Vasantrao Naik Shikshan Prasarak Mandal’s

Vasantrao Naik Mahavidyalaya

Airport Road, Chhatrapati Sambhajinagar (MS) 431003

INTERNAL QUALITY ASSURANCE CELL (IQAC)- 2025-26

2.6 Student Performance and Learning Outcome

Programme Outcomes (PO's),

Program Specific Outcome (PSO's

and

Course Outcomes (CO's)

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<u>Program Outcomes, Program Specific Outcomes and Course Outcomes</u>

BA ENGLISH

PROGRAM OUTCOMES:

1. Inculcation of ethics, moral values and humanity among learners.
2. Learners will be motivated to create socio-cultural and literary traditions.
3. Awareness regarding important social issues will be generated among the learners.
4. Learners will develop intellectual, personal and professional abilities through effective communication skills; ensuring high standard of behavioural attitude through literary subjects and will help them become socially responsible citizens.
5. Learners will be sensitized towards the aesthetic, cultural and social aspects of life and literature.
6. Learners will be equipped with increased linguistic and employability skills.

PROGRAM SPECIFIC OUTCOMES:

The undergraduate program in English aims to -

1. Sensitize students to the aesthetic, cultural and social aspects of literature and help them acquire accuracy in oral and written communication by strengthening grammar rules and its appropriate usage.
2. Provide students with extensive view of social, political, cultural and other aspects of society as reflected in Literature.
3. Help students acquire command over English language, linguistic structure, life and communication skills with a focus on vocational skills.
4. Make them learn to appreciate creative art and literature.
5. Develop students' abilities like creative thinking and writing.
6. Make them familiar with major genres of literature, its framework to understand linguistic, cultural and historical background of the texts and develop fundamental skills required for close reading and critical thinking of the text and context.
7. Acquire in-depth knowledge of the religious, socio-intellectual and cultural thoughts through literature
8. Create holistic approach towards education.

9. Develop knowledge competence in select thrust areas that would provide directions to the students in terms of research as well as career options.
10. Develop a sense of inquiry and capability among students for asking relevant/appropriate questions, problem solving, synthesizing and articulating.
11. Create atmosphere of research and motivate students to undertake research in humanities
12. Encourage multidisciplinary research
13. Provide job opportunities through skill-based courses
14. Understand and recognise value system, moral dimensions and self-responsibility for nation and society.

COURSE OUTCOMES;

B. A. First Year: English

Semester I English Paper I DSC-1

Course Title: English Poetry Credit: 04 (T-2+P-2) Hours/Periods: 60

Learning objectives:

1. The nature and function of English poetry
2. The use of poetic devices
3. Use of diction, language etc.
4. Creative and critical response of learners towards English poetry

Course Outcomes:

By the end of course, the students will study and learn -

1. Meaning of Poetry, its types and forms
2. The rise and development of English Poetry, trends in English poetry
3. Major and minor British poets, texts and contexts.
4. Reflection of human values in English poetry
5. Undertake projects, research in English poetry
6. Write poetry on current situations.

English Paper II

Generic Elective or Open Elective (GE/OE) - 01

Course Name: Functional English Course Code: GE/OE-1 Credits: 02 Hours: 30

Course Objectives:

1. Use of basic grammar in English language
2. Preparation for writing skills

Course Outcome:

By the end of course, the students will learn-

1. Basic grammar in English language.
2. Writing skills with the help of clause elements, phrases, clause types, sentences types.
3. To prepare for various competitive examinations.
4. To spot common errors, sentence improvement, build vocabulary, selecting proper words, subject-verb concord, ordering of words in sentences etc

English Paper III

Skill Enhancement Course (SEC-ENG-1)

SEC-ENG-1 Course Title: Metalinguistic Skills Credit: 02 (T-1+P-1) Hours/Periods: 30

Course Outcomes:

At the end of the course, the student will learn and understand-

1. Acts of writing, the ability to think grammatically and to reflect on the effectiveness of language choices.
2. Phonemic awareness, syntactic awareness, and lexical awareness.
3. Conversational interaction and the role of metalinguistic skills.
4. The intended message of the speaker through metalinguistic skills.
5. Relation between language and culture

English Paper IV

Ability Enhancement Course (AEC-1)

ACE-1 Course Title: Communication Skills in English Credit: 02 Hours/Periods: 30

Course Outcome:

At the end of course, students will learn -

1. Communication skills, importance of all skills and use of effective communication skills.
2. To speak at public places.
3. To prepare for job interview
4. Manners, etiquettes, and maintain good relations with others
5. To show higher level of critical thinking and sharpen their accuracy in writing.

English Paper V Sem II

Course Title: DSC-4 Course Title: English Drama Credit: 04 (T-2+P-2) Hours/Periods: 60

Course Objectives

1. To introduce students to drama and its use in life
2. To understand life through English plays and theatre

Course Outcomes:

1. At the end of course, students will learn-
2. Meaning and elements of English drama
3. Various trends in English drama
4. To demonstrate a broad knowledge of major and minor British playwrights and texts and contexts
5. To play various roles in drama/theatre
6. To write dramas

English Paper VI

Generic Electives/Open Elective:2 Course Title: GE/OE:2-ENG-02

Course Title: English for Competitive Examination Credits: 02 Periods: 30

Course Outcome:

1. At the end of course, the students will learn -
2. The use of basic grammar in English language learning.
3. To prepare for various competitive examinations.
4. To spot common errors, sentence improvement, build vocabulary, selecting proper words, subject-verb
5. Concord, ordering of words in sentences etc.
6. To enable students for employment with requisite professional skills, ethics and values.

English Paper VII

Vocational Skill Course (VSC): Course Code: VSC-ENG:1

Course Title: Translation in Practice Credit: 02 Hours/Periods: 30

Course Outcomes

At the end of course, the students will learn-

1. Translation as an important branch of study and what is good translation,
2. Basic but valuable techniques used by a good translator in the translation between English and Marathi or English and Hindi.
3. To understand the idea, style and tone of the writer, the historical and cultural context of the writing, as well as the explicit and implied meanings of words, the

grammatical structures of sentences, and the logic of sentences and paragraphs in order to achieve faithfulness, expressiveness, and elegance in the translation.

4. What makes a qualified professional translator and acquires the abilities and skills that such a translator needs.

English Paper VIII Sem II

Ability Enhancement Course: Additional English

AEC-2: Additional English Course Title: Business English Credit: 402 Hours/Period: 30

Course Objectives

1. The course introduces students to brines English. They will acquire basic skills useful for business like business correspondence, negotiations, formal networking, business vocabulary, report and proposal writing, vocabulary for professional purposes, Language skills with fluency development, grammar, writing, and vocabulary development.

Course Outcomes;

1. At the end of course, students will learn
2. Business English
3. Business Communication skills

Subject: Compulsory English

BA/BCom/BSc/BSW/BFA Second Year Ability Enhancement Course (AEC) – 2

Course Title: Soft Skills in English Theory: 02 Credits; Practical: NA; Total Credits: 02

Course Objectives:

1. The course is designed with the objective to equip the students with the skills to effectively communicate in English. It also helps students for everyday communication in English. It trains the students in interview skills, group discussions and presentation skills. It also exposes students to other important skills such and computing and programming and motivates the students to develop confidence.

Course Outcomes:

At the end of course, the students will learn

1. Soft skills and communication skills
2. Useful tips for personality development
3. Manners and etiquettes at virtual communication
4. Skills useful in corporate jobs

5. To develop critical thinking

Optional English Course Second Year of BA Semester III

Major (Core) DSC – 3 Course Title: English Novel Theory Credits: 02 Practical Credits: 02 Total Credits: 04

Course Objectives:

1. The course is designed with an intention to introduce students to the rise and development of English Novel. It will also help students to understand and analyse the literary devices and components. The course develops critical reading and interpretation among students.

Course Outcomes:

By the end of the course, the students will learn

1. Meaning of novel and its different types
2. The development of English Novel
3. The major, minor and significant novelists and their contribution
4. Manifestation of human nature, experiences, values, ethics, empathy and emotional intelligence
5. The different cultures and time span
6. Undertake projects in English Novel
7. To critically perceive and review the novel

Bachelor of Arts: Second Year

Semester III

Major (Core) DSC – 4 Course Title: Pre-Independence Indian English Literature

Theory Credits: 02 Practical Credits: 02 Total Credits: 04

Course Objectives:

1. The Course contents are structured to provide with comprehensive idea about Indian English literature before Independence. It traces the trajectory of the growth of Indian English literature from the period of its inception to the Pre-Independence period. Selections from Indian English poetry, prose and drama genres intend to teach students philosophical concepts of Indian society, culture and history. The course is also designed to help students develop an understanding of the structural development of the English language.

Course Outcomes:

At the end of course, the students will learn

1. The concept of Indian English literature, its rise and growth
2. The socio-cultural and historical phenomena of Pre-Independence period
3. Literary traditions and their representations of a pluralist society
4. Creativity in English language.

Bachelor of Arts: Second Year

Semester III Minor – 01 Course Title: Passage to Short Story

Theory Credits: 02 Total Credits: 02 Marks: 50

Course Objectives:

1. The course is designed to explore the short story in depth. The course contents will help to understand the theory of the short story, difference between short story and fable, parable, tale, and anecdote, differentiate between a short story and a novel. The students will be introduced to brief history of the short story, definitions and characteristics of a short story.

Course Outcomes:

At the end of course, the students will learn

1. Elements that make up a short story.
2. Brief history of the short story
3. Analyse short stories more effectively
4. Identify and discuss a variety of literary techniques and styles used in short stories.
5. Identify and evaluate a variety of research tools to locate literary scholarship.

Bachelor of Arts: Second Year

Semester III

Minor – 02 Course Title: Passage to Poetry Theory Credits: 02 Total Credits: 02 Marks: 50

Course Objectives:

1. The syllabus is designed to introduce the student's poetry as genre including its definition, nature of poetry, objective and subjective poetry.
2. It also helps students to be acquainted with poetic devices, diction and language. The students can read, comprehend and summarize the poem in own words. It enhances the poetic sensibility of the students.

Course Outcomes:

At the end of course, students learn;

1. Understand the nature of poetry, its definition, types of poetry.
2. Analyze and interpret the meaning of a poem by examining its various poetic devices.

3. Explore different ways of expressing ideas and emotions through the use of poetic devices.
4. Gain a deeper understanding and appreciation of different societies, cultures, periods and perspectives.
5. Comprehend the main message or theme of the poem.
6. Encounter new words and phrases that will help to expand their vocabulary and improve the understanding of poetic language.
7. Express their personal reactions to the poem while engaging in analysis and discussion with their peers.
8. Know the human values in Poetry, surface and hidden meaning of poetry.

Semester III

Generic Elective/Open Elective (GE/OE) – 3 Course Title: English at Workplace

Theory Credits: 02 Total Credits: 02 Marks: 50

Course Objectives:

1. The course is designed to develop a good command on different dimensions of English language. It helps students to prepare for competitive examinations. It also helps students to express their feelings and thoughts in correct and accurate English language at workplaces.

Course Outcomes: At the end of course, students will learn

1. Four communication skills
2. Interpersonal skills
3. Formal communication skills

Vocational Skill Course (VSC) – 2

Course Title: Business English Theory: 02 Credits; Practical: NA; Total Credits: 02

Course Objectives:

1. The course introduces students to business English. The students will acquire basic skills useful in business. The students will learn the communication, including business correspondence, negotiations, formal presentations, informal networking, business vocabulary, report and proposal writing, vocabulary for professional purposes, and reading for professional purposes. Language skills addressed include: listening, fluency development, oral intelligibility, reading, grammar, writing, and vocabulary development.

Course Outcomes:

At the end of course, students will learn

1. Business English
2. Business Communication skills
3. Language skills, grammar, advanced business vocabulary
4. Social and cultural differences

Semester IV

Major (Core) DSC – 5 Course Title: American Literature Theory Credits: 02 Practical Credits: 02 Total Credits: 04

Course Objectives:

1. The Course is structured to provide with comprehensive idea about American Literature. It traces the trajectory of the growth of American Literature. Selections from American poetry, prose and drama genres intend to teach students philosophical concepts of American society, culture and history. The course is also designed to help students develop an understanding of the structural development of the American English Language and Literature.

Course Outcomes:

At the end of course, the students will learn

1. The concept of American Literature, its rise and growth
2. The socio-cultural and historical phenomena in American Society and Culture Literary traditions and their representations of a pluralist society

Semester II

Major (Core) DSC – 6

Course Title: Post-Independence Indian English Literature Theory Credits: 02

Practical Credits: 02 Total Credits: 04

Course Objectives:

1. The course is designed to introduce students to various genres of post-independence Indian English literature. The course also helps students to familiarise with trends and movements in Post-Independence Indian English literature. It also helps students to analyse and interpret rhetorical elements on a text.

Course Outcomes:

At the end of Course, the students will learn

1. Different genres of Indian writing in English
2. Great writes of Indian writers in English.
3. Significant cultural and societal issues presented in Indian English literature

4. to enrich their knowledge and broaden their horizon regarding Indian English literature
5. Compose a text based on one's knowledge from literary reading

Semester II

Minor – 01

Course Title: Passage to One-Act-Play Theory Credits: 02 Total Credits: 02 Marks: 50

Course Objectives:

1. The said course aims to introduce a few masterpieces of drama, most particularly One Act Plays and the life dramatized in the most precise and witty form of literature. The course is designed to inspire the students to read, appreciate, study and if possible, compose One Act Plays of their favourite themes. This course explores the world of one-act plays, focusing on their structure, themes, and dramatic techniques. Students will read, analyze, and perform a selection of one-act plays from various genres and time periods. Emphasis will be placed on character development, pacing, dialogue, and the power of brevity in storytelling.

Course Outcomes:

At the end of course, the students will learn;

1. The art and science of drama, most particularly One Act Plays

2. The art of critical appreciation of a few masterpieces of drama, most particularly One Act Plays both in India and abroad

3. A few contours and nuances of Life dramatized in the most precise and witty form of literature called One Act Play

4. To compose One Act Plays of their favourite themes.

5. Understand the structure and conventions of one-act plays.
6. Develop analytical skills through reading and interpreting one-act plays.
7. Improve acting skills through performance and presentation.
8. Explore the historical development of the one-act play and its impact on theatre.
9. Learn about the importance of dialogue, conflict, and resolution in a short form.

Semester II

Minor – 02

Course Title: Passage to Phonetics Theory Credits: 02 Total Credits: 02 Marks: 50

Course Objectives:

1. The course is designed to develop students' knowledge of the structure of English. It enhances linguistic competence of students. The basic of phonetics including speech mechanism, speech organs, IPA Symbols, speech sounds, word stress and transcription skills will contribute to improving students' own pronunciation. It also improves communication skills and accent when speaking English

Course Outcomes:

At the end of the course, the students will learn;

1. Basics of Phonetics.
2. Better Pronunciation.
3. To recognize speech mechanism including speech organs.
4. To communicate effectively and fluently.
5. To recognize speech sounds-vowels and consonants- and classification and also recognize IPA symbols.

Generic Elective/Open Elective (GE/OE) – 4

Course Title: Vocabulary Studies Theory Credits: 02 Total Credits: 02 Marks: 50

Course Objectives:

1. The course is designed to meet the needs of students who wish to enhance their vocabulary to promote success in reading skills. The course will help students to develop correct use of vocabulary and accuracy and conciseness in English language.

Course Outcomes:

At the end of course, students learn;

1. Effective use a wide range of words
2. Relationships between words (synonyms, antonyms, analogies)
3. Break down complex words into parts to derive meaning, utilizing context clues to decipher word usage
4. Distinguish between synonyms, antonyms, and related words to enrich vocabulary usage.
5. Use of proper word choice to effectively communicate ideas in writing and conversation.

