs.
		2.	
			statements
		3.	Understand the concept of Array and Strings to solve
			different problems.
	104 Web Design – I	1.	Acquainted with elements, Tags and basic structure of
			HTML files.
		2.	Up skills the knowledge of basic and advanced web designing.
		3.	Students were implement effective use of List and Tables.
		4.	Students were implement effective web page navigation.
		5.	Students were capable to design web page layout
		6.	Students were understood and implement use of style
	DCA 105 L 1	1	Students can able to understand the installation of
	BCA 105 Lab on	1.	operating system.
	Computer Fundamental	2.	- · · · · · · · · · · · · · · · · · · ·
		۷.	different browser.
		3.	Student understand different platforms, Internet, mails,
			tables
		4.	Students can learn text formatting and table formatting.
		5.	Students capable to design power point presentation,
			tables, shapes, smart arts and charts
	BCA 106 Lab on C	1.	Students were able to design consistent look and feel web
	Programming – I	_	pages.
		2.	Students were capable to use multimedia in web page.
		3.	Students were implement effective web page navigation.
		4. 5	Students were capable to design web page layout
	DCA 107 Lab as Web	5.	Students were implement use of style sheet.
	BCA 107 Lab on Web	1. 2.	Students understand the input output functions. Students can understand the use of various operators.
	Design – I	2. 3.	Students can understand the use of various operators.  Students can understand the use of control statements.
		٥.	Students can understand the use of control statements.

		4.	Students can design the various expressions in C
		5.	Students can understand the array and its type.
FYBCA	201 Professional	1.	To develop his verbal and non verbal communication
Sem II	Communication Skill		ability
		2.	To communicate with people effectively and confidently.
		3.	To draft effective business correspondence documents.
		4.	To make and present well designed and informative
			presentations
	202 Database	1.	Introduction to the basic concepts of database
	Management System		management systems.
		2.	Learning to design databases using ER modeling.
		3.	Learning to apply integrity constraints.
		4.	To understand and demonstrate database schema.
		5.	Understand and demonstrate Relational databases, SQL.
	203 Programming in C –	1.	Apply the concepts of Function modules, its usage
	II	2.	Apply the concepts of memory allocation using Pointers
		3.	Understand the concepts of structures and unions:
			declaration, initialization and implementation.
		4.	Learn to draw different graphics objects.
	204 W 1 D : W	5.	Learn to store and apply the data using files.
	204 Web Design – II	1.	Student were able to embed JavaScript in web page
		2.	Students successfully added interactivity in web page
		3.	Students were applied validation on web form
		4.	Students were implemented different events.
	DCA 205 Labor DDMS	5.	Students were familiar with bootstrap framework.
	BCA 205 Lab on DBMS	1.	Students can able to create the database. Students can understand basic database commands.
		2. 3.	Students can understand basic database commands.  Students can understand constraint.
		3. 4.	
	BCA 206 Lab on C	1.	Students capable to design SQL using different clause.  Student were able to understand the concept of Function
		1.	techniques
	Programming – II	2.	Students were able to understand the storage classes
		3.	Students were able to understand the storage chasses  Students were able to understand pointer and its uses. 4.
		٥.	Students were able to design the basic graphics objects
		1.	5. Students understood the operations on file and
		1.	command line argument.
	BCA 207 Lab on Web	1.	Student were able to develop web page using JavaScript
	Design – II	2.	Students successfully added interactivity features in web
	Design – II		page
		3.	Students were implemented validation on web form
		4.	Students were implemented different events.
		5.	Students were familiar with bootstrap framework.
SYBCA	BCA 301 Fundamental	1.	Student were able to develop web page using JavaScript
Sem III	Mathematics and	2.	Students successfully added interactivity features in web
	Statistics		page
	Statistics	3.	Students were implemented validation on web form
		4.	Students were implemented different events.
		5.	Students were familiar with bootstrap framework.
	BCA 302 Operating	1)	To get aware of the main components, computer
	System		organization interface, and system calls of OS.
	-	2)	Ability to apply process management and threading.
		3)	To Make understand the features of Linux OS
		4)	To Learn the basic Linux command
	BCA 303 Programming in	1)	To Understand OOPs Concept
		2)	To Understand the concept to implements Functions,

	C++		Pointer Array in C++
	CTT	3)	To Understand to implements Class, Object, Inheritance
		3)	and polymorphism
		4)	To understand the concepts of Exception handling and
		7)	File management
	BCA 304 C) Python	1)	Explain basic principles of Python programming
	Programming	1)	language
	Frogramming	2)	Construct and apply various filters for a specific task.
		3)	Apply the best features of mathematics, engineering and
		-/	natural sciences to program real life problems.
	BCA 305 Lab on	1)	Apply Linux operating system commands.
	Operating System	2)	Understand different Linux shell scripts and execute
	Operating System	2)	various shell programs.
	BCA 306 Lab on C ++	1)	Solve real time problems and isolate and fix common
	Programming		errors in C++ programs.
		2)	Understand the object-oriented approach for the program
			development and make use of the OOP concepts (data
			abstraction, encapsulation, polymorphism, overloading,
			and inheritance) of C++ appropriately in problem solving
	BCA 307 C) Lab on	1)	To understand basics of python programming.
	Python Programming	2)	To implement different applications using python.
SYBCA	BCA 401 Software	1)	To design and develop a software in learned language.
Sem IV	Engineering	2)	To prepare software requirement specification.
		3)	Estimate the size and cost of software product.
		4)	Get knowledge of different types of software testing
	BCA 402 Data Structures	1)	To analyse algorithms and algorithm correctness.
		2)	To summarize searching and sorting techniques.
		3)	To describe stack, queue and linked list operation.
		4)	To have knowledge of tree and graphs concepts.
	BCA 403 Java	1)	To apply object oriented programming features and
	Programming	2)	concepts for solving given problem.
		2)	Develop reusable programs using the concepts of
		2)	inheritance, polymorphism, interfaces and packages.
	DCA 404 C) A - 4.5.1.1	3)	To develop simple interactive applications.
	BCA 404 C) Artificial	1)	Gain a historical perspective of AI and its foundations.
	Intelligent	2)	Study the concepts of Artificial Intelligence.
		3)	Investigate applications of AI techniques in intelligent
		4)	agents Learn the methods of solving problems using Artificial
		4)	Intelligence.
		5)	Learn various peculiar search strategies for AI.
	BCA 405 Lab on Data		Be capable to identity the appropriate data structure for
	Structure Structure	1)	given problem.
	Structure	2)	• •
		-/	structures
		3)	Analyse the various sorting and searching algorithms.
		4)	Apply the different linear data structures like stack, queue
		,	and link list to various computing problems.
	BCA 406 Lab on Java	1)	To understand basics of Java Programming.
	Programming	2)	Implement different applications using Java.
	BCA 407 C) Lab on	1)	Implement different applications in Artificial Intelligence.
	DOIL TO I C/ Lau on	1)	implement different applications in Authoral intelligence.

	Artificial Intelligent		
TYBCA Sem V	BCA 501 Entrepreneurship Development	2)	To impart the knowledge of Entrepreneurship Development among students.
	BCA 502 Cyber Security	3)	To impart the knowledge of Cybercrime and cyber security among students.
	BCA 503 ASP.NET	1.	To impart the knowledge of web development in students in by using ASP.NET
	BCA 504 Software Engineering	1.	·
	BCA 505 Lab on ASP.Net	1.	To practically train students in developing web pages using ASP.NET.
	BCA 506 Lab on CASE Tool with MSVISIO and Software Test	1.	To practically train students in using CASE tools for designing real time system diagrams.
	BCA 507 Field Work on IT Project Assessment	1.	To understand the issues in implemented IT project by assessing it using research methodology.
TYBCA Sem VI	BCA 601 E-Commerce & M-Commerce	1.	To impart the knowledge of e-Commerce & m - Commerce among students.
	BCA 602 Cloud Computing	1.	This course will help the students to get familiar with cloud computing fundamentals, architecture, services, implementation and deployment techniques etc.
	BCA 603 Android Application Development	1.	The use of mobile communication and android based applications are increasing day by day. It is therefore necessary for students to know that how mobile communication works and how to build mobile apps for android operating system. This course covers the necessary concepts which are required to understand mobile communication and to develop Android Applications.
	BCA 604 Server Side Scripting using PHP	1.	To impart the knowledge of web development in students in by using PHP
	BCA 605 Lab on Android &PHP	1.	To practically train students in developing Mobile application and web pages using PHP
	BCA 606 Lab on Employability Skills	1.	To practically train students in developing required employability skills.
	BCA 607 Project Report and Viva	1.	To prepare students to use applications of the theory and practical learned during the course.

# **Programme Outcomes (POs) Faculty of Science (UG)**

After graduating from science faculty as student should have:

# PO1. Theoretical knowledge:

Students acquire a knowledge of various subjects in basic sciences such Physic, chemistry, Biology, Mathematics etc. she under stood the basic concepts, fundamental principles and theories related to various scientific phenomenon.

# PO2.Laboratory skill:

Students acquire skills in handling instruments, planning and performing experiments.

# **PO3.**Analytical skills:

Analyze the given scientific data, employ critical thinking and scientific approach in the performance, design, inter ..... and documentation of laboratory experiments to get its conclusions.

# **PO4.**Scientific approach:

Students are able to think creatively to propose novel ideas in explaining facts and figures or providing better solution to the problems.

# PO5. Environment and sustainability:

Interdisciplinary approach helps providing better solution and new ideas for sustainable development of better environment.

# **PO6.Ethical social Values:**

The knowledge of Science and its applications inculcate ethical moral and social values among students.

# **PO7.**Effective citizenship:

Students apply the knowledge of science in their day to day life for building better society and stronger nation.

#### **PO8.**Communication skills:

It acquires through presentation of the idea and views of science cleanly and effectively.