Semester II

Skill Enhancement Course (SEC) – 2

Course Title: The Art of Formal Writing Theory: 01 Credit; Practical: 01 Credit; Total Credits: 02

Course Objectives:

1. The Course is designed to introduce students the art of formal writing in good English. The course helps students to express his or her thoughts in clear and fitting English language in neat and well-turned sentences.

Course Outcomes:

At the end of course, students will learn;

1. Principles of correct English
2. How to express thoughts and feelings in correct English language
3. Communicate effectively using formal writing styles
4. Various kinds of formal writings and formal communication

B. A. III

Subject: English Semester- V

English Paper No. IX

Title of the Paper: Study of the English Language-I (Paper IX) Paper Code: OPE 9

Maximum Marks: 50

Aims and Objectives:

1. To develop students' knowledge of the structure of English;

2. To enhance linguistic competence of students.

Course Outcome:

At the end of the course, students will learn;

1. The basics of English grammar
2. Better Pronunciation of the language.

English Paper No. X

Title of the Paper: Literary Theory and Criticism-I (Paper X) Paper Code: OPE 10

Maximum Marks: 50

Aims and Objectives:

1. To develop critical and analytical ability of the students.
2. To produce connoisseurs of literature and life.

Expected Outcome:

1. The students would become connoisseurs of literature and life.

English Paper No. XI

Title of the Paper: Research Project - Theory (Paper XI) Paper Code: OPE 11 Maximum Marks: 50

Aims and Objectives:

2. To develop research aptitude of students.
3. To groom the students as good researchers.

Expected Outcome:

1. The students would come out as good researchers

English Paper No. XII-A

Generic Elective Paper: Eclectic Literature-I Paper Code: OPE 12-A Maximum Marks: 50

Aims and Objectives:

1. To bring the students in close contact with literature from different countries.
2. To make the students aware of diverse cultures of the world.

Expected Outcome:

1. The students would develop awareness about literature and cultures of different countries of the world.

English Paper No. XII-B

Generic Elective Paper: Indian English Literature-I Paper Code: OPE 12-B Maximum Marks: 50

Aims and Objectives:

2. To take students' awareness of Indian literature at a higher level.
3. To produce pan-Indian point of view among the students.

Expected Outcome:

1. The students would have furthered their interest in Indian literature.

English Paper No. XII-C

Generic Elective Paper: Introduction to Modern Linguistics, and Research-I

Paper Code: OPE 12-C   Maximum Marks: 50

Aims and Objectives:

2. To introduce the students to basics of linguistics.
3. To inculcate importance of linguistics in the students.
4. To introduce the students to research in language and literature
5. To generate research interest among the students

Expected Outcome:

1. The students would emerge as researchers in language and literature

B. A. III

Subject: English Semester VI

English Paper No. XIII

Title of the Paper: Study of the English Language-II (Paper XIII)

Paper Code: OPE 13 Maximum Marks: 50

Aims and Objectives:

1. To develop students' knowledge of the structure of English;
2. To enhance linguistic competence of students.

Course Outcome:

At the end of the course, students will learn;

1. To basics of English language
2. Better Pronunciation
3. Grammar of English language

English Paper No. XIV

Title of the Paper: Literary Theory and Criticism-II (Paper XIV) Paper Code: OPE 14 Maximum Marks: 50

Aims and Objectives:

1. To develop critical and analytical ability of the students.
2. To produce connoisseurs of literature and life.

Expected Outcome:

1. The students would become connoisseurs of literature and life.

English Paper No. XV

Title of the Paper: Research Project - Practice (Paper XV) Paper Code: OPE 15 Maximum Marks: 50

Aims and Objectives:

1. To develop research aptitude of students.
2. To groom the students as good researchers.

Expected Outcome:

1. The students would come out as good researchers.

English Paper No. XVI-A

Generic Elective Paper: Eclectic Literature-II Paper XVI-A) Paper Code: OPE 16-A Maximum Marks: 50

Aims and Objectives:

1. To bring the students in close contact with literature from different countries.

2. To make the students aware of diverse cultures of the world.

Expected Outcome:

1. The students would develop awareness about literature and cultures of different countries of the world

English Paper No. XVI-B

Generic Elective Paper: Indian English Literature-II (Paper XVI-B) Paper Code: OPE 16-B

Maximum Marks: 50

Aims and Objectives:

1. To take students' awareness of Indian literature at a higher level.
2. To produce pan-Indian point of view among the students.

Expected Outcome:

1. The students would have furthered their interest in Indian literature.

English Paper No. XVI-C

Generic Elective Paper: Introduction to Modern Linguistics, and Research-II

Paper Code: OPE 16-C Maximum Marks: 50

Aims and Objectives:

2. To introduce the students to basics of linguistics.
3. To inculcate importance of linguistics in the students.
4. To introduce the students to research in language and literature
5. To generate research interest among the students

Expected Outcome:

1. The students would emerge as researchers in language and literature.

BA- मराठी

(मराठी भाषा व वाड्.मय अभ्यासाचे उद्देश)

PROGRAM OUTCOME

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1. वास्तवाची जाणीव करून देत जगण्याचे भान निर्माण करून देणे.
2. रोजगार व व्यवसायाची क्षमता विकसित करणे.
3. सामाजिक समस्यांची जाणीव व समज निर्माण करणे.
4. मानवी मूल्यांची, नैतिक मूल्याची जपवणूक करणे.
5. स्वातंत्र्य- समता -बंधुता -एकतेची जाण निर्माण करून देत आदर्श नागरिक घडविणे.
6. साहित्यिक, सामाजिक, सांस्कृतिक वारसा निर्माण करण्यास प्रोत्साहन देणे.
7. साहित्यातील सामाजिक मूल्यांचे आकलन करून देत आदर्शाचे पालन करणे.
8. भाषा, साहित्य, संशोधन, समीक्षण इत्यादी विषया संबंधी दृष्टिकोन निर्माण करून नवनिर्मितीला चालना देणे.
9. भाषा कौशल्याचा विकास करणे व वाचन संस्कृती वृद्धिंगत करणे.
10. विविध स्पर्धा परीक्षांसाठी प्रोत्साहन देणे व सक्षम बनवणे.

PROGRAM SPECIFIC OUTCOMES

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1. मराठी भाषेचे ज्ञान व प्रभुत्व प्राप्ती करून देणे.
2. भाषिक आविष्काराच्या विविध पद्धतीचे आकलन करून देणे.
3. संशोधनात्मक दृष्टीचा विकास.
4. साहित्य सृजन क्षमता विकसित करणे.
5. मराठी भाषा आणि साहित्याचा प्रसार प्रचार घडवणे.
6. निर्दोष लेखन कौशल्य प्राप्ती
7. व्यावसायिक कौशल्य प्राप्ती.
8. सामाजिक संवेदनशीलता व मूल्य वृद्धी.
9. सृजनात्मक लेखनाचे बहुआयामी पैलू ज्ञात करून देणे.
10. महाराष्ट्रीयन समाज संस्कृती व भाषिक संस्कृतीचे आकलन करून देणे.
11. विविध स्पर्धा परीक्षेसाठी ज्ञान व कौशल्य प्राप्ती करून देणे.
12. पायाभूत भाषिक कौशल्याचा विकास घडवणे.
13. मराठवाडा भाषिक साहित्यिक सामाजिक धार्मिक संस्कृतिक आदींचे आकलन करून देणे.

14. लेखक -कवी यांचे व्यक्तिमत्त्व त्यांच्या साहित्यातील आशय अभिव्यक्तीचा परिचय करून देणे.

COURSE OUTCOME:

कोर्स कोड- DSC-1 MAR /   कोर्स -बी.ए.प्रथम NEP

कोर्स- साहित्य प्रकाराचा अभ्यास - आधुनिक कविता

सत्र 1 पेपर क्रमांक 1 श्रेयांक-४ (अध्ययन २ प्रात्यक्षिक २)

१) मराठी आधुनिक कवितेचे स्वरूप समजावून देणे

२) आधुनिक कवितेच्या प्रकारांचे आकलन होण्यास मदत करणे .

३) निवडक आधुनिक कवितेतील आशयसूत्र व भाषा यातील विविध घटकांचा उलगडा करून देणे

४) निवडक आधुनिक कवितेतील जाणीवा समजावून देणे.

कोर्स-कोड- GENERIC ELECTIVES /OPEN ELECTIVES MAR कोर्स -बी.एस्सी.बी.कॉम प्रथम NEP

कोर्स-- सौंदर्यमूल्य व भाषिक कौशल्य : भाग एक

सत्र 1 पेपर क्रमांक 1 श्रेयांक २

१) निवडक कलाकृतीचा अभ्यास करण्यास मदत करणे

२) निवडक कलाकृतीच्या माध्यमातून सौंदर्यमूल्य उलगडून दाखवणे

३) भाषिक कौशल्याच्या दृष्टीने क्षमता विकसित करण्यास मदत करणे

४) वक्तृत्वाच्या माध्यमातून रोजगार निर्मिती या अनुषंगाने मार्गदर्शन करणे

कोर्स-कोड- SEC -1 MAR /कोर्स -बी.ए. NEP

कोर्स-- समाज माध्यमावरील लेखन

सत्र 1 पेपर क्रमांक 1 श्रेयंक २ (अध्यापन १ प्रात्यक्षिक १)

१) विविध समाज माध्यमाचा परिचय करून देणे

२) समाज माध्यमावरील लेखन तंत्र व कौशल्य आत्मसात करण्यास मदत करणे .

३) समाज माध्यमावरील लेखन व त्यातून रोजगार निर्मिती विषयाचे ज्ञान कौशल्य विकसित करण्यास मदत करणे.

४) व्यावहारिक ज्ञान तंत्रज्ञानाचा व्यवहारातील उपयोग समजावणे .

कोर्स-कोड- IKS -1 MAR /कोर्स -बी.ए. NEP

कोर्स-- मराठवाड्यातील संत आणि संत साहित्य

सत्र 1 पेपर क्रमांक 1 श्रेयंक २

१) मराठवाड्याचे सामाजिक, सांस्कृतिक, धार्मिक, राजकीय पार्श्वभूमी समजावून सांगणे.

२) मराठवाड्यातील संतांचा परिचय करून देऊन त्यांच्या ग्रंथरचनेच्या प्रेरणांचा आढावा घेणे.

३) मराठवाड्यातील संत यांचा परिचय व त्यांच्या साहित्याचा परिचय करून देणे

४) मराठवाड्यातील संत साहित्याचे योगदान समजावणे.

कोर्स-कोड- DSC -4 कोर्स -बी.ए.प्रथम NEP.

कोर्स-- साहित्यप्रकाराचा अभ्यास : कथा

सत्र 2 पेपर क्रमांक 2 श्रेयंक -४(अध्यापन २ प्रात्यक्षिक २)

१) कथेचे स्वरूप व घटक समजून देणे

२) कथेच्या विविध प्रकारांचे आकलन करून देण्यास मदत करणे

३) कथेचे आशय सूत्र व भाषा यातील विविध घटकांचा उलगडा करून देणे

४) कथेच्या कथानकाची जडणघडण घटना प्रसंगाच्या आधार समजून सांगणे

५) कथेतील जाणीव समजावून घेण्यास मदत करणे

कोर्स-कोड- GENERIC ELECTIVES/OPEN ELECTIVES कोर्स -बी.ए.प्रथम NEP

कोर्स-- सौंदर्य मूल्य व भाषिक कौशल्य भाग दोन

सत्र 2 पेपर क्रमांक 2 श्रेयंक २

१) निवडकलाकृतीचा अभ्यास करण्यास मदत करणे.

२) निवडक कलाकृतीच्या माध्यमातून सौंदर्यमूल्य उलगडून दाखवणे .

३) साहित्य कलाकृतीतील जीवनमूल्य आत्मसात करण्यास मदत करणे .

४) जाहिरातीचे तंत्र व कौशल्य आत्मसात करण्यास मदत करणे .

५) रोजगाराभीमूक दृष्टीकोनातून जाहिरात लेखनाचे महत्त्व स्पष्ट करणे .

६)व्यावहारिक ज्ञान तंत्रज्ञानाचा व्यवहारातील उपयोग समजावणे .

कोर्स-कोड- VSC-1 कोर्स -बी. ए.प्रथम NEP

कोर्स-- चित्रपट परीक्षण

सत्र 2 पेपर क्रमांक 1 श्रेयांक -2 (अध्यापन १ प्रात्यक्षिक १)

१) चित्रपटाचे वाड्मयीन मूल्य लक्षात आणून देणे

२) चित्रपटाचे नाट्यमूल्य व चित्रपट मूल्य यावर प्रकाश टकणे

३) चित्रपट परीक्षणाचे तंत्र व कौशल्य अवगत होण्यास मदत करणे.

४) प्राप्त कौशल्याच्या आधारे विद्यार्थ्यांना रोजगाराभिमुख बनविणे.

कोर्स- कोड- AEC-1 कोर्स -बी.ए., बीएस्सी, बीकॉम प्रथम NEP

कोर्स-- जाहिरात लेखन व रोजगारसंधी

सत्र 2 पेपर क्रमांक 1 श्रेयांक -2

१) जाहिरातीचे स्वरुप लक्षात आणून देणे

२) जाहिरातीचे तंत्र समजून घेण्यास मदत करणे

३) जाहिरातीचे विविध प्रकार समजावून सांगणे

४) जाहिरात लेखन कौशल्य आत्मसात करून रोजगार मिळविण्यास उद्‌युक्त करणे

कोर्स- Major -DSC-7 DSC-8 बी.ए. द्वितीय NEP

-कोर्स- साहित्य प्रकाराचा अभ्यास नाटक/ चरित्र

सत्र 3 पेपर क्रमांक 7/8 श्रेयांक 4/4(अध्यापन २+२ प्रात्यक्षिक २+२)

१) नाटकाचे घटक- स्वरूप - विशेषांची ओळख करून देणे.

२) नाटकाचे विविध प्रकार व वेगळेपण समजावणे.

३) नाट्यवाङ्मयाचा आढावा घेऊन कलाकृतीतील जाणीवांचा परामर्श घडवणे.

४) चरित्र संकल्पना- स्वरूप व इतिहासाची ओळख करून देणे.

५) चरित्राची निवेदन शैली लक्षात आणून देणे.

६) चरित्राचे पृथगात्मक स्वरूप उघडून दाखवणे.

कोर्स- Minor - Mn-1 Mn-2 बी.ए.द्वितीय NEP

-कोर्स- साहित्य वैभव भाग १ शेतकऱ्याचे आसूड म. फुले (वि. क. अभ्यास)/ भाग २(निवडक गद्य)

सत्र 3 पेपर क्रमांक 1/2 श्रेयांक 2/2

१) कलाकृतीचे अंतरंग समजावणे.

२) शेतकऱ्याच्या अधोगतीची सामाजिक /आर्थिक बाजू समजावणे.

३) तत्कालीन व्यवस्थेचा व आजच्या प्रस्तुतावर प्रकाश टाकून मूल्य उडून दाखवणे.

४) गद्याचे अंतरंग लक्षात घेऊन मनावर संस्कार घडवण्यास मदत करणे.

५) विविध प्रश्नांचा धांडोळा घेऊन सकारात्मक दृष्टी प्राप्त करून देणे.

६) गद्याचे भाषिक व वाङ्मयीन गुण लक्षात आणून देणे.

कोर्स- GE/OE 3-4 बी.एस्सी. बी.कॉम द्वितीय वर्ष NEP

कोर्स- स्पर्धा परीक्षेसाठी मराठी- भाग १/ भाग २

सत्र-3/4 पेपर क्रमांक 3/4 श्रेयांक 2/2

१) मराठी व्याकरणावर प्रभुत्व मिळवण्यास मदत करणे.

२) स्पर्धा परीक्षेची तयारी व तार्किकता- चिंतनात्मकता वाढीस लावणे.

३) उच्चारण स्थानाविषयी ज्ञान अवगत करून देणे.

कोर्स- VSC-2/SEC-2 बी.ए.द्वितीय NEP

कोर्स- पटकथा लेखन/ नाट्य परीक्षण तंत्र व स्वरूप

सत्र-3/4 पेपर क्रमांक 1/2 श्रेयांक 2/2 (अध्यापन १+१ प्रात्यक्षिक १+१)

१) पटकथा संकल्पना - लेखन पद्धती व आवश्यक कौशल्य तंत्र अवगत करून देणे.

२) पटकथा लेखनाच्या संधी व क्षेत्राचा परिचय करून देणे.

३) नाट्य घटक- प्रयोगाच्या अविष्करणातील परिणामकारकता लक्षात आणून देणे.

४) नाट्य परीक्षण तंत्र अवगत करून रोजगाराच्या संधी निर्माण करून देणे.

कोर्स- Major DSC -9 DSC-10. बी.ए. द्वितीय NEP

कोर्स- साहित्य प्रकाराचा अभ्यास : कादंबरी / एका साहित्यकृतीचा अभ्यास (आत्मचरित्र) :

माझी आत्मकथा डॉ. बाबासाहेब आंबेडकर(वि.सा. अभ्यास)

सत्र -4 पेपर क्रमांक 09/10 श्रेयांक 4/4 (अध्यापन २+२ प्रात्यक्षिक २+२)

१) कादंबरी- आत्मचरित्र स्वरूप - घटक समजावणे.

२) कादंबरीचे विविध प्रकार व अशय व्यक्तीचा उलगडा करून दाखवणे.

३) कथानकाची जडणघडण- प्रसंग व जाणीव समजावून सांगणे.

४) डॉ. बाबासाहेब आंबेडकरांचे आत्मचरित्र समजावणे.

५) कादंबरी/आत्मचरित्राची निवेदन शैली इतिहास लक्षात आणून देणे.

कोर्स- Minor -Mn-3 Mn-4 बी.ए. द्वितीय NEP

कोर्स- साहित्य वैभव भाग 3- जाहीरनामा: नारायण सुर्वे (वि.क. अभ्यास)

साहित्य वैभव भाग ४ (निवडक पद्य)

सत्र 4 पेपर क्रमांक 3/ 4 श्रेयांक 2/2

१) प्रस्तुत काव्यसंग्रहातील अंतरंग- समष्टीरूपी व्यापकता समजावून देणे.

२) प्रस्तुत संग्रहाची निश्चित भूमिका वाङ्मयीन मूल्य भाषिक विशेषता समजावणे.

३) पद्याचे अंतरंग व विविध प्रश्नांचा धांडोळा घेऊन सकारात्मक दृष्टी प्राप्त करून देणे.

४) पद्याच्या आधारे संस्कारशील बनवून भाषिक वांड्मयीन गुण लक्षात आणून देणे.

कोर्स- AEC-4 बी.ए. बी.एस्सी.बी.कॉम. द्वितीय NEP

कोर्स- मुलाखत तंत्र व स्वरूप.

सत्र 4 पेपर क्रमांक 2 श्रेयांक 2

१) मुलाखतीचे तंत्र व स्वरूप समजावून सांगणे.

२) मुलाखत घेण्याची क्षमता विकसित करून रोजगार संधी लक्षात आणून देणे.

३) विद्यार्थ्यांमधील सकारात्मकता वाढीस लावणे.

कोर्स- DSC-9/SEC Wi DSC-10 बी.ए.तृतीय CBGCS

कोर्स- साहित्यविचार भाग 1/ भाषाविज्ञान

सत्र 5 पेपर क्रमांक 9 /10 श्रेयांक 3-3

१) भारतीय/ पाश्चात्य साहित्य विचाराचा परिचय करून देणे.

२) साहित्याचे प्रयोजन समजावणे व निर्मिती प्रक्रिया लक्षात आणून देणे.

३) समीक्षेच्या विविध पद्धतीचा परिचय करून देणे.

४) आधुनिक भाषा विज्ञानाचा व भाषा स्वरूपाचा परिचय करून देणे.

५) प्रमाणभाषा- बोलीभाषा यातील परस्परसंबंध व भाषेबाबतचे समज- गैरसमज समजावून सांगणे.

६) संशोधनात्मक लेखनाचे तंत्र स्वरूप समजावणे

कोर्स- GE बी.ए.तृतीय CBGCS

कोर्स- आधुनिक मराठी वाङ्मयाचा इतिहास १८१८-१९२० भाग १

सत्र 5 पेपर क्रमांक 11 श्रेयांक 3

१) साहित्य -संस्कृती - इतिहास -समाज यांचा अनुबंध उलगडून दाखवणे.

२) निबंध -कथा- कादंबरी वाङ्मय प्रकाराच्या प्रेरणा स्वरूपाचा परिचय देणे.

३) अभ्यासातील कालखंडाचे वाङ्मयीन विशेष समजावणे.

४) संशोधनात्मक लेखनाचे तंत्र स्वरूप समजावणे

कोर्स- DSC-12/SEC Wi DSC-13 बी.ए.तृतीय CBGCS

कोर्स- साहित्यविचार भाग 2 / मराठी व्याकरण

सत्र 6 पेपर क्रमांक 12 /13 श्रेयांक 3-3

१) साहित्यातील विविध शब्दशक्तींचा परिचय करून देणे.

२) साहित्यातील अर्थविचार- रसविचार- मूल्यसंकल्पना उलगडून दाखवणे.

३) मराठी व्याकरणा चा परिचय व परंपरा समजावणे.

४) विभक्ती- अलंकारविचार - म्हणी व वाक्प्रचार यांचे महत्त्व समजावणे.

५) संशोधनात्मक लेखनाचे तंत्र स्वरूप समजावणे

कोर्स- GE बी.ए.तृतीय CBGCS

कोर्स- आधुनिक मराठी वाङ्मयाचा इतिहास १८१८-१९२० भाग -२

सत्र 6 पेपर क्रमांक 14 श्रेयांक 3

१) आधुनिक मराठी वाङ्मय प्रकार परिचय करून देणे.

२) काव्य-नाट्य-चरित्र-आत्मचरित्र वाङ्मय प्रकाराचे स्वरूप विशेष व महत्त्व लक्षात आणून देणे.

३) अभ्यासित कालखंडातील वाङ्मय प्रकाराचा ऐतिहासिक आढावा घेणे.

४) संशोधनात्मक लेखनाचे तंत्र व स्वरूप समजावणे

BA-HINDI

Programme Outcome:

- साहित्य अस्वादन क्षमता का विकास करना।
- अभिरुचि का परिसंस्कर करना।
- मूल्यों की स्थापना करना।
- वर्तमान की व्याख्या करने में सक्षम बनाना।
- रोजगार क्षमता का विकास करना।
- समानता की भावना का विकास करना
- सुयोग्य नागरिक का निर्माण करना।
- साहित्य सृजन क्षमता का विकास करना।
- सामाजिक समस्याओं की समझ निर्माण करना।

Programme Specific Outcome:

- मानवीय भावना और संवेदना को संवर्धित और संरक्षित किया जा सकेगा।
- सामाजिक मूल्यों को बढ़ावा देकर राष्ट्रीय चेतना की प्रबलता दिखाई देगी।
- छात्रों में अभिव्यक्ति कौशल और साहित्य के संस्कारों का बीजारोपन होगा।
- छात्रों में व्यक्तित्व विकास, संवाद कौशल और नेतृत्व के गुण परिलक्षित होंगे।
- पाठ्यक्रम से समरसता और विश्व शांति के लिए सामाजिक समर्थन बढेगा ।
- छात्रों में परिवेश की समझ और मंचीय कला का प्रभाव देखा जा सकेगा।
- छात्र रोजगार की अनेक संभावनाएं की तलाश करने में सक्षम बनेंगे।
- छात्रों में अकादमीक और सांस्कृतिक जागरुकता की वृद्धि होगी।
- हिंदी की टंकण व्यवस्था और साहित्य सृजन का कौशल सीख पाएंगे।
- साहित्य की सभी विधाओं से छात्र भली भांति परिचित हो जाएंगे।
- पर्यावरण और विज्ञान के संबंध में ज्ञान बढ़ाने के संतुलन को बनाए रखने में मदद मिलेगी।
- अनुसंधानात्मक एवं वैज्ञानिक दृष्टिकोण निर्माण होगा।
- विभिन्न प्रतियोगितात्मक परीक्षा संबंधी बुनियादी ज्ञान प्राप्त होगा।
- छात्र चिंतन, विवेचन और मूल्यांकन से संबंधित विषयों को जान सकेंगे।
- साहित्य और सिनेमा के माध्यम से छात्र सामाजिक समस्याओं एवं जटिलताओं को प्रभावी रूप से समझेंगे।

Course Outcome:

BAFY SEMESTER I हिंदी कथा साहित्य Major 1 DSC-1 श्रेयांक 04 (सैद्धांतिक 02, क्रियात्मक 02)

- छात्रों को कहानी विधा का सम्यक ज्ञान प्राप्त होगा।
- निर्धारित पाठ्यक्रम के पठन से छात्रों में भावात्मक और संवेदनात्मक गुणों का निर्माण होगा।
- पाठ्यक्रम के अध्ययन से छात्रों में लेखन और सम्यक दृष्टि का विवेक उत्पन्न होगा।
- पाठ्यक्रम में अंतर्निहित जीवन मूल्यों से जुड़कर छात्र अपने नैतिक और चारित्रिक गुणों का विकास करने में सक्षम होंगे
- छात्रों में कथा लेखन की क्षमता निर्माण होगी।
- हिंदी कहानी की रसास्वादन क्षमता का विकास होगा।

BSC FY, BCOM FY SEMESTER I हिन्दी सिनेमा और साहित्य GE / OE -1 (श्रेयांक - 02)

- हिंदी सिनेमा की परंपरा से परिचय होगा।
- साहित्य और सिनेमा के अंतर संबंधों का ।अध्ययन होगा।
- सिनेमा विधा का अस्वादन व एवं अभिरुचि का परिसंस्कार होगा।
- पाठ्यक्रम के अध्ययन से विद्यार्थी हिन्दी सिनेमा, अपने समाज की परिस्थितियों को सरलता से समझेंगे।
- विद्यार्थी में साहित्य और सिनेमा को देखने का आलोचनात्मक दृष्टिकोण विकसित होगा।
- विद्यार्थियों में भावात्मक रूप से अधिक संवेदनशीलता का भाव निर्माण होने में मदत मिलेगी।
- जीवन मूल्यों की स्थापना होगी।
- छात्र समाज, राजनीति, परिवेश को समझने योग्य होगा।

BAFY SEMESTER I संभाषण कला SEC 1 श्रेयांक 02 (सैद्धांतिक 01, क्रियात्मक 01)

- संभाषण कला से छात्रों के व्यक्तिमत्व का विकास होगा।
- छात्र संभाषण के महत्व एवं अनुप्रयोग को समझेंगे।
- छात्र वार्तालाप, भाषण, वाद विवाद, एकालाप, परिचर्चा जैसे संभाषण की विविध आयामों को समझेंगे।
- भाषण, वाद विवाद, मंच संचालन, मंची कविता आदि के बारे में छात्रों को जानकारी मिलेगी
- छात्रों को संभाषण के व्यावहारिक पक्ष का ज्ञान होगा।
- भविष्य में विद्यार्थी संभाषणकला के सहारे विभिन्न क्षेत्रों में स्वतंत्र रूप में कुशल वक्ता ,सूत्र संचालक बनेंगे।

BAFY SEMESTER II हिन्दी नाट्य साहित्य DSC - 4 श्रेयांक -04 (सैद्धांतिक 02, क्रियात्मक 02)

- छात्रों को हिंदी नाटक विधा का सम्यक का ज्ञान प्राप्त होगा।
- छात्रों में भावनाओं संचार कौशल और रचनात्मक अभिव्यक्ति का निर्माण होगा।
- नाट्य विधा के अध्ययन से छात्रों में लेखन और सम्यक दृष्टि का विवेक उत्पन्न होगा।
- छात्रों में नाट्य लेखन की क्षमता का विकास होगा।
- छात्रों में नाटक या रंगमंच के प्रति अभिरुचि निर्माण होगी।

BSC FY, BCOM FY SEMESTER II हिंदी की राष्ट्रीय काव्यधारा GE/OE -2 (श्रेयांक – 02)

- राष्ट्रीय स्वाभिमान और देश प्रेम को जागृत होगा।

- छात्र स्वाधीनता आंदोलन के इतिहास को समझेंगे
- छात्र स्वाधीनता आंदोलन में साहित्य के योगदान को समझेंगे।
- छात्रों में राष्ट्रीय एकता का भाव निर्माण होगा।
- छात्रों में देशभक्ति और देश के प्रति स्वाभिमान का भाव निर्माण होगा।
- राष्ट्रीय काव्यधारा की अवधारणा एवं स्वरूप का अध्ययन होगा।
- भारतीय साहित्यकारों के राष्ट्रीय आंदोलन का अध्ययन होगा।

BAFY SEMESTER II रचनात्क लेखन कौशल VSC- 1 श्रेयांक 02 (सैद्धांतिक 01, क्रियात्मक 01)

- इस पाठ्यक्रम के अध्ययन-अध्यापन तथा प्रायोगिक कार्य के पश्चात छात्रों में सृजनात्मक चिंतन लेखनाव्यति प्रस्तुतीकरण कौशल का विकास होगा।
- छात्रों में अपने परिवेश तथा समाज के प्रति संवेदनशीलता का विकास होगा।

BA. BSC , BCOM SEMESTER II व्यक्तित्व विकास और जीवन कौशल AEC 2
श्रेयांक 02

- विभिन्न जीवन कौशल को आत्मसात कर छात्र अपने जीवन को सरल एवं सहज बना सकते हैं।
- यह पाठ्यक्रम छात्रों में सकारात्मक व्यवहार की योग्यताएं निर्माण करेगा, जिससे छात्र दैनिक जीवन की मांगों और चुनौतियों से प्रभावी तरीके से निपटने के लिए सक्षम बनेगा।
- छात्रों में रोजगार कौशल की निपुणता आयेगी।

BASY SEMESTER III मध्ययुगीन हिंदी कविता MAJOR DSC 7, श्रेयांक 04 (सैद्धांतिक 02, क्रियात्मक 02)

- छात्र मध्ययुगीन भारतीय संत साहित्य से परिचित होंगे।
- छात्र मध्ययुगीन भक्ति परंपरा के विकास क्रम को समझेंगे।
- छात्र मध्ययुगीन साहित्य के अध्ययन से सामाजिक, आर्थिक, धार्मिक, राजनीतिक, सांस्कृतिक प्रवृत्तियों को समझेंगे।
- मध्ययुगीन साहित्य के अध्ययन से छात्रों में सामाजिक तथा राष्ट्रीयता का भाव निर्माण होगा।

BASY SEMESTER III उपन्यास साहित्य MAJOR DSC – 8, श्रेयांक 04 (सैद्धांतिक 02, क्रियात्मक 02)