# **PO9.Lifelong learning:**

The acquired of knowledge is lifelong activity and in combination with untiring efforts and positive attitudes for leading s successful life.

# **Programme of Outcome (PG)**

After post graduating the students should have:

- PO1. Theoretical knowledge: Students acquired advance and deep knowledge of respective subjects by suing reference books, research journals, periodicals, internet etc.
- PO2. Laboratory skills: Acquire recent laboratory technique and modern technology for performing the experiments.
- PO3. Research attitude: Implementation of designing and execution of research work by using recent and innovative methodology. Presentation of research outcome through participation in seminars, conferences and workshop.
- PO4. Environment and sustainability: Necessary measure for sustainable development for controlling environmental pollution hazards.
- PO5. Social interaction and effective citizenships ability to recognize and solve various social issues and disagreements. Development of awareness regarding social concern and nation centric equity.

# **Programme Specific Outcomes (PSOs)**

### Faculty of Science (UG)

### **Department of Chemistry:**

- PSO1. To understand nature basic concepts of Chemistry viz. Physical, Inorganic, Organic, Analytical, Industrial polymer, Biochemistry etc.
- PSO2. The students should possess critical thinking and problems solving abilities.
- PSO3. The student able to describe and performed chemical processes and procedures as per laboratory standard.
- PSO4. To understand interdisciplinary nature of chemistry and integrate knowledge of other discipline to wide variety of chemical problems.
- PSO5. The student will learn professionalism including ability to work in a team and apply knowledge.

### **Department of Computer Science (UG):**

On the completion of the graduation in Computer Science students are able to:

- PSO1. Work as hardware and Software Engineer or program me with sound knowledge of theoretical, practical and networking concepts.
- PSO2. Work as systems Engineer system Integrate and system administrator.
- PSO3. Provide technical support for various systems
- PSO4. Server as proper consultant and management
- PSO5. Work as IT officer, DTP operator Web Designer and IT sales marketing person.
- PSO6. Work as system analyst and logic designer.

#### **Department of Mathematics:**

After completion of Graduation student will be able to

- PSO1. To learn thoroughly about differentiation of functions and some of its applications.
- PSO2. To understand basic of Game Theory.
- PSO3. Solve improper integrals.
- PSO4. To solve ordinary Differential Equations.
- PSO5. To understand Graph Theory types of Graphs and some related applications.
- PSO6. Basic concepts of Matrices, types of matrices and solving system of linear equations.

## **Department of Physics:**

Students graduating with Physics will be able:

- PSO1. To demonstrate an understanding of core knowledge in Physics, Mathematical methods fundamental, electronics, and Material science etc.
- PSO2. To analyze a variety of Physics phenomenon with appropriate applications of basic concept of Physics.
- PSO3. To utilize wide range of printed and electronic resources and information technology to support their project works.
- PSO4. To design and conduct experiment and show that they have learn laboratory skills, methods to interpreted and analyze results and draw the conclusions.
- PSO5. To demonstrate and understanding of impact of Physics and Science on society.

# **Department of Botany:**

- PSO1. Understand the basic concept and nature of Plants.
- PSO2. Students will be well versed with various processes such as mushroom, compost, Plant tissue culture, Green houses and poly houses, etc.
- PSO3. Students will be able to identify the major groups of organisms with an emphasis on plants and be able to classify them within a phylogenetic framework.
- PSO4. Students will be able to compare and contrast the characteristics of plants, algae, and fungi that differentiate them from each other and from other forms of life.
- PSO5. 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.
- PSO6. They will be able to use specific examples to explicate how descent with modification has shaped plant morphology, physiology, and life history.
- PSO7. This course offers self employment to the student like mushroom cultivation, organic manure preparation, cultivation of crops in poly-house condition, plant tissue culture laboratories etc.

## **Department of Computer Science (PG):**

On the completion of the Post Graduation in Computer Science students are able to: Work as

- Programme or Software Engineer.
- > Computer Engineer
- Web Designer
- ➤ Hardware Designer/engineer
- > System engineer/Integrator/Administrator
- > Technical support
- > Support Engineer
- > Technical Writer
- > Consultant/Management
- > IT officer, It Sales and marketing
- Work as Professor in education filed.
- Work as computer scientist and research staff member in Research and R& D Laboratories

### M.Sc. Organic Chemistry (PG)

- > To stimulate intellectual development, develop power of critical analysis and ability to solve problems.
- > To understand the synthesis of various mechanism and characterization of Organic and natural compounds.
- ➤ To generate interest in and understanding the wide role of Chemistry in various filed e.g. health, industry, etc.
- ➤ Understanding the application of Organic compound like antibacterial, anticancer and antifungal in medical and pharmaceutical field.
- ➤ Understanding application of UV, IR, NMR, GCMS, for characterization of organic compound.
- > Student should able to work in chemical or related fields.

# **Course Outcomes (COs)**

# DEPARTMENT OF CHEMISTRY

Class	Course	Outcomes ( Students will gain an understanding of )
F.Y. B.Sc. Chemistry	CH-101 (Sem. I) Physical and Inorganic Chemistry- I (Section A) CH-201 (Sem. II) Physical and Inorganic Chemistry-II (Section A)	<ol> <li>Ability to develop of conductance measurement.</li> <li>Students understand physical properties like surface tension and application in soap and detergent.</li> <li>Student understands the mathematical operation is used in chemistry.</li> <li>Student understands the mathematical operation is used.</li> <li>In chemistry convert scientific equation in straight line to get physical parameter for slope and intercept.</li> </ol>
	CH-102 (Sem. I) Organic and Inorganic Chemistry-I (Section B) CH-202 (Sem. II) Organic and Inorganic Chemistry-II (Section B)	<ol> <li>Understand fundamentals of organic chemistry with aliphatic &amp; aromatic compounds</li> <li>Understand IUPAC system of alkanes, alkenes &amp; alkynes</li> <li>Study synthesis &amp; reactions of alcohols, phenols &amp; ethers.</li> <li>Able to define acids, bases, buffer solutions, Handersonsequations</li> <li>A student knows the general properties of organic compounds, applications of organic compounds in everyday life.</li> <li>A student knows about hydrocarbon and its reaction.</li> <li>Students understand the reaction and properties of Haloalkanes and haloarenes</li> <li>Study IUPAC names of aldehydes &amp; ketones, Reactions &amp; synthesis of aldehydes &amp; ketones.</li> <li>Preparation, reactions &amp; properties of carboxylic acids &amp; their derivatives, IUPAC name s of acids, esters, acid chlorides &amp; amides.</li> <li>Determine the Molecular weight, formula weight, equivalent weight of organic compounds.</li> <li>Able to distinguish covalent bond &amp; ionic bond, study types of overlap.</li> </ol>
	CH-103 (Sem. I) Chemistry Practical-I (Based on Section A and B) CH-203 (Sem. II) Chemistry Practical-II (Based on Section A and B)	<ol> <li>Ability to handle various glassware's and calibration of burette, pipettes, volumetric flasks.</li> <li>Knows terms like heat of solution, equivalent weights, density viscosity.</li> <li>Understand inorganic qualitative analysis &amp; quantitative analysis.</li> <li>Students develops practical skill &amp; scientific approach.</li> <li>Students should understand fundamental principles of chemical analysis.</li> <li>Students should understand organic qualitative analysis, knows melting points, boiling points, types of organic compounds.</li> <li>Students can operate various chemical equipment's.</li> <li>Able to correlate theoretical concept with practicals</li> </ol>

S.Y. B.Sc.	CH-301 Physical	Student understands the colligative properties and correlation.
	and Inorganic	2. Student understands the General characteristics of d-block elements,
	Chemistry	General Properties of
	•	3. Metals and different process in metallurgy.
		4. Student understands the Solubility, Factors affecting solubility, Types of
		solutions, 5)Different way of expressing the concentration of solution
	CH-302	1. Review the concept of isomers, stereoisomers, free rotation. Optical
		isomers, geometrical isomers.
	Organic and Analytical	2. Study of amines, synthesis & reactions of amines.
	Chemistry	3. Definition and approaches, solvent system concept, Lux- flood
		concept, Lewis concept, Generalized Acid-base concepts.
		4. Able to know heteroatoms such as N, O & S & study five & six
		membered heterocyclic compounds
		5. Students understands separation techniques like chromatography &
		types of chromatography
	CH-303 Skill	1. Knows about definition of analysis, types of analysis, able to define
	Enhancement Course	qualitative analysis & quantitative analysis.
	SEC-1 Basic Analytical	2. Able to understand accuracy, precision & significant figures, rounding
	Chemistry	off in data.
		3. Knows importance of sampling minimization of errors
		4. Students understands the mechanism of acid base titration
	CH-303 Chemistry	Students should understand colligative properties like elevation in
	Practical's	boiling points, depression in freezing points.
		2. Use of potentiometer for determination of standard electrode
		potential.Students can perform conductometric titration.
		3. Students can perform volumetric analysis. Students Can carry
		separation of mixtures using chromatographic techniques
		4. Students are able to conduct organic preparations & metal complexes.
	CH-401 Physical and	1. Student understands the thermodynamic properties is used in
	Inorganic Chemistry	chemistry
		2. Student understands the electrochemical cell and its application
		3. Student understands Basic concepts of coordination chemistry.
	CH-402 Organic and	1. Knows importance of synthetic reagents & their applications.
	Analytical Chemistry	2. Students understand organometallic compounds.
		3. Students understand the MOT of various compounds. Interaction
		between s-s, s-p, p-p, p-d and d-d combination of orbitals
		4. Students understands Complexes, ligands, types of ligands, chelates,
		chelating agents., Applications of complex metric titration
	CH-403 Skill	1. Students understand gravimetric analysis, precipitation process
	Enhancement Course	&various steps in gravimetric analysis.
	SEC-2	2. Students understands Oxidation, reduction, redox reaction, oxidising
		agents, reducing agents, redox titrations, Detection of end point-redox
	Advanced Analytical	indicators, self indicator and starch indicator
	Chemistry	