- छात्र उपन्यास की कथावस्तु, शिल्प, पात्र और भाषा की संरचना को समझ सकेंगे।
- छात्र समकालीन सामाजिक और सांस्कृतिक समस्याओं की साहित्यिक प्रस्तुति को विश्लेषित कर सकेंगे।
- आपका बंटी के माध्यम से छात्र बाल मनोविज्ञान, पारिवारिक तनाव और स्त्री संघर्ष को समझ पायेंगे।
- गेशे जम्पा के ज़रिए आत्मबोध, निर्वासन और तिब्बती संस्कृति के संवेदनात्मक पक्ष से छात्र परिचित होंगे।
- संवेदनशील विषयों के ज़रिए छात्र आत्मीयता, करुणा और विवेकशीलता जैसे मूल्यों से परिचित होंगे।
- उपन्यास की भाषा, शैली, संवादों और प्रतीकों के अध्ययन से छात्रों की हिंदी भाषा पर पकड़ मज़बूत होगी।
- प्रायोगिक कार्य के माध्यम से छात्रों में शोध प्रवृत्ति और लिखित तथा मौखिक प्रस्तुति में दक्षता प्राप्त होगी।

BASY SEMESTER III हिंदी फिल्मी गीत अध्ययन MINOR 1 (श्रेयांक – 02)

- छात्र हिंदी फिल्मी गीतों में प्रयुक्त काव्य शैलियों, अलंकारों और भावों को पहचान सकेंगे।
- छात्र यह विश्लेषण कर सकेंगे कि फिल्मी गीत भारतीय समाज, संस्कृति, राष्ट्रप्रेम और जीवनदर्शन को किस प्रकारदर्शाते हैं।

- छात्र प्रमुख गीतकारों और संगीतकारों की शैलियों और रचनात्मकता की पहचान कर सकेंगे।
- छात्र पारिवारिक, सामाजिक, देशभक्ति, जीवनदर्शन तथा स्त्री विषयक गीतों की विशेषताओं को समझ पाएंगे।
- छात्र गीतों के शब्दार्थ, सन्दर्भ, कथ्य और उद्देश्य को स्पष्ट रूप से प्रस्तुत कर सकेंगे।
- छात्र उर्दू,हिंदी और लोकभाषाओं के प्रभावों को गीतों में पहचान सकेंगे।
- छात्र यह पहचान सकेंगे कि गीत किस प्रकार जनभावना और सामाजिक विचारधारा को प्रभावित करते हैं।

BASY SEMESTER III साहित्य विविधा MINOR 2 (श्रेयांक - 02)

- छात्र विभिन्न साहित्यिक विधाओं जैसे - कविता, कहानी, व्यंग्य, एकांकी, यात्रा वर्णन, निबंध आदि की पहचान करने एवं उनके स्वरूप को समझने में सक्षम होंगे।
- छात्र प्रत्येक विधा की विशेषताओं, शैलियों एवं संरचनात्मक तत्वों का विश्लेषण करने की क्षमता प्राप्त करेंगे।
- छात्र साहित्यिक रचनाओं का समीक्षात्मक अध्ययन कर सकेंगे तथा उनमें निहित सामाजिक, सांस्कृतिक एवं मानवीय मूल्यों को समझ सकेंगे।
- छात्रों की भाषा, अभिव्यक्ति एवं विश्लेषणात्मक क्षमता में वृद्धि होगी ।

BSC SY , BCOM SY SEMESTER III हिंदी व्यंग्य साहित्य GE /OE 3 (श्रेयांक - 02)

- छात्र हिंदी की अहम विधा व्यंग्य को समझेंगे।
- छात्र व्यंग्य साहित्य के योगदान को समझेंगे।
- छात्र सामाजिक भ्रष्टाचार, विसंगतियों और विद्रूपताओं को समझेंगे।
- छात्रों में सामाजिक जागरूकता का भाव निर्माण होगा।

BASY SEMESTER III अनुवाद स्वरूप और प्रक्रिया VSC 2, श्रेयांक 02 (सैद्धांतिक 01, क्रियात्मक 01)

- छात्र अनुवाद के स्वरूप एवं प्रक्रिया को समझेंगे।
- अनुवाद के महत्व एवं उपयोगिता का बोध होगा।
- छात्र अनुवाद के माध्यम से अन्य भाषाओं में निहित ज्ञान एवं भाषाई कौशल को अर्जित करेंगे।
- छात्रों में अनुवाद कौशल का विकास होगा।
- अनुवादक के रूप में रोजगार के नये अवसर प्राप्त होंगे।

BASY SEMESTER IV आधुनिक हिंदी कविता MAJOR DSC 9, श्रेयांक 04 (सैद्धांतिक 02, क्रियात्मक 02)

- छात्र हिंदी की आधुनिक कविता को समझेंगे।
- छात्र आधुनिक हिंदी कविता के विविध रूपों को समझेंगे।
- छात्र हिंदी के आधुनिक कवियों से परिचित होंगे।
- छात्र आधुनिक हिंदी कविता की विषय वस्तु एवं कवि के दृष्टिकोण को समझेंगे।

BASY SEMESTER IV कथेत्तर गद्य साहित्य MAJOR DSC 10, श्रेयांक 04 (सैद्धांतिक 02, क्रियात्मक 02)

- छात्रों को कथेत्तर गद्य विधा का सम्यक ज्ञान प्राप्त होगा।
- पाठ्यक्रम से छात्रों में भावनात्मक और संवेदनात्मक गुणों का निर्माण होगा।
- पाठ्यक्रम के अध्ययन से छात्रों में लेखन और सम्यक दृष्टी का विवेक उत्पन्न होगा।

- पाठ्यक्रम मे अन्तर्निहित जीवन मूल्यों से जुड़कर छात्र नैतिक और चारित्रिक गुणों का विकास करने में सक्षम होंगे।
- छात्रों में कथेत्तर गद्य लेखन की क्षमता निर्माण होगी

BASY SEMESTER IV हिंदी मंचीय कविता MINOR 3(श्रेयांक - 02)

- छात्रों में मंचीय कविता प्रस्तुति का कौशल विकसित होगा।
- रोजगार परक आयाम से छात्र अवगत होंगे।
- मंचीय कविता की मूल संवेदना को छात्र समझेंगे।
- मौलिक काव्य सृजन भाव विकसित होगा।
- साहित्यिक समझ में विस्तार होगा।

BASY SEMESTER IV भारतीय कहानी साहित्य MINOR 4 (श्रेयांक – 02)

- छात्र भारतीय कहानी साहित्य के स्वरूप को समझेंगे।
- भारतीय कहानी साहित्य के महत्व एवं अध्ययन की आवश्यकता का बोध होगा।
- छात्रों को भारतीय कहानियों के माध्यम से भारतीयता की पहचान होगी।
- छात्रों में साहित्यिक अनुवाद के आस्वादन एवं मूल्यांकन का विकास होगा

BSC SY , BCOM SY SEMESTER IV हिंदी गजल साहित्य GE /OE 4 (श्रेयांक – 02)

- हिंदी ग़ज़ल की परंपरा और उससे संबंधित गजलकारों से परिचित होंगे।
- भारतीय संस्कृति एवं सामाजिक मूल्यों का परिचय होगा।
- मानवीय मूल्यों से अवगत होंगे।

1) साहित्यिक मनोरंजन के साथ यथार्थ से परिचय होगा।

BASY SEMESTER IV फीचर लेखन SEC 2, श्रेयांक 02 (सैद्धांतिक 01, क्रियात्मक 01)

- छात्र फीचर लेखन की उपयुक्तता को समझेंगे।
- छात्रों में फीचर लेखन का कौशल विकसित होगा।
- छात्र फीचर लेखन के क्षेत्र से जुडेंगे।
- छात्र फीचर लेखन को रोजगार का साधन के रूप में देखेंगे।
- फीचर लेखन से विषय की गहराई तक जाने की क्षमता छात्रों में विकसित होगी।

BASY, BSC SY, BCOM SY SEMESTER IV हिंदी भाषा : सम्प्रेषण कौशल AEC-4 (श्रेयांक **- 02)**

- सम्प्रेषण की अवधारणा और प्रक्रिया की समझ विकसित होगी।
- सम्प्रेषण की तकनीक और कार्यशैली की बहुआयामी समझ आयेगी
- छात्रों को लेखन का व्यावहारिक ज्ञान होगा।
- मीडिया के विभिन्न रूपों के लिए लेखन क्षमता को बढ़ावा मिलेगा।
- सम्प्रेषण और संवाद के विविध पक्षों की समझ उत्पन्न होगी।

BATY SEMESTER V साहित्याशास्त्र – DSC PAPER 9 (श्रेयांक – 03)

- साहित्य चिंतन का अध्ययन होगा ।

- साहित्यालोचन क्षमता का विकास होगा।
- शब्द शक्ति से परिचय होगा।

1) आलोचना के भेदो से परिचय होगा।

BATY SEMESTER V हिंदी भाषा और लिपि SEC PAPER 10 (श्रेयांक – 03)

2) प्रयोजनमूलक भाषा का अध्ययन एवं प्रयोग की क्षमता का विकास होगा।
3) हिंदी भाषा के विविध रूपों से छात्रों का परिचय होगा।
4) संविधान में समाविष्ट भारतीय भाषाओं की स्थिति से छात्रों का परिचय होगा।
5) देवनागरी लिपि से परिचय होगा।
6) प्रयोजनमूलक हिंदी के अधुनातन आयामों से परिचय होगा।
7) राजभाषा हिंदी के विविध पहलुओं से परिचय होगा।

BATY SEMESTER V प्रादेशिक आत्मकथा साहित्य GE Paper 11 (श्रेयांक – 03)

- आत्मकथा विधा से छात्रों का परिचय होगा।
- आत्मकथा पठन-पाठन की अभिरुचि का विकास होगा।
- प्रादेशिक भाषा के रचनाकारों की जानकारी प्राप्त होगी।
- हिंदी आत्मकथा के साहित्य के विकास में प्रादेशिक भाषा के आत्मकथा के योगदान का ज्ञान होगा।

BATY SEMESTER VI साहित्याशास्त्र - DSC - 12 (श्रेयांक – 03)

1) भारतीय साहित्य चिंतन का अध्ययन होगा।
2) खंडकाव्य महाकाव्य का परिचय होगा।
3) साहित्यालोचन क्षमता का विकास होगा।
4) साहित्य की विधाओं का परिचय होगा।
5) आलोचना के भेदो से परिचय होगा।
6) साहित्य के सिद्धांतों से परिचय होगा।

BATY SEMESTER VI प्रयोजनमूलक हिंदी SEC Paper 13 (श्रेयांक – 03)

- प्रयोजनमूलक भाषा का अध्ययन एवं प्रयोग क्षमता का विकास होगा।
- प्रयोजनमूलक हिंदी के अधुनातन आयामों से परिचय होगा।
- मानक हिंदी का ज्ञान प्राप्त होगा।
- भाषा कौशल का विकास कराना।
- अनुवाद क्षमता का विकास होगा।

BATY SEMESTER VI हिंदी व्यंग्य साहित्य GE Paper 14 (श्रेयांक – 03)

- हिंदी व्यंग्य साहित्य से छात्रों का परिचय होगा।
- हिंदी व्यंग्य के प्रति छात्रों में पठन-पाठन की अभिरुचि विकसित होगी।
- हिंदी के व्यंग रचनाकारों की जानकारी प्राप्त होगी।
- छात्र हिंदी व्यंग साहित्य के योगदान से परिचित होगे।

B.A. (PUBLIC ADMINISTRATION)

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1. To provide students with her comprehensive understanding of the fundamental concepts, theories and principles of Public Administration.

PEO 2. To enable them to analyse and you let the functioning of the Government and public sector organisations.

PEO 3. To develop student's critical thinking and analytical abilities, allowing them to access and address complex administrative challenges, formulate effective policies, and contribute to informed decision-making process.

PEO 4. To equip students with practical skills in area such as e-governance, public relations, office administration, record management and database administration, enhancing their employability and preparedness for divorce roles in the public sector.

PEO 5. To foster and understanding of the constitutional framework, structure and functioning of the Indian Administrative system, enabling students to comprehend the roles and responsibilities of various agency and organisations.

PEO 6. To cultivate leadership qualities, ethical values, and effective communication skills in students, empowering them to assume leadership positions and drive positive changes in public services.

PEO 7. To encourage students to appreciate the significance of Public Administration in promoting good governance, transparency and accountability, contributing to the overall development and welfare of society.

PEO 8. To prepare student for successful careers in various domains, including Government agencies, non-Governmental organisation, international organisations, and the private sector, where and understanding of Public Administration principle is essential.

PROGRAM LEARNING OUTCOMES: -

The students who complete 3/4 years undergraduate program in public administration an Honours degree in the discipline. The learning outcomes that a student should be able to demonstrate on completion of this Hons. Degree-level program would involve academic, behavioural and social competencies.

PO 1. Academic competence

i. Gain dictionary knowledge and methods including data analysis and computer literacy.

ii. Gain the ability to use kids in specific areas related to the chosen specialisation (Administration, E -governance etc.)

iii. Enhance the ability to relate and connect concepts with personal experiences and use critical thinking.

iv. Able to articulate ideas, scientific writing, and authentic reporting, effective presentation skills.

v. Able to deal with conflicting theories and approaches, learn to withstand ambiguities and understand the limitations of the discipline.

PO 2. Personal and behaviour Competence

i. Lead to development and self-regulation skills.

ii. Develop positive attributes such as empathy, compassion, social participation, and accountability.

iii. Improve conversational computers including communication and effective interaction with others, listening, speaking and observational skills.

iv. Enhance ability to work both independently and in a group and deal effectively with clients and stakeholders and learn the art of negotiation.

PO 3. Social competence

i. Enhance the skill to collaborate, corporate and realise the power of groups and communities.

ii. Able to analysis social problems and understand social dynamics.

iii. Imbibe ethical, social and ecological responsibility including acknowledging the dignity and presence of others, awareness of social order, learning of values and social concern reflected through activation of social participates (e.g. village survey visiting old age homes and spending time with elderly orphanage community service etc.)

PROGRAM SPECIFIC OUTCOMES (PSOs);-

Upon successful completion of the program, the various aspects of the students will be improved. These aspects include.

PSO 1: Gain deep knowledge of the subject

Demonstrate abroad understanding of public affairs, policy development, policy analysis, economic analysis, management skills and organisation theory and their applications to public service.

PSO2 - Critical Thinking

Critical thinking is Central to the art, practice and process of Public Administration functions is in constant flux. The political, economic, technological, and social courses are constantly changing and are challenging to the public servants. The study will enable the students to learn how to face these challenges. It will provide opportunities in the classroom to practice and sharpen cognitive skills so as to face the challenges.

PSO 3- Intellectual skills

The ability to think and make decision will be enhanced. The ability to demonstrate knowledge and understanding of essential facts, concepts, principal and theories relating to the subject areas identified. The ability to apply such knowledge and understanding to the solution of qualitative and quantitative problems mostly of familiar nature. Use of ICT in governance, and communication skill with enhanced.

PSO-4 Communication Skill

Effective communication is key to success it may be private or public sector. The students can effectively communicate orally and by writing. This will be facilitate him/her to connect the new people, take a new ideas and transfer and exchange knowledge.

PSO5- Gain Employable skill

The study will enable the students to enter into civil services like UPSC, state public services, police recruitment, staff selection commission, railway department and other private sector also.

BA FIRST YEAR

COURSE OUTCOMES: -

Paper No. PUB-1: DSC1 -Introduction to Public Administration

CO 1: Students will gain broad understanding of Public Administration and the development of the discipline.

CO 2: Learn about the basics of organization.

CO 3: Understand the roles and functions of line agencies, staff agencies and auxiliary agencies in organizational structures.

CO 4: Apply the principles of hierarchy, span of control, and unity of command to develop organizational hierarchy and calculate spans of control, through practical exercises.

CO 5: Develop critical thinking and analytical skills by evaluating the application of organizational principals in real world contexts.

Paper No. PUB-2 : G.E 1.-Theories & Principles of Management

CO 1: Understand the various management theories

CO 2: Understand the various administrative theories

CO 3: Familiarize with the concept of management and administration

CO 4: Gain knowledge of principles of management

CO 5: Gain knowledge of principles of administration.

Paper No. PUB -3 SEC 1- Administrative Leadership and Communication Skills

CO 1: Acquire theoretical knowledge of concepts such as administrative leadership.

CO 2: Understand the style of administrative leadership

CO3: Familiarize with theories of leadership

CO4:. Develop communication skills

CO5: Able to face interview in corporate and public

Paper No. PUB-4 : DSC2- Indian Administration

CO1: Understand and critically analysis the features of the Indian Administration.

CO2: Knowledge of role and functioning of Indian legislature and union judiciary

CO 3: Demonstrate knowledge of structure and functions of the secretariat and Prime Minister's Office (PMO)

CO 4: Comprehend the roles and responsibilities of constitutional agencies

CO 5: Analyse case studies related to judiciary review and judiciary activism, and develop inform opinions on these topics based on the theoretical background and practical work.

Paper No. PUB -5: G.E2.- Management and Administrative Thinkers

CO 1: Gain knowledge about various administrative thinkers.

CO 2: Familiarize with the theories given by this admission to thinkers

CO 3: Understand concept of scientific management

CO 4: know the approaches about organisation, decision making etc. given by the thinkers

CO 5: Acquire knowledge about the behaviour theories

Paper No. PUB -6 VSC - Office Administration And Record Management

CO 1: Able to understand concept of office and office administration

CO 2: Gain the knowledge about office layout

CO 3: Understand the various office procedures

CO 4: Acquire skill of record management

CO 5: Gain the skill and knowledge regarding documentation and office communication.

BASY

Paper No. PUB -7- DSC 7 (Major)- Public Personal Administration I

CO 1: Conceptual clarity of public Personal administration, it's scope and importance.

CO 2: Able to define the objectives and importance of Personal administration.

CO 3: Understand various civil services in India.

CO 4: Gain the knowledge of recruitment process in India.

CO 5: Able to complete in various civil services by knowing recruitment process.

Paper No. PUB -8 – DSC 8 (Major)- Rural Location Government In India

CO 1: Able to explain the development of rural government in India.

CO 2: Gain the knowledge of 73rd constitutional amendment.

CO 3: Understand the structure and functions of Panchayat Raj system in Maharashtra.

CO 4: Gain knowledge of financial resources of rural location government**.**

Paper No. PUB -9 - Mionr1 - Local self-government

CO 1: Understand concept and importance of local self-government.

CO 2: Able to describe the 73rd and 74th constitutional amendment.

CO 3: Understand the structure and functions of rural and urban location government.

CO 4: Gain knowledge difference between organisation of rural and urban local self-government.

CO 5: Understand various rural and urban local bodies. Paper No. PUB -10 Secretarial Pratice

Paper No. PUB -10: - Minor 2- Financial Administration

CO 1: Are able to analyse the significance of financial administration in public governors and economic development.

CO 2: Can describe the organisational structure, department, and key functions of Indian ministry of finance.

CO 3: Are able to examine the constitutional provisions governing union-State financial relations in India.

CO 4: Identify and categories different type of financial policies. (Fiscal, Monetary, Budgetary)

CO 5: Are able to analyse the constitutional role, powers and functions of Comptroller and Auditor General.

Paper No. PUB -11: - GE/OE3- Good Governance

CO 1: Student can define and understand the concept of good governance.

CO 2: They can analyse the evolution of governance theories and their practical applications in various context.

CO 3: They can apply principles of good governance to access administrative practices.

CO 4: Demonstrate critical thinking about the relationship between democratic institutions and governance quality.

Paper No. PUB -12: - VSC 2- Secretarial Practice

CO 1: Are able to define the meaning and importance of secretary.

CO 2: Understand the professional Personal qualities of secretary.

CO 3: Can perform the duties and responsibilities of personal secretary effectively in the profession.

CO 4: Can effectively perform duties such as organising meetings, scheduling appointments.

CO 5: Can draft various letters like enquiry letters and understand quotations, tender.

Paper No. PUB -13: - DSC 9 (Major)- Public Personal Administration II

CO 1: Can define the concept of training, its importance.

CO 2: Understand various training agencies at the union and State level.

CO 3: Gain the knowledge of principal of promotion.

CO 4: Understand retirement benefits in an administration.

CO 5: Gain knowledge of employer- employee relations, right to form association.

CO 6: Understand administrative tribunals at the Central and state level.

Paper No. PUB -14 – DSC 10 (Major)- Urban Location Government In India

CO 1: Can understand urbanisation its causes and consequences.

CO 2: Gain the knowledge of growth of urbanization and 74th constitutional amendment.

CO 3: Get knowledge of composition and functioning of various urban local government institutions.

CO 4: Gain inside into the financial resources of urban local self-government.

Paper No. PUB -15 - Minor 3 - Personnel Administration

CO 1: Conceptual clarity of Personal Administration, it's scope and importance.

CO 2: Understand various civil services in India.

CO 3: Gain the knowledge of recruitment and training process in India.

CO 4: Able to compete in various civil services by knowing recruitment process.

CO 5: Gain the knowledge of concept of promotion and retirement.

Paper No. PUB -16: - Minor 4- Budgetary Process In India

CO 1: are able to define budget and explain its multifaceted roll in public administration and governance.

CO 2: can distinguish between traditional, performance, and zero-based budgeting system with clear understanding of their core characteristics.

CO 3: can explain the constitutional and legal framework governing India's budgetary process.

CO 4: identify the stages, timeline and procedure specific to Indian budget preparation, authorisation and execution.

Paper No. PUB -17: - GE/OE4- E - Governance

CO 1: understand the evolution and importance of e-governance.

CO 2: able to know various models of e-governance.

CO 3: become aware of the cyber security.

CO 4: understand ki initiatives in e-governance in India

Paper No. PUB -18: - SEC 2- Management of NGOs.

CO 1: understand what NGOs are and how they help in the development of society.

CO 2: identified different types aap NGOs and their areas of work.

CO 3: learn how NGOs are managed, including their structure, leadership and planning.

CO 4: know the basic laws and rules that NGOs in India must follow.

CO 5: game basics skills in financial management and fund rising used in NGOs work.

BATY

Paper No. PUB -19: DSC- Local Self Government in India

CO 1: Understanding importance and structure of local self-Government and its implications.

CO 2: Develop clarity owned comprehension of administrative system of local self-government. Understanding the budgeting system.

CO 3: Comprehension of different development models through local self-government.

CO 4: Create awareness about importance of participation in public administration.

CO 5: Understanding new trends in local self-government.

Paper No. PUB -20: SEC- Training of Community Resource Persons

Learning Outcomes

CO 1: Development of ability to understand self, others and the society by gaining the conceptual understanding of youth issues set of transferable skills, positive attitude to work.

CO 2: Inculcation of the society to deal with various social problems in professional manner by using scientific methods and approaches.

CO 3: Facilitation of students to become capable to serve as an instrument for bringing transformation in the lies of youth and communities through research, policy, direct practice and teaching.

CO 4: Become professional workers in designing, organizing and delivering services for bringing change in the lives of young people, especially the socially and economically disadvantaged categories.

Paper No. PUB -21 : G.E.- Principles of Public Administration

CO 1: Demonstrate broad understanding of public administration including principles of management and Organization.

CO 2: Explain the development of public administration from ancient to contemporary Times.

CO 3: Acquire and understanding of the features and principles of organization.

CO 4: Understanding capacity building, ethical and accountability concerns.

Paper No. PUB -22 : DSC- Administrative Thinkers

CO 1: Gain the knowledge about various administrative thinkers.

CO 2: Familiarize with the theories given by these administrative thinkers

CO 3: Understand concept of scientific management.

CO 4: Know the approaches about organization, decision making etc. given by the Thinkers.

Paper No. PUB -23 : SEC- E -Governance

CO 1: Gain theoretical understanding about the concept, hairy and models of e-governance

CO 2: Learning practical application of e-governance in different walks of life

CO 3: Awareness of various e-governance institutes undertaken to deliver public services to the stakeholders.

CO 4: Developing necessary skills to use and operate e-governance or digital service delivery.

Paper No. PUB -24: G.E. - Indian Administration

CO 1: Explain the development of Indian Administration from ancient to contemporary Times

CO 2: Understand the system of Indian Administration and governors

CO 3: Student will be able to understand the basic structure, function and behaviour of Indian Administration

CO 4: Acquire knowledge of legislature, executive and Judiciary working.

CO 5: Acquire and broad understanding of constitutional values, rights and duties.

BA SOCIOLOGY

PROGRAM OUTCOMES (POs):

The National Education Policy (NEP) 2020 for India emphasizes several key aspects for Bachelor of Arts (B.A.) programs, aiming to produce graduates who are not only well-versed in their respective disciplines but also equipped with skills necessary for holistic development and employability. While specific program outcomes may vary between institutions and disciplines within B.A. programs, here are some common outcomes aligned with NEP 2020:

- **PO1: Conceptualization of basic Knowledge**- Through Environmental Science, Gender Equity, Indian Constitution and Computer Knowledge the program cultivates and nurtures the students into a responsible citizen. It also memorizes an idea of the behaviour of Indian and world economy, Indian Culture and history (BL1)
- PO2: To acquaint with the Social and Economic Issues **-** The program explains various interdisciplinary fields using sociological knowledge, discusses various forms of social inequality and respect social diversity. Student identifies the role of theory and methodology in the production of historical knowledge (BL2)
- **PO3: Social and Ethical Values -** The program promotes ethical and value - based learning, inculcates global competencies, imparts creativity and encourages entrepreneurship (BL3)
- **PO4: Economical Intelligence -** The program enables the student to relate the theories of exchange among rational economics agents in variant market structure (BL4)
- PO5: Proficiency – The program enables student to evaluate and recognize different interdisciplinary sections and achieve expertise (BL5)
- PO6 : Communication and Linguistic Skills – Students will be able to develop communication skills and linguistic skills to acquire competency, acquire practical and technical proficiency

It will develop their vocabulary, writing skills and encourage their scientific temper through inspiring prose and poetry and language (BL5)

PROGRAM SPECIFIC OUTCOMES (PSO's)

On completion of the 03/04yearsDegree in BA. Sociology students will be able to-

- **PSO1:** Students will get to know 'Sociology' as discipline and will understand the meaning and Scope of the subject in branch of Humanities
- **PSO1:** Students will get to know 'Sociology' as discipline and will understand the meaning and Scope of the subject in branch of Humanities
- **PSO2:** Understanding of Concepts and sociological theories to explore and understand society and social phenomenon in general
- **PSO.3:** Create ability to understand and interpret social change along with

factors responsible for it and its implications to the society and Individual.

- **PSO.4:** Knowledge of research methodology tools and it use of solving social problems and further its use in Social Policies.
- **PSO.5:** Learning use of sociology and its application in understating of contemporary social problems in the interest of society.
- **PSO.6:** providing information and knowledge of various fields and subfields of sociology and its interrelation for helping students in the study of society.
- **PSO.7:** Encourage critical thinking of emerging issues, implications of dynamic society, providing ability to encounter with existing social issues.

FIRST SEMESTER- I

Class: BAFY
Number & Title of the Paper: DSC 1- Introduction to Sociology

COURSE OUTCOMES (COs):

i) Students will understand the period of renaissance and its significance in the development of social thought.
ii) Students will understand the major contributions and theories of pioneer sociologists.
iii) Students will able to define sociology through a scientific lens.
iv) Students will get introduction of Indian sociologists and their contribution
v) Students will acquaint with basic concepts of Sociology

Semester: I
Class: BAFY
Number & Title of the Paper: GE/OE-1 social media and Society

COURSE OUTCOMES (COs):

i) Students will understand the meaning and nature of social media.
ii) Students will able to identify and describe the functions of social media platforms, recognizing their roles in information dissemination, community building, and entertainment.
iii) Students will able to differentiate between various types of social media platforms and understanding their unique features and purposes.
iv) Students will able to understand the impacts of social media on society and able to evaluate the challenges and concerns associated with social media.

Semester: I
Class: BAFY
(Choose any one from Pool /Basket)
Number & Title of the Paper: SEC-1: ***Personality Development***

COURSE OUTCOMES (COs):

i) Develop skills to embrace change, handle setbacks, and thrive in dynamic work environments.
ii) Build self-confidence, overcome self-doubt and be able to assert oneself in professional settings
iii) Students will be able to analyze their own strengths and weaknesses both verbal and non-verbal communication abilities, active listening and expressing ideas effectively.
iv) Improve communication skills and time management

SECOND SEMESTER -II

Class: BAFY
Number & Title of the Paper: DSC4-Applied Sociology

COURSE OUTCOMES (COs):

1. Students will gain a comprehensive understanding of applied sociology, including its definitions, scope, relevance and significance in various social contexts.
2. Students will be able to identify and analyze social problems using sociological theories and methods for effective solutions to these problems.
3. Students will learn how sociological insights contribute to develop the policy. They will be capable to take a part and contribute in the creation of policy.
4. Students will understand how applied sociology can drive social development initiatives.
5. Students will acquire the knowledge and skills necessary to conduct rigorous social research.

Semester: II
Class: BAFY
(Choose any one from Pool /Basket)
Number & Title of the Paper: GE/OE-2 Sociology of Cinema

COURSE OUTCOMES (COs):

1. Students will gain a foundational understanding of key sociological concepts and theories related to cinema, enabling them to critically analyze films from a sociological perspective.
2. Students will be able to identify and explain how cinema both reflects and influences societal structures, behaviors, and cultural norms.
3. Students will develop insights into how films can shape and reinforce social norms, values, and personal and collective identities.
4. Students will be able to critically assess the ways in which films contribute to cultural and social transformations, including shifts in public opinion and behavior.
5. Students will gain an in-depth understanding of current trends, challenges, and debates in Indian cinema, and how these reflect broader societal issues.

Semester: II
Class: BAFY
Number & Title of the Paper: VSC-1: Family Counselling

COURSE OUTCOMES (COs):

1) Students will understand the Characteristics of Family.
2) Students will analyse the Changing Nature of Family.
3) Students will able to Identify and Address Issues and Problems in Family.
4) Students will able to explore the Significance and Role of Family Counselling.

THIRD SEMESTER- III.

Semester: III
Class: BASY
Number & Title of the Paper: VII- Social Institution (DSC)

COURSE OUTCOMES (COs):

1. This paper is expected to instill knowledge about the fundamental institutions in society.
2. To know Governing principles of Social Institutions and their continuity and importance of these institutions.
3. The students learn how to read and interpret complex ideas and texts and to present them in a cogent manner.

Semester: III
Class: BASY
Number & Title of the Paper: VIII Indian Society (DSC)

COURSE OUTCOMES (COs):

i. Students will be able to explain unity and diversity in India.
ii. Students will understand the caste system and its role in society.
iii. Students will learn about the class system and its recent changes.
iv. Students will understand how Indian society is changing due to modernization and urban life.
v. Students will be able to describe the agrarian crisis and its impact on rural society.

Semester: III
Class: BASY
Number & Title of the Paper: Minor 1- Kinship in India

COURSE OUTCOMES (COs):

1. Understand the concept of kinship and its significance in the Indian context.

2. Learn about different kinship systems in India.
3. Examines how kinship patterns have changed due to major social process modernization, globalization, and urbanization.