	CH-403 Chemistry	1. Students can evaluate thermodynamic parameters. $\Delta G$ , $\Delta H$ , $\Delta S$ of the
	Practical's	cell
		<ol> <li>Students can perform critical solution temperature of phenol- water system</li> </ol>
		3. Students Can conduct organic qualitative analysis with elemental
		analysis.Students can perform gravimetric, qualitative analysis also
		know about preparation of Inorganic metal complexes
		4. Students can Determination of molecular weight of liquid by steam
		distillation technique
T.Y.B.Sc.	CH-501 Principles of	1. Understand the significance of wave function and postulates of
	Physical	quantum mechanics
	Chamiatry I	2. Deduce rate equations and half-life equations for first and second
	Chemistry-I	order reactions
		3. Draw and explain the one and two component system phase
		diagrams.
		4. Explain the principles of electrode processes and apply them during Practicals
	CII 502In organia	
	CH-502Inorganic Chemistry	<ol> <li>Learn about the VSEPR theory and how it can be used to explain molecular shapes.</li> </ol>
	Chemisu y	2. Learn about the VBT to describe the formation of covalent bonds in
		terms of atomic orbital overlap.
		3. Learn about stability of complexes using CFSE.
		4. Learn about MOT to draw energy diagrams and to predict bond
	CIV #00 O	order.
	CH-503 Organic Reaction	1. Students will learn organic reactions like nucleophilic substitution,
	Mechanism	electrophilic
		<ol> <li>substitution, nucleophilic addition, electrophilic addition and elimination</li> </ol>
		3. Students will be able to write/ explain mechanisms of those types of
		reactions
		4. Students will understand how a reaction takes place in one or more
		steps
		5. Students will understand the types of intermediates formed in
	CII 704 I 1 1 1 1	different reactions
	CH-504 Industrial	1. Students should understand distribution coefficients, distribution ratio,
	Chemistry	solvent extraction process
		<ol><li>Application of Ion Exchange Chromatography method for the separation of cations and anions using different types of resins</li></ol>
		3. Knows basic principles and working of HPLC applications of high
		performance of liquid chromatography
		4. Understands difference between different types of chromatography.
		Understand the concept of gas chromatography.
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CH-505Analytical	1. Basic requirements of Chemical Industry, different terms,
Instrumentation	operations and processes involved in chemical Industry.
	2. Describe Copy Right Act, Patent Act and Trade Marks, Bureau of
	Indian Standards (BIS) and International Organization for
	Standardization (ISO).
	3. Basic requirements, raw materials, different processes and operations
	involved in Sugar Industry and also different grades of sugar and uses of
	by-products of sugar industry.
	4. Importance of fermented products, basic requirements, theory and
	process of alcohol making, fractional distillation and various terms
	involved in Fermentation Industry.
CH-506 (A)	Students will study biomolecules like carbohydrates, amino acids,
Biochemistry	proteins, enzymes, lipids and nucleic acids.
	2. Students will understand definitions, classifications and examples of
	these biomolecules.
	3. Students will learn the detailed structure of these biomolecules along
	with types of bonds or linkages present in their molecules.
	Students will learn the chemical properties of these biomolecules and
	the action of some reagents on them in the form of reactions or
	graphical presentation.
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	compounds along with hydrolytic reactions.
	6. Students will learn metabolisms like Glycolysis, TCA cycle,
	Transamination, deamination and $\beta$ - oxidation through reactions,
277 20277	enzymes involved, outlines and energetics.
CH-507Physical	Students will able to calibrate and handle instruments like
Chemistry Practical	conductometer, potentiometer, pH meter,
	colorimeter,spectrophotometer, polarimeter.
	2. They have ability to perform accurate quantitative measurements
	with an understanding of the theory and use of contemporary
	chemical instrumentation, interpret experimental results, perform
	calculations on these results and draw reasonable, accurate
	conclusions
	3. They get skills required in chemistry such as the proper handling of
	apparatus and chemicals.
CH-508Inorganic	1. They have ability to do chemical analysis by Gravimetric Estimations,
Chemistry Practical	Volumetric analysis
	2. They know about the Inorganic Preparations of complexes.
	3. They have ability to do Colourimetric Analysis for metal present in
	sample
	4. They have ability to do Separation and identification of binary mixture
	of cations
CH- 509Organic	They have ability to do Separation of Binary Mixtures and Qualitative
Chemistry Practical	Analysis
	2. They have ability to do Organic Estimations
CH-601Principles of	Analyze the rotational spectra of diatomic molecules and determine the
Physical Chemistry-II	bond length.
Thysical Chemistry II	2. Explain and apply the radioactivity principles for various chemical and
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	CVL 607 DI	conditions required for the preparation of polymers in laboratory or industry.
	CH-607 Physical Chemistry Practical	<ol> <li>Students will get basic analytical and technical skills to work effectively in the various fields of chemistry</li> <li>They will have ability to present scientific and technical information resulting from laboratory experimentation in both written and oral formats.</li> </ol>
	CH-608 Inorganic Chemistry Practical	<ol> <li>They have ability to do Inorganic Qualitative Analysis of given binary mixture.</li> <li>They have ability to do Ore Analysis</li> <li>They have ability to do alloyAnalysis by various methods.</li> </ol>
	CH-609 Organic Chemistry Practical	<ol> <li>They have ability to do various Organic Preparations</li> <li>They have ability to do various Preparation of Derivatives</li> </ol>
Class	Course	Outcomes ( Students will gain an understanding of )
M.Sc.I (As per NEP 2020)	DSC-25 CH-511 : Advanced Organic Chemistry-I	<ol> <li>Develop knowledge of substitution (electrophilic, nucleophilic) addition and elimination reactions</li> <li>Differentiate between various organic reactive intermediates and their reactions</li> <li>Students can understand the carbon-carbon multiple bonds and carbon heteroatom multiple bonds-</li> <li>Mechanism and stereochemical aspects</li> <li>Differentiate between the concept of aromaticity and anti aromaticity</li> </ol>
	DSC-26 CH-512 : Advanced Inorganic Chemistry-I	<ol> <li>On the basis of MOT Student should able a) to determine term symbols of elements of First and second row period homonuclear diatomic molecules b) to know structure, bonding (BMO, ABMO and NBMO), properties, MO electronic configuration and construction of MO energy level diagram various molecules.</li> <li>Student should imagine molecules in 3 dimensions and a) to understand the concept of symmetry and able to pass various symmetry elements through the molecule b) to understand the concept of point group and apply it to molecules c) to understand product of symmetry operations</li> <li>Student should a) know and apply EAN rule to organometallic compounds. b) know alkyl and aryl complexes, alkene complexes, Allyl and butadiene complexes, complexes containing delocalized cyclic system (sandwich compounds) c) know catalytic reaction involving organometallic compounds and mechanism of these reactions</li> <li>Student should understand a) Hydrides of P, Sb, As, etc b) Selenides, Tellurides. c) Synthesis, properties and structures of alkali and alkaline earth metal compounds d) synthesis and reactivity of inorganic polymer</li> </ol>
		of Si and P.  5. Student should able to know a) Metal clusters b) Carbonyl clusters and their types (HNCC and LNCC), apply electron counting scheme to HNCC's c) Halide cluster

DSC-27 CH-513 : Industrial Safety and Good	<ul><li>9. Understand the importance of laboratory safety.</li><li>10. Aware and follow healthy laboratory practices</li></ul>
Laboratory Practices	11. Acquire the knowledge about personal protective equipment
CH-517 :Research Methodology for Sciences	<ol><li>Students will understand the basic concept of science and scientific research.</li></ol>
	<ol> <li>Learn and follow the ethical guidelines while doing research avoid plagiarism in research publications.</li> </ol>
	7. Able to write a comprehensive literature review on a given research topic.
	8. To be able to write a crisp research proposal or research project independently.
	<ol> <li>To be learn most advanced chemistry tools for the efficient research work.</li> </ol>
	<ol> <li>Acquire knowledge about various hazardous chemical handling procedures and implement it while working in the laboratory.</li> </ol>
DSC-28 CH-514:	6. Students enable to understand the use of various principles,
Chemistry Practical-I	instruments and techniques for various analysis
(Physical and Analytical Chemistry Practical)	7. This practical course is designed to make student aware about various methods and analytical tools
	8. Students understand the principle behind ore analysis, gravimetric and volumetric analysis
	9. Students can analyze contents present in sample
	10. Students able to handle various instruments and perform the instrumental analysis techniques
	11. Students can apply their knowledge for development of experiment involves analysis and estimations
DSC-29 CH-515:	5. Students are made aware of carrying out different types of reactions
Chemistry Practical-II	and their workup methods
Chemistry Practical)	•
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(Organic and Inorganic Chemistry Practical)	<ol> <li>Students able to perform purification techniques in organic chemis like recrystallization, distillation, steam distillation and extraction</li> <li>Students will understand the process of ore analysis</li> <li>Students able to apply their knowledge for binary mixture separation of inorganic compounds using quantitative analysis</li> <li>Students can analyze contents present in given sample</li> <li>Students are able to synthesize and evaluate the complex and also a to determination of complex purity</li> <li>Chromatography is an important biophysical technique that enable students for the separation, identification, and purification of the components of a mixture for qualitative and quantitative analysis</li> </ol>

Semester-II	5. Students can understand various reactions and rearrangements
DSC-30 CH-521 :	6. Understand and write mechanism of reactions and their applications
Advanced Organic	7. Understand how to convert one molecule into another molecule by
Chemistry-II	using oxidising and reducing agents
, i	8. Plan the fundamental organic reactions of significance for organic
	synthesis and design synthesis of organic molecules.
	9. Apply theoretical knowledge in practical's for various conversions
	10. Understand the concept of stereochemistry and will able to write stereo
	chemical aspects inorganic chemistry
	11. To know how to solve problems based on H1 and C13 NMR
DSC-31 CH-522 :	1. Students should a) Know the nature of solids b) Know the crystal
Advanced Inorganic	structures of solids. c) Draw the simple cubic, BCC and FCC structures
Chemistry-II	d) identify the C.N. of an ion in ionic solid. e) Identify the type of void
, i	f) Know the effect of radius ratio in determining the crystal structure g)
	radius ratio rules for calculation of C. N. 3, 4, 6. h) able to solve simple
	problems based on Pauling's univalent radii and crystal radii to identify
	structure of inorganic solid
	2. Student should a) derive term symbols using vectors of spin and orbital
	angular momentum b) determine the number of microstates and
	meaningful term symbols, able to construction of microstate table for
	various electronic configuration. c) Know Hund's rules for arranging
	the terms symbols on the basis of their energies. d) knowledge of the
	hole formalism for information about the configuration pairs e) know
	Laporte 'orbital' selection rule and spin selection rule f) able to convert
	term/state symbol to Mulliken state symbol for construction Orgel
	diagram. g) Interpret of electronic spectra for transition metal
	complexes using Orgel diagram.
	3. Student should a) know types of reactions mechanisms in coordination
	compounds- dissociative, interchange, associative, b) know inert and
	labile complexes c) get detailed information of substitution reactions in
	coordination complexes and their mechanism d) know stereochemistry
	of reaction e) get knowledge about kinetics of reactions
	<ul><li>4. Students should gain knowledge about a) Catalyst- types and properties,</li><li>b) catalysis and catalytic steps in homogeneous catalysis c) Types of</li></ul>
	reaction involving organometallic compounds Students should know a)
	method of Preparation of complexes b) Application of complexes in
	various fields - analytical chemistry, complexometric titration,
	metallurgy, industry, medical field. c) study of metal complexes in
	biological system- Haemoglobin, Chlorophyll, Vitamin B12)
DSC-32 CH-523 :	5. Explain various theoretical concepts of analytical chemistry.
Instrumental Methods of	6. Build up ability to solve the numerical problems
Analysis	7. Apply theoretical principles, working of various classical and modern
	instrumentation techniques.
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DSC-33 CH-524: Chemistry Practical-III (Physical and Analytical Chemistry Practical)	<ol> <li>Differentiate between the nature of chemical bond concept from MOT and VBT</li> <li>Students will be able to apply the Approximate quantum methods for simple conjugated systems</li> <li>Students will gain an understanding of Joule-Thomson effect, third law of thermodynamics, absolute entropy, standard entropy and residual entropy and partial molar quantity and its significance.</li> <li>Students will be able to explain the mechanism of spectroscopic methods and solve the numerical problems related with it.</li> <li>Students will be able to differentiate between adsorption isotherms, and how it is used for surface area calculation</li> <li>Students enable to understand the use of various principles, instruments and techniques for various analysis.</li> <li>This practical course is designed to make student aware about various methods and analytical tools.</li> <li>Students understand the principle behind Complexometric, Quantitative and Spectroscopic estimation of various compounds.</li> <li>Students can analyze contents present in sample</li> <li>Students able to handle various instruments and perform the</li> </ol>
	instrumental analysis techniques.  Students can apply their knowledge for development of experiment involves analysis and estimations
DSC-34 CH-525 : Chemistry Practical-IV (Organic and Inorganic Chemistry Practical)	<ol> <li>Students understand the important of safety techniques and handling of chemicals</li> <li>Students are made aware of carrying out different types of reactions and their workup methods</li> <li>Students able to use of chemistry software's like, ISI Draw, Chem Draw, Chem Sketch.</li> <li>Students able to perform purification techniques in organic chemistry like recrystallization, distillation, steam distillation and extraction</li> <li>Students will understand the importance of green chemistry</li> <li>Students will understand and analysis various UV, FT-IR and 1H-NMR spectrum spectra</li> <li>Students able to apply their knowledge for binary mixture separation of inorganic compounds using quantitative analysis</li> <li>Students can analyze contents present in given sample</li> <li>Students are able to synthesize and evaluate the complex and also able to determination of complex purity</li> <li>Chromatography is an important biophysical technique that enables students for the separation, identification, and purification of the components of a mixture for qualitative and quantitative analysis.</li> <li>Learn about the VSEPR theory and how it can be used to explain</li> </ol>
	<ul> <li>5. Learn about the VSEPR theory and now it can be used to explain molecular shapes.</li> <li>6. Learn about the VBT to describe the formation of covalent bonds in terms of atomic orbital overlap.</li> <li>7. Learn about stability of complexes using CFSE.</li> </ul>

		Learn about MOT to draw energy diagrams and to predict bond order.
M.ScII CH- 350: Organic reaction mechan ism	CH-350: ORGANICREACTION MECHANISM	<ol> <li>Studyofcarbanionformation, stabilityandrelatednamereaction, enemies and its applications.         UnderstandtheNGP.</li> <li>Learnthecarbines and nitrenes.</li> <li>Study of free radicals: generation of radicals, Nucleophilic electrophilic radicals, inter and intra molecular C-C bond formation via mercuric hydride. Studyof oxidative coupling and SNArreaction.</li> </ol>
	CH-351 Spectroscopic methods in structure determination	<ol> <li>Study 1H NMR Spectroscopy: Chemical Shift, deshielding, correlation forprotons bonded to carbon and other nuclei. Study of 13C NMR spectroscopy:FT-NMR,typeof13CNMRspectra, proton ecoupled, offres onance,APT,INEPT, DEPT, Chemical shift, nuclear and hetero nuclear coupling constant2D NMR techniques: COSY, homo and hetero nuclear 2D resortsspectroscopy,NOESY and the applications</li> <li>Study of mass spectrometry: Instrumentation, various methods of ionization, SIMS, FAB, MALDI. Differentdetectorsrules of fragmentationsofdifferentfunctionalgroups.</li> </ol>

## **DEPARTMENT OF COMPUTER SCIENCE**

Class	Course	Outcomes
FYBSc	CS-101 Essentials of	Understand the History of Computers.
	Computer	2. Understand What is Computer and Types of computer language.
		3. Aware about various types of Computers, types of input and output devices.
		4. Preparation of Algorithm and Flowchart of Program.
		5. Learn computer networks, its types and basics of Internet.
		6. Understand computer viruses and its types.
	CS-102 C Programming	1. Develop their programming skills.
	Language-I	2. Understand basic structure of 'c' program.
		3. Declaration of variables and constants.
		4. Understand operators, expressions and preprocessors. 5. Understand arrays,
		it's declaration and uses
		6. Develop their programming skills.
		7. Understand basic structure of 'c' program.
		8. Declaration of variables and constants.
	CS -201 Internet	1. Understand the Types of Webpage it's Structure, Site Organization Model,
	Computing	Site Planning and Testing.
		2. Understand how to design website with different website development
		models.
		3. Familiar with HTML tags.
		4. Designing website using HTML language.
		5. Design advanced website using CSS.

	CS -202 Programming	1. Design programs using Functions, Pointers, Structures and Unions in C
	Language- II	language.
		2. Write a program using File Handling.
		3. Writing programs for drawing different graphical shapes.
	CS-103 and 203 LAB	1. On completion of the course, students are able to develop programs using C to
	Courses on Paper I & II	meet real world needs and able to develop their own websites. This course
		provides platform to enhance student's basic skills required for advanced
		programming.
SYBSc	CS -301 : Data Structure-I	1. Know what is data structure and different types of its algorithmic notations.
		2. Analyze the time and space requirement of any algorithm.
		3. Understand different linear data structures for conversion of mathematical
		expressions.
		4. Know the file structures.
		5. Know what is data structure and different types of its algorithmic
	CS -302 : Programming in	1. Be familiar with Object Oriented Programming Environment with its features.
	C++ -I	2. Differentiate between Structure oriented programming and object oriented
		programming.
		3. Understand different object modelling techniques and analysis like
		Generalization, Aggregation and Metadata
		4. Write Reusable, Extensible and Robust programs in C++.
	CS -304(SEC-I) Software	1) Expose the students to research methodology used to social sciences.
	& Hardware Installation	2) Identify and discuss the role and importance of research in the computer
	Skills(skill)	sciences.
		3) Identify and discuss the issues and concepts salient to the research process.
	CS-401 : Data Structure –	1. Know different non-linear data structures that can be used to represent
	II	hierarchical relationship between objects.
		2. Traverse and represent the graphs in computer.
		3. Understand the different approaches of sorting and searching elements in the
		arrays.
		4. Study of different tree structures.
		5. Understand different techniques of designing the algorithms.
	CS-402 : Programming in	1. Explore polymorphism using Function and Operator Overloading.
	C++ -II	2. Write programs for handling runtime errors using exception. 3. Understand the
		concepts of pointers in C++.
		4. Understand the different aspects of hierarchy of classes and their extensibility.
		5. Write generic programs using templates and STL
	CS-404 (SEC-II) Network	1. On completion of the course, students are able to develop programs using C++
	Security	based on object oriented concepts and write the ROBUST, EXTENSIBLE and
		EFFICIENT programs.
		2. Students are able to develop programusing different data structures.
	CS-303 and 403 : Practical	1. Identify some of the factors driving the need for network security.
	Course	2. Identify and classify particular examples of attacks.
		3. Define the terms vulnerability, threat and attack.
		4. Identify physical points of vulnerability in simple networks.
TYBSc	CS-501: System	Get aware about system software and their tools like Editors and Debug
	Programming	Monitors.
		Understand the concept of smaco programming.
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1	• Understand detail working of Assembler, Macro and Macro Preprocessor,
	Compiler and linker & Loader.
CS-502: Database	Get aware of Describing & storing data.
Management System	Know about E-R Model by overview of database design
Wanagement System	,
	Know about functional dependency and Data Normalization.      Understand Database Involvementations
	Understand Database Implementations.  All Problems & Comments of Comments
	Make use of Concurrency control, Backup & recovery for large or huge of
CS 502: Seftman	databases
CS-503: Software	• Get aware of evaluation of software and Software Development Life Cycle
Engineering	(SDLC) and different models.
	• Study of different stages of Software Engineering.
	• Learn use of Fact finding Techniques, Types of Requirement Modeling and
	Data Modeling Concepts, design concepts.
	• Know about Cohesion & Coupling, Decision Table & Decision Tree, .Know
	about Software Coding & Testing.
	Get aware about Elements of Software Quality Assurance
CS-504:Computer Aided	Differentiate between interactive and non interactive graphics.
Graphics	• Explore different line and circle drawing algorithms.
	Perform 2D and 3D transformation on different images.
	Know about detail working of image clipping and windowing.
	Understand raster graphics and hidden surface elimination
CS-505: Python	Basic principal of python programming language.
Programming-I	Construct and apply various filter for specific task .Apply the best feature of
	mathematics, engineering and natural science to program real life problem
Elective -B UG-CS- 506 (	Get knowledge about JDK Environment.
B) JAVA Programming-I	Explore polymorphism using Function and Operator Overloading, overriding.
	• Understand the different aspects of hierarchy of classes and their extensibility.
	Understand the concepts of streams and files.
	Write programs for handling runtime errors using exception
CS-601: Operating System	Know about functions and services of operating system, different types of
	operating systems.
	Aware about different CPU scheduling algorithms
	Get familiar with different memory management techniques.
	Understand different disk and drum scheduling algorithms as well as deadlock
	concepts.
	Get introductory knowledge about android operating system
CS-602: R-DBMS	• E-R Model by overview of database designUse database technique SQLAND
	PLSQL
	Understand Database Implementations.
	•Use advanced concept of programming
CS-603:Computer	Understand applications of network, network structures and protocol hierarchy
Network	Aware about details of physical, datalink, network and transport layer of
	TCP/IP network model, OSI Reference Model
	Understand about different aspects of network security like firewalls, IP
	security and VPNs.
CS-604: Theoretical	Understand what is Push down Automata and its applications.
Computer Science	Understand concepts of Context free grammar and normalization of CFG.
	Convert regular expression to Finite Automata, design PDA
<u> </u>	· · · · · · · · · · · · · · · · · · ·