Semester: III
Class: BASY
Number & Title of the Paper: Minor 2- Population Education

COURSE OUTCOMES (COs):

1. CO1: Understand the concept, importance, scope and objectives of population education.
2. CO2: Identify the key factors affecting population growth and explain demographic theories.
3. CO3: Analyze the impact of population growth on the environment and natural resources.
4. CO4: Evaluate population policies, family planning programs and the role of education in population control.
5. CO5: Understand the relationship between population and sustainable development, including the SDGs.

Semester: III
Class: BASY
Number & Title of the Paper: GE/OE 3- Sociology of Artificial Intelligence

COURSE OUTCOMES (COs):

1. Understand the fundamental concepts of AI.
2. Recognize the sociological dimensions of Al technology and its implications.
3. Analyze the role of Al in reshaping work and employment pattern.
4. Evaluate the ethical and social implications of Al in diverse contexts.
5. Engage in informed discussions and debates on Al-related topics.

Semester: III
Class: BASY
Number & Title of the Paper: VSC 2- Sociology of Journalism

COURSE OUTCOMES (COs):

1. Understand the basic concepts of sociology and journalism.
2. Explain the interrelationship between media and society and analyze the role of media in Socialization and social change.
3. Demonstrate awareness of media ethics and the challenges related to media freedom, censorship, fake news, and biased reporting.
4. Develop basic skills in reporting, interviewing, and content writing relevant to the field of journalism.

5. Apply sociological perspective to analyze news and media content critically and creatively through practical assignments.

FOURTH SEMESTER- IV.

Semester: IV
Class: BASY
Number & Title of the Paper: DSC P- IX- Transformation in Social Institution

COURSE OUTCOMES (COs):

i). student have understood the transformation in social institutions.
ii). An acquaintance with changes in institutions.
iii). Institutions changes guide them in their future planning.

Semester: IV
Class: BASY
Number & Title of the Paper: DSC P- X- Indian Social Problems

COURSE OUTCOMES (COs):

i. Students can explain the meaning and types of social problems in simple terms.
ii. Students will able to describe the major challenges faced by women, children.
iii. Identify major community issues and their effects.
iv. Discuss the causes of poverty, illiteracy, and unemployment.
v. Suggest basic solutions to reduce or solve social problems.

Semester: IV
Class: BASY
Number & Title of the Paper: Minor- 3- Sociology of Development

COURSE OUTCOMES (COs):

1. Critically evaluate explanation of Human Behavior and Social phenomena.
2. Apply scientific principles to understand the social world.
3. Evaluate the quality of social scientific methods and data.
4. Rigorously analyze social scientific data.

Semester: IV
Class: BASY
Number & Title of the Paper: Minor- 4- Gender and Society

COURSE OUTCOMES (COs):

Students will gain an understanding of gender and its social implications.

1. They will be able to analyze gender discrimination and related ideologies.

2. They will critically assess societal norms, traditions, and policies from a gender perspective.
3. They will learn about social movements and policies aimed at gender equality.

Semester: IV
Class: BASY
Number & Title of the Paper: GE/OE- 4- Sociology of Information Technology

COURSE OUTCOMES (COs):

1. Analyze the sociological implications of information technologies in a variety of contexts (e.g., workplace, education, family, politics, and economy).
2. Critically evaluate the impact of IT on social stratification and inequality.
3. Assess the role of information technology in social change and technological innovation.
4. Explore ethical issues in the use and development of information technology, particularly around privacy, security, and u surveillance.

Semester: IV
Class: BASY
Number & Title of the Paper: SEC- 2- Sociology of Environment

COURSE OUTCOMES (COs):

Understand key sociological concepts related to the environment.
1. Identify and analyse environmental problems from a sociological perspective.
2. Demonstrate awareness of environmental policies, movements, and community actions.
3. Apply basic skills in reporting, awareness creation, and critical observation of environmental issues.
4. Engage in community-based environmental practices and campaigns.

FIFTH SEMESTER – V.

Semester: V
Class: BATY
Number & Title of the Paper: Classical Sociological Traditions. Paper No. IX (DSE)

COURSE OUTCOMES (COs):

1. Understanding the grand foundational themes of sociology.
2. Application of theories and concepts from classical sociological theories to develop Intellectual openness and curiosity.

3.Appreciation of the classical concepts and theories to develop awareness of the limits of current knowledge.

Semester: V
Class: BATY
Number & Title of the Paper: Social Research Methods. Paper No. X (SEC)

COURSE OUTCOMES (COs):

1. Students are introduced to sociological research both from a theoretical and methodological perspective.
2. Students develop the ability to evaluate the methodological validity of the claims made by theory
3. Students will learn to identify ethical and practical issues in research.

Semester: V
Class: BATY
Number & Title of the Paper: Population & Society. Paper No. XI (GE)

COURSE OUTCOMES (COs):

1. Demonstrate a knowledge of key concepts and different approaches to population studies.
2. Recognize the relations between population and social groups and processes.
3. Undertake a sociological analysis of international and national population dynamics and population policies.

SIXTH SEMESTER- VI.

Semester: VI
Class: BATY
Number & Title of the Paper: Indian Sociological Tradition. Paper No. XII (DSE)

COURSE OUTCOMES (COs):

1. Ensure that students have conceptual clarity and can articulate the main debates and arguments with regard to sociology in India.
2. To ensure that students have understood the formation of the discipline in India and the challenge.
3. To help students understand the history of ideas related to the analysis of Indian society.

Semester: VI
Class: BATY
Number & Title of the Paper: NGO Management and Social Development. Paper No. XIII (SEC-1D)

COURSE OUTCOMES (COs):

1. Students should enrich their knowledge about NGO Management.
2. Students enrich their knowledge about Project management dimensions, planning and its implementations.
3. Understanding To enrich skills and techniques of project evaluation

Semester: VI
Class: BATY
Number & Title of the Paper: Sociology of work. Paper No. XIV

COURSE OUTCOMES (COs):

1. Understanding work in its social aspects such as gendered work and unpaid work, as different from its better-known economic dimension.
2. Learning about the complexities, disparities and inequalities in the area of work
3. Learning about the socio-historical context of work, theoretical concerns and problems and contemporary issues in the area of work and Industry

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B.A. (POLITICAL SCIENCE)

Program Outcome

- Understand the world their country, their society, as well as themselves and have Awareness of ethical problems, social rights. Value and responsibility to the self not to others.
- Understand different disciplines from natural and social sciences to Mathematics and art and develop interdisciplinary approaches in thinking and practice.
- Think critically follow innovations and developments in science and technology demonstrate personal and Organizational Entrepreneurship and engage in lifelong learning in various subjects.
- Communicate effectively in by rewritten, graphical and technological means.
- Take individual and team responsibility, function effectively and respectively as on individual and a member of a leader of a team and have the skills to work effectively in multi-disciplinary teams.

Program specific outcomes

- Develop Knowledge of Theories, Concepts, and Research Methods in Humanities and Social sciences.
- Assess how Global, Natural and Regional Developments affect Society.
- Know how to access and evaluate data from various sources of information

BAFY

DSC-Pol-01: Introduction to Political Science

Course Objective:

This paper aims to provide students a sound understanding of political science, including various approaches, ideological perspectives and relationship with other Social Sciences. Acknowledging the importance of state in the contemporary political discourses, the students will be able to comprehend the function of the state in society and how it rules and regulates the power structure by learning various theories of origin and functioning of the state. Learners would be able to describe and comprehend various key concepts related to the discipline and develop their own understanding of politics. They will understand what power is and how it functions in society and politics. They will be able to explain various theories of Justice. They will learn to comprehend and explain various theories and contemporary debates in democracy. Also, they will come to know how liberal and Marxist traditions look at and understand politics today

Learning Outcome:

At the end of the course the students would be able to understand Theoretical aspects of Political Science, and will learn about its basic concepts state and government the origin, structure and functioning of state and government. Understand the dynamics of live politics in the context of political theory Basic concepts - liberty, equality, and justice Distinctions and relevance of these concepts.

GE/OE 1-: Basics of State and Government

Course Objective:

To know the basics of the state and government, it may help students to understand his socio-political life and responsibilities. This course is also having a broad line perspective and objective to increase awareness of an individual as a citizen of a state, towards the institutions and system of governance of society. The main aim of this course is to cater general knowledge and information to student about the structure and functioning of the state and government.

Course Learning Outcomes:

At the end of the course, students will be able to: Understand origin, constituents, purpose, structure and functioning of the state and government. Analyze the better form of government around the world. To understand the difference between state and government.

SEC -I Human Rights

Course Objective:

This course is aiming to enhance students understanding, sensibility and skill to identify ultimate catastrophes and violations of human rights and analyze it to reach at substantial remedial suggestion.

Learning Outcomes:

After completing this course students will be able to-

1. Explain the basic concept of Human Rights and its various formulations.
2. Have sufficient knowledge and skills for analyzing, interpreting, and applying the Human Rights Standards and sensitize them to the issues.
3. Develop ability to critically analyze Human Rights violations around them and become a volunteer.

DSC-Pol-04 : INDIAN CONSTITUTION AND GOVERMENT

Course Objective:

This course enables students to develop an understanding of the tenets of Indian constitutionalism by engaging with Constituent Assembly debates. It enables them to understand the working of different organs of government and analyze the interaction amongst them which often involves both conflict and cooperation. Moreover, it enables the students to understand the division of powers in Indian federal set-up and its asymmetrical federal arrangements. The students are also familiarized with the process of rural and urban governance and the dynamics of gender and caste in these domains. The students would also become familiar with challenges of addressing emergency conditions and security concerns within the constitutional framework.

Course Learning Outcomes:

1. At the end of the course, students will be
2. Aware of the making, sources and features of the Indian constitution.
3. Known about structure and functioning of Indian Government
4. Acquainted of dynamics in Indian politics
5. Able to understand and to analyze party politics, federal system, elections and democratic values

Pol-GE/OE 2: Introduction to Foreign Policy

Course Objective:

The objectives of this course are to: Introduce students to the mechanics of foreign policy making. Identify the issues that influence the policy in order for them to develop a perspective on the emerging trends in Indian foreign policy

The object of the course is to introduce the students to the traditions in Indian foreign policy which have defined the nation's strategic approaches to myriad themes and shaped and conditioned its perspectives in terms of national interest. Introduce the student genre to the changing contours of Indian foreign policy through the 21st century

Course Learning Outcomes:

At the end of the course, students will be able to: To study the framing, means and goals of foreign policy. To understand the objectives and principles of India's foreign policy.

VSC-1: Election Management

Course Objective

This paper attempts to discuss about principles, structure, debate and practices of election management. It provides the vocational skill and basics of electoral services. This course may create employment opportunities for students.

Course Outcome-

This Course will make students able to;

1. Acquire skills of election management.
2. Assist political parties or candidates to manage its electorate.
3. Provide Professional solutions to run election campaign to political party or any independent candidate.

BASY

Title of the course: DSC-7: Introduction to Political Theory

Course Objective:

This course aims to develop a comprehensive understanding of political theory by engaging with diverse approaches, ideological perspectives, and the central debates within both classical and modern traditions. It explores the nature and scope of political theory, its evolution over time, and the distinctions between traditional and contemporary approaches. Special attention is given to how political theory helps in interpreting and analyzing political behavior, institutions, and values. The course also emphasizes current trends in modern political theory to connect theoretical inquiry with real-world political contexts.

Learning Outcome:

Upon completion of the course, the students would be able to Understand the meaning, nature, and scope of political theory. Distinguish between political theory and political philosophy and comprehend the function of theory. Recognize the relevance of discourse within political theory. Analyze the underlying assumptions and perspectives of both classical and contemporary political theories. Understand the evolution of arguments related to changing patterns in political behavior, ideas, and institutions. Draw logical inferences about political issues using both historical and contemporary knowledge.

DSC-8: Theories and Concepts of International Relations

Course Objective

This course introduces students to key theoretical perspectives in international relations. It aims to build a foundational understanding of essential concepts, global institutions, and major issues in world politics. The course also facilitates critical exploration of power dynamics at both regional and global levels, with particular focus on the forces shaping the current world order.

Course Outcomes –

Upon completion of this course, students will be able to:

1. Understand the meaning, nature, and scope of international relations.
2. Develop analytical perspectives to study international relations using various theoretical frameworks.
3. Reflect on the political dynamics underlying regional and global institutions.
4. Critically analyze contemporary developments in international relations and global politics.

M 1: Indian Parliamentary System

Course Objective:

This course aims to familiarize students with the Indian Parliamentary system and legislative practices, while equipping them with the necessary skills to engage in deliberative processes and democratic decision-making. The introductory unit offers a foundational understanding of constitutional provisions related to the composition, powers, and functions of Parliament, as well as the legislative process and types of bills. The course also seeks to deepen students' understanding of parliamentary procedures, practices, and the functioning of various House committees.

Course Outcome-

On completing the course, student will be able to:

1. Understand the constitutional framework, key features, and nature of the Indian Parliamentary system.
2. Grasp the functioning of the Indian Parliament.
3. Comprehend the legislative process and parliamentary practices.
4. Gain insight into the functioning of major parliamentary committees.

M 2: Introduction to International Politics

Course Objective:

This course is designed to help students to understand the nature, scope, elements, and significance of international politics. It aims to provide a broad understanding of the international system, international organizations, and their role in maintaining peace and order. The course also familiarizes students with the contemporary structure and key issues shaping international politics.

Course Outcomes –

Upon completion of this course, students will be able to:

1. Understand the meaning and scope of international politics and evaluate global events through multiple perspectives.
2. Identify and analyze the roles and influence of state and non-state actors in the international system.
3. Examine the determinants of world order and dynamics of power politics.
4. Understand the role of the United Nations in maintaining global peace.
5. Analyze critical contemporary issues in international politics.

GE/OE-3: Indian Nationalism

Course Objective:

This course aims to provide students with an in-depth understanding of the meaning, nature, and emergence of Indian nationalism, along with key approaches to its study. It emphasizes analysing the major constituents of Indian nationalism and the role of the national movement in shaping it. A core objective is to deepen students' knowledge of various theoretical and historical perspectives on Indian nationalism, while enhancing their ability to critically examine its key issues and ongoing challenges.

Course Outcomes –

Upon completion of this course, students will be able to:

1. Understand the emergence, development, and nature of Indian nationalism.
2. Engage with and compare various scholarly perspectives on Indian nationalism.
3. Acquire the knowledge and analytical skills needed to assess the key components and challenges facing Indian nationalism,
4. Recognize and appreciate the contributions of national leaders and freedom fighters.

VSC-2: Political Communication

Course Objective:

This course introduces students to the concept of political communication an essential tool in modern democracies for acquiring and exercising power. With the rise of diverse media platforms and advances in information technology, the art and science of political communication have gained critical significance. The course provides a theoretical framework for understanding political communication, drawing on both historical and contemporary examples of influential messaging systems that have evolved across the country.

Course Outcomes:

Upon completion of the course, student will be able to:

1. Understand the core concepts, theories, and practices of political communication.
2. Analyze the roles of various actors and institutions involved in the political communication process.

3. Develop critical thinking skills to evaluate political messages and media narratives.
4. Gain insights into the impact of political communication on public opinion, electoral outcomes, and political culture.
5. Enhance communication skills for effective political engagement and participation.

DSC-9: Federal System of India

Course Objective:

This course aims to develop a strong understanding of the fundamentals of federalism, along with the constitutional structure and its underlying principles. It focuses on an in-depth exploration of Centre-State relations, their constitutional foundations, and practical functioning. The course examines the challenges facing the Indian federation and the efforts to coordinate Centre-State relations. It also acquaints students with the evolving dynamics and trends within India's federal system.

Learning Outcomes –

Upon completion of the course, students will be able to:

1. Understand the nature and structure of the Indian federal system.
2. Analyze the key determinants shaping Indian federalism.
3. Explain constitutional provisions, issues, and the dynamics of Centre-State relations.
4. Identify administrative reforms aimed at enhancing the efficiency of the Indian federation.
5. Examine major political developments related to Centre-State relations.

DSC-10: Government and Politics of Maharashtra

Course Objective:

This course aims to provide both theoretical and practical insights into the formation and reorganization of the state of Maharashtra. It seeks to enhance students' understanding of the state's socio-political legacy, urban and rural development, and the role of democratic decentralization. The course also familiarizes students with the political landscape of Maharashtra, including the evolution and functioning of regional political parties.

Course Outcomes-

Upon completion of this course, students will be able to:

1. Understand the socio-economic conditions, cultural background, and reorganization of Maharashtra
2. Comprehend the structure and functioning of the Government of Maharashtra.
3. Analyze the political dynamics of the state and evaluate the role of regional parties, social movements, and caste in shaping Maharashtra's politics.
4. Examine key socio-economic movements and their impact on state politics in Maharashtra.

M-3: Grassroots Democracy in India.
Course Objective:

This course introduces students to the nature and functioning of grassroots democracy in India, with a focus on local governance. Centered on the 73rd and 74th Constitutional Amendments, it explores rural and urban governance through the Panchayati Raj system and urban civic bodies. It also examines the implementation of social justice through women's empowerment and the participation of marginalized groups via affirmative action.

Course Outcomes –

Upon completion of this course, students will be able to:

1. Understand the structure and functioning of Panchayati Raj institutions and urban local bodies.
2. Comprehend the constitutional status of local governance under the 73rd and 74th Amendments.
3. Analyze the political participation of women and marginalized communities in grassroots democracy.
4. Appreciate the significance of democratic decentralization and participatory decision-making.
5. Gain technical knowledge of rural and urban political processes.

M 4: Study of Political Ideas.

Course Objective:

This course is designed to help students understand the evolution and development of political ideas as expressed through various ideologies. It offers insights into the role ideologies play in society both the challenges they pose and the challenges they face due to socioeconomic shifts and emerging technologies such as artificial intelligence. The core aim is to equip students to trace how ideologies adapt, respond, or re-emerge in transformed forms in response to changing social and technological contexts.

Course Outcomes –

Upon completion of this course, students will be able to:

1. Discuss and analyze various trends in political thought.
2. Compare and contrast major political ideologies, both historical and contemporary.
3. Identify the core values and assumptions underlying key ideologies.
4. Understand the socioeconomic and techno-political conditions that gave rise to ideologies such as Liberalism, Socialism, Marxism, Anarchism, Fascism, and Authoritarianism.
5. Critically examine the socio-political impacts of these ideologies.

GE/OE-4: Introduction to Democracy

Course Objective:

This course aims to provide students with a comprehensive understanding of democracy-its evolution, development, and functioning as the most prominent political system in the contemporary world. With a specific focus on Indian democracy, the course explores its constitutional foundations, including the commitment to socialism, secularism, and democratic governance as enshrined in the Preamble. Students will also engage with the challenges facing Indian democracy and the ways in which these are being addressed and negotiated.

Course Outcomes –

Upon completion of this course, students will be able to:

1. Understand the core principles and ideas underlying democracy,
2. Distinguish between social, political, and economic dimensions of democratic governance.
3. Appreciate the significance of the Indian Constitution in safeguarding democratic values.
4. Critically examine political practices carried out in the name of democracy.
5. Recognize the meaning and importance of active, informed participation in democratic processes as responsible citizens.

SEC-2: Political Ethics and Values

Course Objectives:

This course introduces students to the philosophical foundations of ethics and their application to political institutions and practices. It explores the role of values in shaping public policy and governance, and equips students to navigate ethical dilemmas in political life especially those involving authority, accountability, and responsibility. Key concepts such as justice, fairness, equality, and the common good are critically examined. The course also aims to develop students' ability to apply ethical and value-based reasoning in real-world political contexts, while fostering a broader commitment to civic ethics and public responsibility.

Course Outcome:

By the end of the course, students will be able to understand and critically reflect on the relationship between ethics and politics within the evolving dynamics of political society.

FP: Field Project in Political Science

Course Objective:

This course offers students hands-on experience by engaging directly with political issues, institutions, and processes. Field projects may involve conducting surveys, analyzing data, studying political behavior, or participating in political campaigns and civic initiatives. The primary objective is to bridge the gap between theory and practice, allowing students to apply classroom knowledge to real-world contexts. The course also aims to develop research skills, enhance professional competence, and foster a deeper understanding of both the empirical and normative dimensions of political science.

Course Outcomes:

Upon completion of this course, student will be able to:

1. Understand the integration of theoretical knowledge with real-world political practice.
2. Analyze political data and propose practical solutions to observed issues.
3. Gain technical and professional skills such as effective communication, decision-making. and proficiency in research tools and techniques.
4. Conduct both qualitative and quantitative research independently.
5. Demonstrate awareness of key socio-economic and political issues at the grassroots level.

BATY

DSE- A1 Indian Political Thinkers

Course Objective:

The primary objective of this course is to familiarize students with the perspectives of Indian political thinkers regarding the challenges encountered in polities and society, as well as the solutions they proposed.

Learning Outcomes:

1. Students will demonstrate comprehensive knowledge of prominent thinkers and their conceptual frameworks.
2. Students will apply these conceptual frameworks to analyze contemporary situations effectively.
3. Students will identify and evaluate the significant contributors to Indian political thought, elucidating their roles in shaping India's reform movements.
4. Students will articulate the core concepts in Indian political thought with clarity and precision.
5. Students will exhibit proficiency in applying abstract theoretical constructions to real-world problems. utilizing the insights of political theorists to address contemporary social issues.

DSE - A2 Western Political Thinkers

Course Objective:

Western political thought holds a central position in the realm of political science knowledge. Without a grasp of political thinking, students cannot engage in theoretical debates or investigate socio-political issues. Therefore, this course aims to cultivate critical thinking skills among students by exploring various ideas in political thought and the approaches of political thinkers.

Learning Outcomes:

1. Students will exhibit a thorough understanding of key political thinkers and their foundational concepts.
2. Students will discern and analyze similarities and differences among thinkers with analogous concepts
3. Students will apply these conceptual frameworks to analyze and interpret contemporary political scenarios.
4. Students will articulate the essence and significance of normative thinking, elucidating its role in shaping political discourse and decision-making processes.

DSE - A3 Indian Constitution and Social Justice

Course Objective:

The Constitution of India upholds the principles of social justice as integral to the democratic fabric of the nation. This course aims to examine the constitutional provisions pertaining to social justice, which are designed to ensure every citizen's right to live a dignified life. By exploring these provisions, students will gain insights into the foundational principles of social justice enshrined in the Indian Constitution.

Learning Outcomes:

1. Students will develop a comprehensive understanding of the concept of social justice and its significance within the framework of the Indian Constitution.
2. Students will analyze and interpret the constitutional provisions related to human rights, with a focus on their implications for promoting social justice and ensuring the dignity of all citizens.
3. Students will critically evaluate various legislative enactments passed by the Indian Parliament aimed at advancing social justice objectives, assessing their effectiveness and impact on society.
4. Students will engage in in-depth study and discussion of key legal frameworks and mechanisms established to uphold social justice principles, fostering a nuanced understanding of the legal and institutional structures supporting societal equity.

SEC- 1C Indian Federal System.

Course Objective:

The course aims to explore the concept of federalism within the contemporary context, serving as a nexus between the expanding sphere of common interests and the imperative for local autonomy. Through a nuanced examination, it will delve into the evolving landscape of federalism in India, emphasizing the imperatives of cooperative and collaborative federalism in realizing constitutional objectives.

Learning Outcomes:

1. Understand the theoretical underpinnings of federal government and the concept of federalism, contextualized within the Indian scenario.
2. Analyze the distinctiveness of the Indian Union in its federal structure, considering historical. political, and constitutional dimensions.
3. Examine the delineation of powers between the Central and State governments in the Indian Union, elucidating the mechanisms of distribution and allocation.
4. Identify and evaluate the sources of conflict between the Center and the States, discerning the socio-political and constitutional factors at play.
5. Investigate the recommendations proposed by various Commissions tasked with enhancing Centre-State relations, critically assessing their implications and potential for fostering cooperative governance.

GE-1 Political Party system in India

Course Objective:

As a largest representative democracy in the world, India's political landscape is deeply influenced by the role of political parties in governance. This course aims to explore the organizational structures. ideologies, and operational dynamics of different political parties in India by illustrating their significance for shaping the democratic process in India.

Learning Outcomes:

1. Upon completion of this course, students will be able to:
2. Grasp the indispensable role of political parties in sustaining democracy, comprehending their organizational intricacies, functions, and diverse typologies.
3. Establish connections between the principles of democracy and their manifestations in everyday life, discerning the pivotal role of political parties in national development.
4. Be familiar with the array of political and social institutions integral to a democratic framework, enhancing their understanding of the broader democratic ecosystem.
5. Analyze the factors contributing to the escalating phenomenon of defection within the Indian party system, critically evaluating its implications for democratic stability and governance.

DSE- B1 Indian Political Thinkers

Course Objective:

This course aims to familiarize students with the perspectives of Indian political thinkers, exploring their analyses of political events and social issues of their time, along with their proposed solutions. By delving into the works of these thinkers, students will gain insights of evolution of Indian political thought and its relevance to contemporary challenges.

Learning Outcomes:

Upon completion of this course, students will be able to:

1. Understand significant Indian political thinkers and their works.
2. Apply these conceptual frames to analyze and interpret contemporary political phenomena and social challenges.
3. Identify and evaluate the contributions of prominent political thinkers and elucidating the relevance of their ideas.

DSE- B2 Western Political Thoughts

Course Objective:

This course is designed to underscore the pivotal role of political thought within the discipline of political science, serving as a cornerstone for engaging in theoretical debates and addressing socio-political issues. By immersing themselves in the study of modern Western political thought, students will cultivate critical thinking skills and enhance their capacity for rigorous inquiry.

Learning Outcomes:

Upon completion of this course, students will be able to:

1. Demonstrate a comprehensive understanding of prominent Western political thinkers and the foundational concepts they espoused.
2. Compare and contrast the perspectives of different thinkers on similar political concepts. Elucidating the nuances and divergences within Western political thought.
3. Apply these conceptual frameworks to analyze and interpret novel political situations, demonstrating adaptability and analytical acumen.
4. Explain the nature and significance of normative thinking within Western political thought, discerning its role in shaping ethical and moral dimensions of politics.

DSE-B3 Political Ideologies

Course Objective:

This course is aimed at deliberating and explaining prominent ideologies of Political Science as subject. The care ideological foundation is explained from philosophical standpoint to political action. Different variances that exist within basic ideological realm, their characteristics, their strength and weaknesses are also explained in the course. The basic objective of the study of political ideology is to reflect the position of man in a society, understanding and defining key aspects like liberty, equality, justice, Gender equality, Environment and accountability. etc with an intent of generating vision for society and taking the course of political action.

Learning Outcomes:

Students will be able to understand different political arguments in their wider, ideological context and they will be more sophisticated in dealing with the cultural and social roots of political actions, discourses, and rhetoric. The course will enhance key academic transferable skills, such as critical writing, summary writing, and oral communication. It helps multidisciplinary approach to social phenomena, value awareness, and integration of research into learning and critical thinking.

SEC- 1D Indian Judicial System

Course Objective:

This course aims to examine the distinctive features and crucial role of the judiciary within the federal structure of India. Despite the adoption of a federal system, India has a unified judiciary. The course seeks to explore the importance and functioning of this judicial system in upholding the rule of law and ensuring justice for all citizens.

Learning Outcomes:

Upon completion of this course, students will be able to:

1. Analyze fundamental concepts of justice and law, discerning their theoretical underpinnings and practical applications within the Indian context.
2. Study the structure and functioning of the unified judiciary under the Union Government of India, including the Supreme Court and the High Courts.
3. Evaluate the principles of judicial independence and impartiality, examining their significance in upholding the integrity and credibility of the Indian judiciary.
4. Examine the mechanisms and safeguards in place to ensure a fair and accessible justice system in India, including the role of legal aid, judicial review, and public interest litigation.
5. Critically assess the challenges and opportunities facing the Indian judicial system, identifying areas for reform and improvement to strengthen the rule of law and promote social justice

GE- 2 Local Self Governments

Course Objective:

This course aims to delve into the principles and practices of democratic decentralization as enshrined in the Indian Constitution. With a focus on local self-government bodies, the course seeks to explore their pivotal role in decentralizing power and empowering grassroots communities.

Learning Outcomes:

1. Upon completion of this course, students will be able to:
2. Demonstrate a comprehensive understanding of the concept and process of democratic decentralization, elucidating its significance in fostering participatory democracy and empowering local communities.
3. Analyze the provisions and implications of the 73rd and 74th constitutional amendments, critically evaluating their impact on strengthening local self-governance structures.
4. Examine the structure, functions, and powers of local self-government bodies in India, including Panchayats and Municipalities, discerning their roles in local administration and service delivery.
5. Evaluate the challenges and opportunities inherent in local governance systems in India, identifying strategies for enhancing their effectiveness and accountability.
6. Synthesize theoretical insights and empirical evidence to propose informed recommendations for advancing democratic decentralization and strengthening local self-government institutions in India.

BA ECONOMICS

PROGRAM OUTCOMES (PO)

After the completion of the Program Bachelor of Arts with an Economics subject students are able to:

- **Understanding Economic Principles:**
    - Students will gain a solid foundation in core economic theories, including microeconomics and macroeconomics.
    - They will be able to understand and apply fundamental economic concepts like supply and demand, market structures, and national income accounting.
- **Analytical and Critical Thinking Skills:**
    - Students will develop the ability to analyze economic data and events critically.
    - They will learn to evaluate economic policies and their potential impacts.
    - They will be able to construct and evaluate economic arguments.
- **Quantitative Skills:**
    - Students will acquire skills in using mathematical and statistical tools to analyze economic problems.
    - They will be able to interpret and analyze economic data and use it to draw conclusions.
- **Communication Skills:**
    - Students will be able to effectively communicate economic ideas and analyses, both orally and in writing.
    - They will be able to present economic data and arguments clearly and concisely.
- **Understanding of Real-World Economic Issues:**
    - Students will gain an understanding of current economic issues and challenges facing individuals, businesses, and governments.
    - They will be able to apply economic principles to analyze real-world problems.
- **Employability and Further Studies:**
    - The program will prepare students for careers in various fields, including business, finance, government, and research.
    - It will also provide a strong foundation for further studies in economics or related fields.