		D: T: M: 1: C: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1:
		Design Turing Machines for various applications like enumerator, function
	GG 40% D 11	computer and universal turning machine.
	CS-605:Python	1.Basic principal of python programming language 2.Construct and apply
	Programming-II	various filter for specific task .Apply the best feature of mathematics,
		engineering and natural science to program real life problem 3.Basic principal of
		python programming language 4.Construct and apply various filter for specific task
	Elective - B CS-606( B)	Program using graphical user interface with Swing classes.
	JAVA Programming-II	Handle different kinds of events generated while handling windows.
		Create programs using menus and dialog boxes.
		Program for websites using applets.
		Understand advanced java concepts like JDBC and servlets.
	CS-507:Lab on Python	1.On completion of the course, students are able to develop basic programs using
	Programming I	python
	CS-508:Lab on Computer	On completion of the course, students are able to develop different programs for
	Aided Graphics	demonstrating different Computer graphics algorithms like circle, line drawing and clipping
	Elective B) CS-509: Lab	• On completion of the course, students are able to develop basic programs using
	on Java programming-I	Java.
	CS-607:Lab on Python	1.On completion of the course, students are able to develop basic programs using
	Programming II	python
	CS-608: Lab on RDBMS	• On completion of the course, students are able to develop database management
		system using features and services provided by MS SQL
	Elective -B CS-609: Lab	On completion of the course, students are able to develop efficient programs
	on JAVA Programming –II	which provides graphical user interface for easy handling of computers using
	and CS-L	JAVA.
MSc-II	CS-301 Software	Know the requirements of developing software.
	Engineering	Be aware of various models required for software development.
		• Test the developed software for its functionality and performance.
		Understand software quality and quality measures.
		Grasp the software configuration management and project planning.
	CS-302: Optimization of	Understanding classification and limitation of Operation Research.
	Algorithm	• Take hold of linear programming problem solving techniques.
		• Solve various kinds of transportation problems using different techniques.
		• Explore concepts in game theory
		• Be aware about the network models, sequencing models and simulation models.
	CS-303: Advanced Java	Design programs using Remote method invocations (RMI).
	Programming	• Explore programming techniques of Java beans and swing.
		Be aware about Java Enterprise applications.
		Know about java servlets and java struts.
	CS-304: Windows, WCF	Familiar with windows environment and child window controls, GDI device
	and WPF Programming	contexts.
		• Understand windows communication foundation using WCF contracts, clients
		and services security.
		• Understand windows presentation foundation, WPF and .Net programming.
	CS-305:LAB – V on	On completion of the course, students are able to develop program having
	Windows, WCF and WPF	graphical user interface for various applications
	Programming	Supricul user interface for various appropriations.
	110514111111115	

CS -306:LAB –VI on	• On completion of the course, students will get hands on training for various
Advanced Java	java programs like JDBC, EJB, Servlets, Struts etc.
Programming	
CS-40: Natural Language	Understand languages and linguistic background
Processing	• Be familiar with applications and research background in NLP. • Grasp
	mathematical foundation related to NLP like probability, bays theorem,
	clustering algorithms and machine learning.
	Know about linguistics essentials and grammar as part of speech and parsing
	and differentiating them.
	Aware about word morphology and N-Gram Models.
CS-402: Advanced	Understand network fundamentals with TCP/IP architecture.
Network Programming	Aware with client server programming and its application using socket
	interface.
	Understand IGMP ICMP and IP datagrams, network interface layers.
	Understating the mobile and advoc network programming.
CS-403: Data Warehousing	Understand data warehousing for business analysis using OLAP, OLTP,
and Data Mining	MOLAP and ROLAP.
	• Explore the concepts of data mining and data preprocessing.
	Understand concept of association rule mining.
	Grasp classification and prediction and analysie different issues related to
	them.
	Identify different cluster analysis techniques.
	Know about advanced data mining techniques such as spatial data mining and
	understand the concept of big data analysis.
CS-404:LAB – VII on	On completion of the course, students are able to develop client server
Network programming and	programs for various services like TCP, UDP, Telnet, FTP and HTTP. Students
Data Mining	are also able to analyse the processing and classification techniques using
	WEKA tool.
CS -405 Mini Project	Deal with real world data.
	• Familiar about real time IT industry environment.
	• Expeirnance about applying the knowledge they got uptil now.
	• Build a whole real time working system which will satisfy all custmor"s needs.

## **DEPARTMENT OF MATHEMATICS**

Class	Course	Outcomes (Upon successful completion of this course the student are expected to understand):
F.Y. B.Sc.	MTH 101: Matrix Algebra	<ul> <li>a) understand concepts on matrix operations and rank of the matrix.</li> <li>b) understand use of matrix for solving the system of linear equations.</li> <li>c) understand basic knowledge of the eigen values and eigen vectors.</li> <li>d) apply Cayley-Hamilton theorem to find the inverse of the matrix.</li> <li>e) know the matrix transformation and its applications in rotation, reflection, translation</li> </ul>
	MTH 102: Calculus of Single Variable	<ul><li>a) Understand basic concepts on limits and continuity.</li><li>b) Understand use of differentiations in various theorems.</li><li>c) Know the Mean value theorems and its applications.</li></ul>

	1	NM1- 4
		d) Make the applications of Taylor's, Maclaurin's theorem.
		e) Know the applications of calculus.
		f) Determine the derivative of a function using the limit definition.
		g) Interpret the derivative as the slope of a tangent line to a graph, the slope of a
		graph at a point, and the rate of change of a dependent variable with respect to
		an independent variable
		h) Use the first and second derivatives to analyze and sketch the graph of a
		function, intervals on which the graph is increasing, decreasing.
	MTH 103 (B): Discrete	Understand the concepts of relations, coding and decoding, mathematical logic,
	Mathematics	Boolean algebra.
	MTH 201: Ordinary	a) Understand basic concepts in differential equations.
	Differential	b) understand method of solving differential equations
		c) understand use of differential equations in various fields
	Equations	
	MTH 202: Theory of	a) Find out roots of any equation of degree less than or equal to five.
	Equations	b)understand Theory of equations which is highly useful in various subjects like
		algebra, linear algebra, calculus, ordinary and partial differential equations etc.
	MTH 203 (B): Numerical	After successful completion of this course the Students are expected to
	Methods	a) Understand basic concepts of methods of solutions of equations viz. bisection,
		iteration, Newton-Raphson methods and method of false position.
		b) Understand methods of curve fitting viz. Gauss's forward and backward
		difference formulae and Lagrange's interpolation formula.
		c) Use of curve fitting such as least square, polynomials and exponential fittings
		for set of given dada.
		d) Use Taylor's series, Euler's method, Modified Euler's methods, RangeKutta
		methods for solving ordinary differential equations
S.Y. B.Sc.	MTH -301: Calculus of	➤ limit and continuity of functions of several variables.
	Several Variables	fundamental concepts of multivariable Calculus.
		series expansion of functions.
		> extreme points of function and their maximum, minimum values at those
		points.
		meaning of definite integral as limit as sums
		➤ how to solve double and triple integration and use them to find
		area by double integration and volume by triple integration.
	MTH -302(B): Theory of	> understand group structures which is useful to understanding ideas of
	Groups and Codes	modern mathematics.
		understand solutions to polynomial equations.
		understand permutation groups.
		understand concepts of homomorphisms and isomorphisms.
		Students will understand basic concepts in codding theory.
	MTH 304:Set Theory and	Uses of the language of set theory, designining issues in different subjects
	logic	of mathematics.
	-	> understand the issues associated with different types of finite and infinite
		sets via countable uncountable sets.
		knowledge of the concepts and methods of mathematical logic, set theory,
		relation calculus, and concepts concerning functions which are included in
		the fundamentals of various disciplines of mathematics.
		<ul> <li>understanding the role of propositional and predicate calculus</li> </ul>
		able to provide the logical mathematical reasoning, formulate theorems
•	1	. act to provide the region matternation reasoning, formulae dicorents

		and definitions.
	MTH -401: Complex Variables	> understand the concept of analytic function
	v arrables	> understand the Cauchy Riemann Equations
		> understand harmonic functions
		understand complex integrations
		understand calculus of residues.
		> acquire the skill of contour integrations
	MTH-402 (B):	> understand formation of differential equations and their solutions.
	Differential Equations and	understand the concept of Lipschitz condition
	Numerical Methods	<ul> <li>understand method of variation of parameters for second order L.D.E.</li> <li>understand simultaneous linear differential equations and method of their</li> </ul>
		solutions.
		<ul> <li>understand Pfaffian differential equations and method of their solutions.</li> </ul>
	MTH 404: Vector	> understand scalar and vector products.
	Calculus	> understand vector valued functions and their limits and continuity and use
		them to estimate velocity and acceleration of partials.
		Calculate the curl and divergence of a vector field.
		Set up and evaluate line integrals of functions along curves
T.Y. B. Sc.	MTH 501: Metric Spaces.	1.Understand the Euclidean distance function on R <sup>n</sup> and appreciate its properties, and state and use the Triangle and Reverse Triangle Inequalities for the Euclidean distance function on R <sup>n</sup>
		2. Understand the definition of continuity for functions from R <sup>n</sup> to R <sup>m</sup> and determine whether a given function is continuous.
		3. Understand the geometric meaning of each of the metric space properties (M1)
		- (M3) and be able to verify whether a given distance function is a metric
		4. Distinguish between open and closed balls in a metric space and be able to determine them for given metric spaces
		5. Define convergence for sequences in a metric space and determine whether a given sequence in a metric space converges
		6. State the definition of continuity of a function between two metric spaces
	MTH -502: Real Analysis	Understand the structure of Riemann Integration     Represent lattice in diagrammatic form.
		We resent fature in diagrammatic form.     Understand the Improper integrals with finite limit—and infinite limit their properties.
		4. Learn the concepts of Beta and Gamma Integrals.
	MTH 503: Algebra	1) know the use Permutation Groups
		2) know normal Subgroups and group isomorphisms
		3) Know Ideals in rings, Quotient Rings and Isomorphism of Rings
	MTH 504:Lattice	Understand the structure of poset and lattice.     Represent lattice in diagrammatic form.

Theory	3) Understand the terms Maximal element, Minimal element, Greatest element, Least elements.
	4) Learn the concepts of ideals and their properties.
	5) Learn the concepts of homomorphism.
	6) Understand modular and distributive lattice and their interrelation.
	7) Understand complemented and relatively complemented
MTH -505; Integral	1. Know the use of Fourier transform in Wave equation,
Transform	2. Solve Boundary Value Problems, also problem on Heat-flow in semi-infinite bar.
	3. Use Fourier transform in communication theory and signal analysis, image processing and filters, data processing and analysis, solving partial differential equations for problems on gravity.
	4. To use Z-transform in the characterization of Linear Time-Invariant system (LTI), in development of scientific simulation algorithms
MTH 50C(D), November	
MTH -506(B): Number Theory	Solve Diophantine equations     Use Fermat's theorem, Euler's theorem and Wilson's theorem for finding remainders
	3) Understand perfect, Mersenne and Fermat's numbers.
	4) Understand Fibonacci sequence
	5) Solve Diophantine equations by using finite continued fractions.
MTH 507: Practical Course Practical based MTH 501&& MTH502	After successful completion of this course, students are expected to develop problem solving skills on metrica metric space and Riemann Integration.
MTH 508: Practical Course Practical based MTH 503& MTH504	After successful completion of this course, students are expected to develop problem solving skills, develop computer programs for problems of number theoretic problems.
MTH - 601: Measure	Learn measurable sets. Learn the concept of Sets of measure zero.
Theory	2. Understand why a more sophisticated theory of integration and measure is needed.
	3. Show that certain functions are measurable.
	4. Understand properties of the Lebesgue integrals.
MTH - 602: Real	solve Convergence and divergence     use Test for absolute convergence,
Analysis – II	3. understand Fourier series for even and odd functions t, 4. understand Sine and cosine series in half range
MTH - 603: Linear Algebra	solve Rank and nullity theorem     use Cayley Hamilton theorem, Euler's theorem and finding Eigen values and Eigen vectors of linear transformation.
	<ul><li>3) Understand Kernel and image of linear transformations.</li><li>4. understand Singular and non-singular linear transformation</li></ul>
MTH - 604: Ordinary and Partial Differential Equations	<ol> <li>Know the exact differential equation and its solution.</li> <li>Solve the exact differential equations by using integrating factor.</li> <li>Solve the linear differential equation of second order by using various</li> </ol>
1	methods.

MTH - 605: Graph	Understand a functional hierarchical code organization.
Theory	define and manage graphs, connected graphs.
	2. Understand concept of Cut set and cut vertices
MTH – 606(B):	1. solve the linear programming problem by graphical method
Operations Research	and simplex method.
	2. learn the unbounded, alternative and infeasible solutions of
	LPP by graphical and simplex method.
	3. Understand the standard and canonical form of LPP.
	4. Find the optimal solution of TP by MODI method.
	5. solve the solution of assignment problems by Hungerian Method
	6. Understand the unbalanced, balanced, maximization, restricted
	AP and alternative solution of AP, Hungerian Method.
	7. understand the saddle point, maximin-minimax principal, two
	Person zero sum game.
	8. use of dominance property to find the solution games
MTH 607: Practical	After successful completion of this course, students are expected to deve
Course Practical based	problem solving skills
MTH 601&& MTH	
MTH 608: Practical	After successful completion of this course, students are expected to:
	Understand basics of vector spaces and method of solving differential equation
Course Practical based	Onderstand busies of vector spaces and method of solving differential equation
MTH 603&& MTH-	
604	
MTH –609 Practical	After successful completion of this course, students are expected to:
Course based on MTH	Students will develop Problemsolving analytical and computational skills.
605 & MTH606 B	

# **DEPARTMENT OF PHYSICS**

Class	Course	Outcomes (Students will be able to )
EWD C	DINI 101 D	
FYB. Sc	PHY 101:Basic	1. Apply the concept and knowledge of Basic Mechanics to
	Mechanics	understand and solve real life problems.
		2. Understanding of the course will create scientific temperament
	PHY102: Dynamics and	Learner will be able to
	Properties of Matter	1. Apply the concept and knowledge of Dynamics and Properties of Matter to
		understand and
		solve real life problems.
		2. Understanding of the course will create scientific temperament
	PHY 201: Electricity and	1. Apply the concept and knowledge of Electricity and
	Electrostatics	Electrostatics to understand and solve real life problems.
		2. Understanding of the course will create scientific
		temperament.
	PHY 202: Dielectrics,	1. Apply the concept and knowledge of Dielectrics, Magnetism and
	Magnetism and	Electromagnetism tounderstand and solve real life problems.

	F1	2 11 1
	Electromagnetism	2. Understanding of the course will create scientific temperament
	PHY 103: LAB I and	On successful completion of this course students will be able to:
	PHY 203: LAB II	1. To demonstrate their practical skills.
		2. To understand and practice the skills while doing Physics practical.
		3. To understand the use of apparatus and their use without fear.
		4. To correlate Physics theory concepts through practical.
		5. Understand the concepts of errors and their estimation
S Y B Sc	PHY 301:	1. Apply the concept of use of knowledge of Thermodynamics and kinetic theory
	Thermodynamics and	of gases to real life problems.
	Kinetic theory of gases L	2. Understanding of the course will create scientific temperament
	PHY 302 (A): Electronics	Learner will be able to
	_I	1. Apply the concept of use of knowledge of Electronics to real life problems.
		2. Understanding of the course will create scientific temperament.
	PHY 302 (B):	1. Apply the concept of use of knowledge of Instrumentation to real life
	Instrumentation	problems.
	msu amentation	2. Understanding of the course will create scientific temperament
	PHY 304: Skill	To impart theoretical knowledge to the students and provide
	Enhancement Course I	them with exposure and hands-on learning wherever possible.
	(SEC-I)	
	PHY 401: Waves,	1. Apply the concept of use of knowledge of Waves and Sound to real life
	Oscillations and	problems.
	Acoustics	2. Understanding of the course will create scientific temperament
	PHY 402: Optics and	1. Apply the concept of use of knowledge of Optics and LASERS to real life
	LASERS	problems.
		2. Understanding of the course will create scientific temperament
	PHY 303: Lab III and	The scientific knowledge improves the experimental and handover training.
	PHY 403: Lab IV -	
	General Physics II	
T Y B Sc	PHY 501: Mathematical	1. Apply the concept and knowledge of Mathematical physics to understand and
	physics	solve real life problems.
		2. Understanding of the course will create scientific temperament
	PHY 502: Solid State	Learner will be able to
	physics	1. Apply the concept and use of knowledge of Solid state Physics understand and
		solve the real life problems.
		2. Understanding of the course will create scientific temperament
	PHY 503: Atomic and	Apply the concept and knowledge of Atomic and Molecular Physics to
	Molecular physics	understand and solve the real life problems.
	Wiolectiai physics	Understanding of the course will create scientific temperament.
	DIIV 504(A): Electronics	
	PHY 504(A): Electronics-	1. Apply the concept and use of knowledge of Electronics and Digital Electronics
	II	to real life problems.
	DVIV. FO. (72)	2. Understanding of the course will create scientific temperament
	PHY 504(B):	1. Apply the concept and use of knowledge of Instrumentation to understand and
	Instrumentation-II	to solve real life problems.
		2. Understanding of the course will create scientific temperament
	PHY 505: Solar energy	Apply the concept of use of knowledge of energy resources, solar radiations and
	and applications	conversion to real life problem.
		2. Understanding of the course will create scientific temperament.
		3. To impart knowledge of basic concepts of solar cell fundamentals.
	1	<u> </u>

	4. To provide the knowledge and methodology of conversion of solar energy into electricity.
PHY 506 (E):	1. Explain basic principles of C ++ programming language
Programming in C ++ - I	2. Concept of Variable, Operators, Control structure, Functions used in C++
	programming.
	3. Develop skills in writing a simple C++ program using a different statement.
	4. Apply the best features of mathematics, engineering, and natural sciences to
7777 101 0	program real-life problems
PHY 601: Quantum	1. Apply the concept and use of knowledge of Quantum Mechanics to real life
Mechanics	problems.
	2. Understanding of the course will create scientific temperament
PHY 602: Material	1. Apply the concept of use of knowledge of Material Science to real life
Science	problems.
	2. Understanding of the course will create scientific temperament
PHY 603: Nuclear	1. Apply the concept and use of knowledge of Nuclear Physics to understand and
Physics	solve the real life problems.
	2. Understanding of the course will create scientific temperament
PHY 604: Modern and	1. Apply the concept and use of knowledge of Modern and Applied Physics to
Applied Physics	understand and solve the real life problems.
	2. Understanding of the course will create scientific temperament
PHY 605: Basic	1. Handle and use various basic mechanical and electrical measuring instruments
Instrumentation Skills	2. Understanding of the course will create scientific temperament
PHY 606 (E):	Acquire knowledge of Object and Class.
Programming in C+ + - II	2. Explore polymorphism using function overloading and operator overloading.
	3. Understand the different aspects of the hierarchy of classes and their
	extensibility
	4. Understands the concept of Virtual function, streams, and files, Generic
	Programming.
	5. Write programs for handling run time errors using exceptions
PHY-	The scientific knowledge improves the experimental and handover training
507,508,509,607,608,609:	
Practical and Project	
Tractical and Troject	

# **DEPARTMENT OF BOTANY**

Class	Course	Outcomes (Students will be able to )
F.Y. B.Sc.	BOT. 101: Diversity of	1. Provide identification technique of microbes, Viruses, Bacteria, Algae and
	Lower Cryptogams	Fungi.
		2. Understand the systems of classification of Microbes, Viruses, Bacteria, Algae
		and Fungi, and its interdisciplinary approaches.
		3. Provide lab-based training in writing short species descriptions and
		illustration.
		4. Recognize members of the major microbes, Viruses, Bacteria, Algae, Fungi
		and their medicinal, economic importance for human welfare.
	BOT 102: Morphology of	1. Students will able to understand ground plan of angiospermic plant.
	Angiosperms	2. Students will aware about vegetative and reproductive characteristics of
		angiospermic plant.
		3. Students will able to understand the modifications and functions of plant parts.

	BOT 103: Practical Based on BOT 101 and BOT 102	<ol> <li>Student can diversity of Algal and fungal genus and species.</li> <li>Interpret the performance characteristics and life cycle of various lower plants.</li> <li>Detail study of the different types of fungal diseases and symptoms in plants and its prevention and control measures.</li> <li>To aware the student about the morphological characters of angiospermic plants.</li> </ol>
	Bot-201: Diversity of Higher Cryptogams	<ol> <li>Student will be able to understand the basic knowledge of the subject.</li> <li>To understand the basic structure and study the comparative characteristic of Bryophytes and Pteridophytes.</li> <li>Also, to understand the structural similarities and differences among both the groups.</li> <li>Student will be able to aware developmental stages of life cycle of higher cryptogamic plants.</li> <li>To facilitate students for taking up and shaping a successful career in botany.</li> </ol>
	Bot-202: Taxonomy of Angiosperms	1. Understanding of angiospermic plants Causes of phenomenal succession and alternation of generation.  2. Understand the systems of classification of angiosperms, nomenclature and interdisciplinary approaches.  3. Provide lab-based training in writing short species descriptions and illustration.  4. Recognize members of the major angiosperm families by identifying their diagnostic features, economic and medicinal importance.
	BOT 203: Practical Based on BOT 201 and BOT 202	<ol> <li>Understand botanical gardens and herbarium technique</li> <li>Know the systematic, morphology and structure, of bryophytes and Pteridophytes.</li> <li>To gain knowledge about life cycles of gymnosperm plants.</li> <li>Student will Know the concept of methodology in taxonomy.</li> <li>Student will know the morphological, distinguishing characters of plant Families.</li> <li>Student know economic importance of plants.</li> <li>Student briefly studied on herbarium techniques.</li> </ol>
S.Y. B.Sc.	Bot. 301 Plant Anatomy	<ol> <li>Know the scope of plant anatomy in various fields.</li> <li>Understand the structure, types and functions of epidermal tissue system with reference</li> <li>To epidermis, stomata and epidermal outgrowths.</li> <li>Learn the mechanical tissue system with reference to their distribution in plants and</li> <li>Following the principle for providing the strength and support to the plants.</li> <li>Understand the types of vascular tissue system and their role in development of normal an abnormal secondary growth in various plant as per the need of plant.</li> </ol>
	Bot. 302 Plant Physiology	<ol> <li>Get deeper understanding about the sub-topics of botany.</li> <li>Understand major concepts about plant functioning.</li> <li>Understand and define various topics of plant physiology like: plant-water relation, mineral nutrients essential for plant and their translocation etc.</li> <li>How's the plant grows from seedlings and what are the main Factors and hormones necessary for that.</li> </ol>
	Bot. 303 Practicals based on Bot. 301 and 302	<ol> <li>Observe and identify internal structures of plants tissues.</li> <li>Observe primary and secondary internal structure of dicots and monocots.</li> <li>Understand the transport phenomenon of water and Transpiration.</li> <li>Determine osmotic potential of vacuolar sap by plasmolytic method using leaves of Tradescantia.</li> </ol>

		5. Describe mineral deficiency symptoms using plant material/photographs.
	Bot. 304 Mushroom	1. Understanding much some times (edible & maison and a much some
		Understanding mushrooms, types (edible & poisonous) and mushroom production.
	Culture Technology	2. Learning cultivation of different edible mushrooms.
		3. Knowledge about climatic requirements of mushroom cultivation.
		4. Knowing harvesting and post harvesting processes of mushroom.
		5. Learning value added products preparation from mushroom.
	Bot. 401 Plant	1) Study of scope and importance of plant embryology with reference to
	Embryology	microsporgangium
		2) and male gametophyte development; megasoprangium and female
		gametophyte development.
		3) Provide in depth knowledge to the students related to pollination mechanism.
		4) Process and significance of double fertilization followed by structure, types, and functions of endosperm and embryo in flowering plants.
		5) Provide in depth knowledge to the students related to Seed dispersal,
		Apoxixis, parthenocarpy etc.
	Bot. 402 Plant	1. Understand Plant physiology, a sub discipline of Botany concerned with
		functional aspects of plants
	Metabolism	2. Remember all internal metabolic activities of plants.
		3. Understand Photosynthesis & Respiration process.
		4. Explain the growth and development of plants using additional OE resources
		available in the internet using modern ICT tools.
		5. Understand the transport phenomenon of water and Transpiration.
	Bot. 403 Practicals based	1. Observe various Embryology slides.
	on Bot. 401 and 402	<ul><li>2. To study structure and types of embryo sacs, Ovules.</li><li>3. To know about seed and fruit dispersal</li></ul>
		4. Separate of chloroplast pigments using paper chromatography
		5. Rate of photosynthesis under varying CO2 concentration.
		6. Discuss the effect of kind of light intensity, bicarbonate concentration in
		photosynthesis on oxygen evolution (Hydrilla funnel).
	Bot. 404 Nursery and	1. Explain sexual and asexual propagation methods of plants.
	Gardening	2. Demonstrate skills on vegetative propagation of plants.
	Gardening	3. Demonstrate the techniques on raising of different types of nursery beds
		4. Justify the role of various propagation structures used to raise
		horticulture plants.
		5. Understand the regulation to establish a plant nursery and quality
		parameters to be maintained. 6. Implement different routine/regular activities in a nursery.
		7. Understand the economics of a plant nursery and can maintain
		necessary records.
T.Y. B.Sc.	BOT. 501 : Lower	Know the salient features of Cryptogams plants
	Cryptogams	2. Become aware of the status of cryptogams as a group in plant kingdom.
		3. Understand the life cycles of selected genera.
		4. Learn about the economic and ecological importance of Cryptogams
		plants.
		5. Know the salient features of Cryptogams plants
		<ul><li>6. Become aware of the status of cryptogams as a group in plant kingdom.</li><li>7. Understand the life cycles of selected genera.</li></ul>
	BOT. 502:	Understand the habit of the angiosperm plant body.
		2. Understand the plant morphology.
	MORPHOLOGY AND	3. Know the vegetative and reproductive characteristics of the plant.
	SYSTEMATICS OF	4. Outline the concepts of Taxonomy with Identification, Nomenclature
	ANGIOSPERMS	and various classifications of plants using additional OE resources
	THOTOSI LIMIS	available in the internet using modern ICT tools.

	5. Discus about the family's Study on Herbarium and Botanical Gardens.
BOT. 503: CELL BIOLOGY AND GENETICS	<ol> <li>Understand the basic components of cell, key role of cell division during cell cycle.</li> <li>Explain about inheritance and behaviour of chromosomes using</li> </ol>
	<ul> <li>additional OE resources available in the internet using modern ICT tools.</li> <li>3. Describe Plant Breeding and produce new crop varieties superior to existing types in all.</li> <li>4. Realize the cell as a structural and functional unit of life, basic</li> </ul>
	components of a cell & explain basic principles.
BOT. 504: PLANT PHYSIOLOGY AND	1. Understand and define various topics of plant physiology like: plant-water relation, mineral nutrients essential for plant and their translocation etc.
BIOCHEMISTRY	<ol> <li>How's the plant grows from seedlings and what are the main factors and hormones necessary for that.</li> </ol>
	3. Realizes primary and secondary metabolites and their differences, major types - terpenes, phenolics, alkaloids, terpenoids, steroids.
	<ul> <li>4. Aware of sources of drugs and biosynthesis : (Phenols ,Steroids, Alcohols), enzymes, proteins and amino acids etc.</li> <li>5. Discuss the common grade drugs and their the reportion values.</li> </ul>
BOT. 505:	<ul><li>5. Discuss the common crude drugs and their the repeutical values.</li><li>1. Explain isolation and role of various soil bacteria in bio-fertilizer</li></ul>
BIOFERTILIZERS	<ul><li>production.</li><li>2. Describe production steps and specific requirements for each biofertilizers.</li></ul>
	<ul><li>3. Restore the soil fertility by performing the sustainable agriculture practices viaorganic farming</li><li>4. Apply the knowledge gained to generate opportunities of self-employability</li></ul>
BOT. 506B:	1. Understand different horticultural practices and commercial use of the
HORTICULTURE	<ol> <li>methods.</li> <li>Know principles of polyhouse.</li> <li>Aware production technologies, harvesting and marketing of crops along with entrepreneurship.</li> <li>Develop skills of preparation and preservation of different preserved products.</li> </ol>
BOT. 601: HIGHER	Student will be able to understand the basic knowledge of the subject.
CRYPTOGAMS	<ol> <li>To understand the basic structure and study the comparative characteristic of Bryophytes and Pteridophytes.</li> <li>To understand the structural similarities and differences among both the</li> </ol>
	groups.  4. Student will be able to aware developmental stages of life cycle of higher cryptogrammic plants. To facilitate students for taking up and shaping a successful career in botany.
BOT. 602:	Understand Gymnosperms with respect to distinguishing characters,
GYMNOSPERMS AND	comparison with Angiosperms, economic importance and classification and life cycles of Pinus and Gnetum.
PALEOBOTANY	2. Know the scope of Paleobotany, types of fossils and geological time scale.
	<ol> <li>Understand the various fossil genera representing different fossil groups.</li> </ol>

BOT. 603:  MOLECULAR  BIOLOGY  BOT. 604: ECONOMIC	<ol> <li>Study of Genes and their Inheritance Patterns, Concept of Evolution.</li> <li>Learn the scope and importance of molecular biology.</li> <li>Understand the biochemical nature of nucleic acids, their role in living systems, experimental evidences to prove DNA as a genetic material.</li> <li>Understand the process of synthesis of proteins and role of genetic code in polypeptide formation.</li> <li>Become aware of applications of different economically important</li> </ol>
BOTANY  BOTANY	<ol> <li>Become aware of applications of different economically important plants in various industries</li> <li>To highlight the potential of these studies to become an entrepreneur conservation and sustainable use of plant</li> <li>To create foundation for further studies in Botany</li> <li>Awareness of the socio-economical challenges related to plant sciences.</li> </ol>
BOT. 605: FLORICULTUR	<ol> <li>Realize the scope and significance of horticultural practices.</li> <li>Plan and develop orchards and recall its managements.</li> <li>Utilize the green manuring and organic fertilizers.</li> <li>Identify and appraise appropriate plant growth stimulating and inhibiting hormones.</li> <li>Solve economic implications of cultivation of tropical and subtropical</li> </ol>
BOT. 606.B: PLANT	fruits and vegetable crops.  1. Describe sources and types of genetic variation and explain their importance for plant improvement.
BREEDING	<ol> <li>Describe the progression of stages within a modern breedingprogramme from the setting of breeding objectives, through the development and implementation of breeding strategies to the commercialisation of plantvarieties and the protection of intellectual property.</li> <li>Describe methods that are used in plant breeding.</li> <li>Locate, analyse, evaluate and synthesise information relevant to plant breeding.</li> <li>Judge which plant breeding methods are appropriate for specific objectives and situations.</li> <li>Formulate and justify a plan for the application of plantbreeding methods to achieve a specific objective.</li> <li>Carry out specific plant breeding activities, such as selection of parental germplasm, observation and recording of phenotypic variation and selection among progeny.</li> </ol>

### **DEPARTMENT OF ZOOLOGY**

Class	Course	Outcomes (Students will be able to )
F.Y. B.Sc.	Zoo: 101: Invertebrate Zoology:	<ol> <li>Know the basic concept, common and unknown invertebrate species.</li> <li>Acquire the ecological relationships of the local species.</li> </ol>
	Zoo:102: Grasshopper- The Nonchordate	<ol> <li>Acquire knowledge about external morphological features, internal structural and functional details of grasshopper.</li> <li>Develop deeper knowledge about reproduction and life cycle of grasshopper.</li> </ol>
	Zoo: 103: Practical course I	<ol> <li>Know the common and unknown invertebrate species.</li> <li>Acquire practical knowledge about structural and functional aspects of grasshopper.</li> </ol>
	Zoo: 201: Vertebrate Zoology	<ol> <li>Gain the knowledge of thesystematic position, habit and habitat of vertebrate animals.</li> <li>Understand the general topics related to vertebrate animals.</li> </ol>

	Zoo: 202: Frog-The	1. Understand the systematic position, habit and habitat of Frog.
	Chordate	2. Acquire the knowledge about structural and functional details about
		Frog.
	Zoo - 203: Practical II	1. Enlighten themself with knowledge related to systematic features of
		vertebrate animals.
		2. Enrich themselves with understandings of accessory organs.
		3. Know the poisonous and nonpoisonous snakes.
S. Y. B. Sc	Zoo: 301: Physiology	1. Know the basic conceptof functioning the human body.
		2. Acquire the knowledge of Physiological process going inside the body.
	Zoo:302: Biochemistry	Acquire knowledge about metabolism of physiological process in human body.
		Develop deeper knowledge about enzymatic reactions.
	Zoo: 303: Practical course	Know the blood composition.
	I	2. Acquire practical knowledge about histology of various organs.
	Zoo: 401: Genetics	Gain the knowledge of thegenetics history and various hereditary
		processes
		2. Understand the sex determination in animals.
	Zoo: 402: Evolutionary	Understand the evolution of mammals
	Biology	2. Acquire the knowledge about evidences of evolution.
	Zoo - 403: Practical II	Enlighten themself with knowledge related to evolution of of
		vertebrate animals.
		2. Enrich themselves with understandings homology and analogy of
		organs organs

# DEPARTMENT OF ELECTRONICS

Class	Course	Outcomes (Learner will be able to)
F.Y. B.Sc.	ELE-101: Circuit	Apply knowledge to develop circuits using electronic devices.
	Components and Network	2. Apply the concept and knowledge of electronics devices to real life problems.
	Analysis	3. Simulate complex circuits and understand the behaviour of the systems.
	ELE-102: Basics of	1. Understand and analyse, linear and digital electronic circuits.
	Digital Electronics	2. Review, prepare and present technological developments.
	ELE-103:	1. Familiarize with basic electronics components, testing and measuring
	ELECTRONICS LAB-I	instruments.
		2. Understand the practical use of various networks theorems
		3. Study the electronics circuits analysis and verification of the circuits
		4. Have the knowledge of passive filters and skill to build and test the circuits
		5. Familiarize with logic gate ICs and have the knowledge of truth tables of logic
		gates.
		6. Study various digital combinational circuits.
	ELE-201: Analog	1. Apply the concept and knowledge of digital integrated circuit chips to develop
	Electronics	new systems.
		2. Apply practical knowledge to solve real life problems of the society.

	ELE-202: Digital Circuits	1. Understand of the course and create scientific temperament and give exposure to the students for independent use of digital integrated circuit chips for
		innovative applications.
		Model complex circuits and simulate them.
		3. Handle simulation software to analyse analog and digital electronics circuits
	ELE-203:	Familiarize with various Semiconductor devices.
	ELECTRONICS LAB-2	2. To understand the behavior of semiconductor devices.
	LLLE TROMES LAB-2	3. Understand the practical use of various semiconductor devices.
		Familiarize with combinational and sequential circuit ICs.
		5. Design of various combinational and sequential circuits.
		6. Study various data processing circuits.
S. Y. B. Sc	ELE-301: Analog	Apply knowledge to develop circuits of analog modulation and demodulation.
5. 1. <b>B</b> . 50	Communication	2. Analyse modulation circuits and understand the behaviour of the systems.
	Communication	3. Review, prepare and present technological developments
	ELE-302:	Apply the concept and knowledge of microprocessors to real life problems.
	Microprocessors and	Apply the concept and knowledge of interoprocessors to real the problems.     Understand and analyse 8085 microprocessor and its programming.
	Applications	S. Review, prepare and present technological developments
	Applications	3. Review, prepare and present technological developments
	ELE-303:	The scientific knowledge improves the experimental and handover training.
	ELECTRONICS LAB-III	
	ELE-304: Electrical	To expose students to practical aspects of electronics. Therefore, it is not
	Circuits and Network	expected anywhere to teach physics behind topics covered in the syllabus.
	Skills	
	ELE-401: Digital	1. Apply the concept and knowledge of digital communication to develop new
	Communication	systems.
		2. Apply practical knowledge of microcontrollers to solve real life problems of the society.
		3. Handle hardware and software to shoot problems of the society.
	ELE-402:	1. Understanding of the course and create scientific temperament and give
	Microcontrollers and	exposure to the students for independent use of microcontroller for innovative
	Applications	applications.
		Gain knowledge of microcontroller programming.
		3. Handle hardware and software to shoot problems of the society.
	ELE-403:	The scientific knowledge improves the experimental and handover training.
	ELECTRONICS LAB-2	
	ELE-404: Computational	to emphasize its role and gain skills to students in solving problems in
	Techniques in Electronics	Electronics