PROGRAM SPECIFIC OUTCOMES (PSO)

- Microeconomic Analysis:
    - Understanding consumer and producer behaviour.
    - Analysing market structures and competition.
    - Evaluating the efficiency of markets.
- Macroeconomic Analysis:

- Understanding national income, inflation, and unemployment.
    - Analysing the role of monetary and fiscal policy.
    - Understanding economic growth and development.
- Data collections and analysis:
    - Using statistical software to analyse economic data.
    - Conducting regression analysis and hypothesis testing.
    - Applying mathematical models to economic problems.
- Understanding of the Indian Economy (in relevant programs):
    - Analyzing the structure and performance of the Indian economy.
    - Understanding key policy issues facing India.
    - Understanding the challenges of the Indian economy.
- Analysis of International trade theories and Balance of Payment
    - Understanding the theories of international trade.
    - Knowing the concepts of International Economics.
    - Understand the fluctuations of the Balance of Payment.
- Understanding economics Social Welfare:
    - Students will be able to define and analyze the concept of social welfare and its various interpretations.
    - They will understand the complexities of measuring and comparing individual and social well-being.
- Applying Welfare Criteria:
    - Students will be able to apply welfare criteria, such as Pareto efficiency and Kaldor-Hicks efficiency, to evaluate economic policies and outcomes.
    - They will be able to analyze the trade-offs between efficiency and equity.
- Analyzing Market Failures:
    - Students will be able to identify and analyze market failures, such as externalities and public goods, that lead to inefficiencies in resource allocation.
    - They will understand how government interventions, such as taxes, subsidies, and regulations, can address these market failures.
- Evaluating Public Policy:
    - Students will be able to use welfare economics principles to evaluate the impacts of public policies on social welfare.
    - They will be able to conduct cost-benefit analyses and assess the distributional effects of policies.
- Ethical Considerations:
    - Students will develop an understanding of the ethical considerations involved in welfare economics, including issues of fairness, justice, and individual rights.

- They will be able to understand the role of value judgements in welfare economics.

COURSE OUTCOMES (CO)

Course	**Course Outcomes**
Paper No. I DSE-1 Microeconomics	Completion of the study of Microeconomics student should be able to: • Analyse about traditional and modern definition of Economics. • Perform demand analysis to analyse the impact of economic events on markets. • Perform supply analysis to analyse the impact of economic events on markets. • Analyse the behaviour of consumers in terms of demand for products. • Understand various types of Market Equilibrium.
Paper No. II G.E/O.E-1 Indian Banking System	• After completion of the course, students will be able to - • Students will be able to describe NABARD. • Students will be able to understand Indian banking structure. • Students will be able to analyze functions of commercial banks. • Students will be able to analyze functions of Co-operative banks. • Students will be able to examine role of banking in development.
Paper No. III SEC-1 Data Collection	After completion of the course, students will be able to - ents will be able to analyze primary data collection methods. ents will be able to describe secondary data collection methods. ents will be able to examine questionnaires and schedule. ents will be able to differentiate between primary and secondary data. ents will be able to develop practical skills related to data collection.
Paper No. IV DSE-4 Price Theory	After completion of the course, students will be able to - • After completion of the course, students will be able to - • Students will be able to analyze the theory of production. • Students will be able to compare costs and revenue. • Students will be able to examine the market. • Students will be able to describe various concepts in production and costs. • Students will be able to analyze the selling cost.
Paper No. V G.E/O.E-2 Reserve Bank of India and Monetary	After completion of the course, students will be able to - • Students will be able to analyze money measures. • Students will be able to understand the function of RBI. • Students will be able to examine monetary policy. • Students will be able to describe methods of credit control. • Students will be able to describe current monetary policy.
Paper No. VI VSC-1 Modern Banking Techniques	After completion of the course, students will be able to - • Students will be able to describe the need for and importance of technology in banking. • Students will be able to understand E-Banking and Digital Payments. • Students will be able to examine cybersecurity.

	• Students will be able to understand security measures. • Students will be able to develop practical skills.
Paper No. VII DSE-7 Macro Economics	After completion of this course students will be able to • Get knowledge of concept of microeconomics • Get information about the various concepts of national income. • understand the classical approach and and Keynesian views on production and employment theory • Understand the consumption and investment function.
Paper No. VII DSE-8 International Economics	After completion of the course • Students will be able to Analyse the meaning scope and importance of International Economics. • Students will be able to identify the basic differences between domestic and international trade. • Students will be able to understand the various international trade theories. • Students will be able to examine the concept of tariffs and Quotas.
Paper No. VII M-1 Economy of Maharashtra	After completion of the course student will be able to • Students are able to understand the nature of the Economy of Maharashtra. • Students understand the major challenges of Maharashtra's economy. • Students are able to understand the recent development in the economy of Maharashtra. • Students are able to appear for various competitive examinations.
Paper No. VIII M-2 Economics of Development	After completion of the course student will be able to • Students are able to understand the concept of indicators of economic development. • Students are able to understand the theories of economic development. • Students are able to understand the economic development process. • Students understand the role and importance of Startup India in economic development.
Paper No. IX VSC-2 Farmer Producer Organization	After completion of the course, students will be able to • Students understood the Farmer Producer Organisation's structure and functioning. • Develop an understanding of market linkages and Government support for Farmer Producer Organisations. • Students are aware about value chains through FPOs.
Paper No. X DSC-9 Public Finance	After completion of the course, students will be able to • Students will be able to analyse the meaning and scope of public finance. • Students will be able to identify sources of public revenue. • Student will be able to understand the concept of public expenditure and public debt • Students will be able to examine the structure of the Union Budget..
Paper No. XI DSC-10 Money and Financial Market.	After completion of the cause students will be able to • Students will be able to explain the role and functions of money, paper currency and different note issue methods. • Students will be understood the operations of money and capital market and their significance in the Indian economy.

	• Students will understand the functions of RBI and the applications of monetary policy tools.
Paper No. XII M-3 Indian Economic Reforms	After completion of the course, students will be able to • Students will be able to understand economic reforms. • Students will be aware of LPG. • Students will understand the impact of economic reforms.
Paper No. XIII M-4 Principles and Practice of Co-operation	By the end of the course, the students will be able to • Students will understand the cooperative credit system and the roles of various cooperative banks. • Students will access the role of different types of cooperatives in economic development. • Students will evaluate challenges faced by the cooperative and suggest improvement solutions.
Paper No. XIV VSC-4 Introduction Indian Stock Market.	After completion of the course, students will be able to • know the functioning of the Indian stock market. • Understand the investment of the Indian stock market. • Understand the SEBI power and functions. • Understands the benefits of mutual funds and SIP.
Paper No. XV DSE-A1 International Economics	Completion of the study of International Economics, Students should be able to: • Identify the basic difference between domestic and international trade. • Understand the various international trade theories. • Understand the concepts of tariffs and Quotas. • Understand the importance of maintaining equilibrium in the balance of payment.
Paper No. XVI G.E. 1 Introduction to Elementary Economics	After completion of this course student should be able to • Students are aware about the concept of microeconomics. • Understood the concepts of macroeconomics. • Students are aware about the knowledge of the Indian economy. • Student got the information regarding money and banking.
Paper No. XVII SEC-1C Indian Stock Market	After Completion of this course, Students should be able to: • Know the functioning of the Indian Stock Market • Understand the structure and functions of the Indian Stock Market • Understand the SEBI and its Functions. • Knowledge about future and option trading.
Paper No. XVIII DSE-B2 Industrial Economics	• After Completion of this course, Students should be able to. • Understand the importance of Industries in the economic development of the Economy. • Students are aware about the theories of industrial location. • Understand the types of industries. • Students aware about the industrial policy after 1901.
Paper No. XIX SEC1D Insurance Market and Its	After completion of this course students should be able to • understand the meaning, nature and importance of insurance. • The course enables functions of the insurance companies and their agents. • Students are able to evaluate the Indian insurance framework.

Products	• Students are able to understand the legal aspects of Insurance.
Paper No. XX G.E.-2 Indian Economy	After the completion of this course students should be able to: • The Course equips students to understanding the structure of Indian Economy and its problems. • Students enable to analyse income and inflation. • Students sensitized to the various issues faced by Indian Agricultural and industrial sector. • Students are able to evaluate the role of International Institutions and Organizations.

B.A. (HISTORY)

PROGRAM OUTCOMES (PO) :

PO1 - Students enables to Evaluate, analyze and synthesize historical materials (Primary and secondary sources).

PO2 - Student enables Recognize and explains the historical development of cultures.

PO3 - Student understands to evaluate and recognize different Empire in Indian history.

P04 - Student Identify the role of theory and methodology in the production of historical knowledge.

PO5 - Student Identify and critique basic historical concepts.

PROGRAM SPECIFIC OUTCOMES (PSO) :-

PS01 - A history graduate can find employment with Archaeological survey of India or with private firms related to archaeology.

PSO2 - For history graduates, the option of public service is always open.

PSO3 - Work as a teacher in schools and high schools.

PSO4 - Serve as conservator and tourist guide in historical monuments. PSO5 - NGO and social welfare organizations also employ B.A. History graduates.

PSO6 - Writer/subject matter Expert.

B.A.F.Y. - Semester I

- <u>DSC-1: History of India (up to 300 BCE)</u>

  Course Outcomes (CO)

CO1 - CO1 - To study various type of sources in history.
CO2 - To put 4th social economical and religious history of India. CO3 - To understand various concepts in ancient India.

Program Outcomes (POs) for History

PO1 - Gain a comprehensive understanding of historical events, developments, and their impact on civilizations.
PO2 - Analyze and interpret historical data critically to understand different perspectives on historical events.
PO3 - Develop the ability to use primary and secondary sources effectively for historical research.
PO4 - Evaluate historical processes and trends to understand their relevance in contemporary times.

- <u>SEC–1: Study of Museology</u>

  Course outcomes (CO

CO1 - To study the basic concept of Museology.
CO2 - To create awareness about Museology.
CO3 - To put force importance of Museology.

Program Outcomes (PO)

PO1 - Gain in-depth knowledge of the history, development, and role of museums in society.
PO2 - Understand various types of museums and their significance.
PO3 - Understand scientific techniques for conservation and restoration of cultural and historical objects.
PO4 - Gain practical knowledge of handling, storing, and maintaining museum collections.

B.A.F.Y. - Semester II

- **<u>DSC-4: History of India (300 BCE to 650 CE)</u>**

  Course Outcomes (CO)

CO1 - To study the different dynasties in the history of India
CO2 - To understand the rise and expansion of different dynasties. CO3 - To understand the importance of different dynasties.

Program Outcomes (PO)

PO1 - Historical Knowledge: Gain an in-depth understanding of key historical events, transformations, and cultural developments.

PO2 - Develop analytical skills to interpret historical data, primary sources, and historiographical debates.

PO3 - Assess historical processes and their long-term impacts on society, economy, and governance.

PO4 - Recognize the role of history in shaping ethical perspectives and social justice.

- <u>VSC-1: Study of Archaeology</u>

Course Outcomes (CO)

CO1 - To study the basic concept of archaeology. CO2 - To create awareness about archaeology.
CO3 - To put forth importance of archaeology.

Program Outcomes (PO)

PO1 - Develop a fundamental understanding of archaeological theories, methods, and techniques.
PO2 - Analyze archaeological data critically to interpret past cultures and civilizations.
PO3 - Learn about heritage management, site preservation, and conservation techniques.
PO4 - Develop the ability to document and publish research findings effectively.
PO5 - Promote awareness of archaeological heritage among the public.

B.A.S.Y.- Semester -III

- <u>DSC-7: Rise of Maratha Power under Chhatrapati Shivaji Maharaj (A.D. 1650 to 1680 A.D.)</u>

Course Outcomes (CO)

CO1 – To understand political History of Maratha's
CO2 – To know Chhatrapati Shivaji Maharaj's Relation with other powers.
CO3 – To acquaint student with conflict, coronation and expedition of Chhatrapati Shivaji Maharaj.
CO4 – To sensitized students about Chhatrapati Shivaji Maharaj's political power.
CO5- To provide historical information for tourism about Maratha History.
CO6- To develop understanding Chhatrapati Shivaji Maharaj's political Carrier.

Program Outcomes (PO)

PO1 - Analyze the political, economic, and social structures of Chhatrapati Shivaji Maharaj.

PO2 - Develop skills to critically analyze Chhatrapati Shivaji Maharaj's political power.

PO3 - Understand the evolution of military strategies, warfare, and administrative policies of Chhatrapati Shivaji Maharaj.

- **<u>DSC-8: History of Modern Maharashtra</u>**

Course Outcomes (CO)

CO1 – To understand event involve information in modern Maharashtra
CO2 – To study contribution of various social reformers in modern Maharashtra.
CO3 – To evaluate role of social reformation organization in modern Maharashtra

Program Outcomes (PO)

PO1 – Develop comprehensive understanding about formation of modern Maharashtra.
PO2 – To develop skill of writing and giving speeches about socio-religious movement in modern Maharashtra.
PO3 – to sensitize about historical places regarding formation of modern Maharashtra.

- <u>M-1 : Study of Fundamental Rights in the Constitution in India</u>

Course Outcomes (CO)

CO1- To give information about Fundamental rights in Indian Constitution
CO2 - To create awareness about fundamental rights.
CO3 - To understand importance of fundamental rights.

Program Outcomes (PO)

PO1 – Develop overall understanding of fundamental rights.
PO2 – To create awareness about equality, liberty, fraternity, and social justice enshrined in the fundamental rights.
PO3 – The course explores the development of fundamental rights and their implementation in the Indian legal system.

- <u>M-2 : Women's Movement in Modern Maharashtra</u>

Course Outcomes (CO)

CO1 – This course will give comprehensive understanding about women's reformation movement in Maharashtra.
CO2 – This course will give information about social reforms in Maharashtra.
CO3 – This course will orient student about various legal aspects of women reformation.

Program Outcomes (PO)

PO1 – This course will be helpful to analyze changes of women in modern Maharashtra.
PO2 – This course will be useful to understand contribution of various social reformers.

PO3 – Colonial approaches regarding women is put forth.

- <u>VSC-2 : Heritage Management</u>

Course Outcomes (CO)

CO1 – To develop heritage management studies.
CO2 – To understand role of archeology in cultural heritage preservation.
CO3 – Evacuate ethical implication of archeological practices.

Program Outcomes (PO)

PO1 – To develop heritage management project in Marathwada Region.
PO2 – To use cultural resources management in contemporary society.

PO3 – To engage student community archeological project of heritage management.

B.A.S.Y.- Semester -IV

- <u>DSC-9 : Political History of Maratha A.D. 1681 to 170 A.D.)</u>

Course Outcomes (CO)

CO1 - To study the political development in between 1681 to 1707 AD.
CO2 - To understand political struggle of Maratha in the period of 1681 to 1707 AD.
CO3 - To assess contribution Maratha Sardar and Senapati in Maratha history

Program Outcomes (PO)

PO1 - Create awareness about warfare strategy of the then Maratha rulers.
PO2 - Examine the contribution of Maratha Sardar and Senapati's in the Maratha history.
PO3 - Explore the possibility comprehensive understanding of Maratha history and further support historical tourism.

- <u>DSC- 10 History of Medieval India (A. D. 1526 to 1707 A. D.)</u>

Course Outcomes

(CO) CO1 - Medieval culture with a view understands the student.
CO2 - Student introduced nature of medieval Indian society economy, state formations and the main religious currents of the time.
CO3 - History of Mughal India, History is very important for UPSC exam.
CO4 - Students enable to understand the medieval political, Economical, Social and Agriculture History.

Program Outcomes (PO)

PO1 - Analyze the political, economic, and social structures of Medieval India, including the Sultanate, Mughal, and regional kingdoms.
PO2 - Develop skills to critically analyze primary and secondary historical sources using historiographical methods.
PO3 - Understand the evolution of military strategies, warfare, and administrative policies of dynasties

- M-3 : Directive Principle of state policy

Course Outcomes

(CO) CO1 - To develop comprehensive understanding of directive to principal of State policy.

CO2 - To understand specification of directive to principal of State policy.

CO3 - To impact information about directive principle of State policy.

Program Outcomes (PO)

PO1 - To create awareness about constitutional amendments of affective directive principal of State policy.

PO2 – To develop standing of aligned with directive principle of State poli.

PO3 - To impact information about implementation status of directive to principal of State policy.

- M-4 : Study of Archives
  Course outcomes (CO)

CO1 - To define the concept and significance of archives in historical and administrative contexts.
CO2 - To classify different types of archives and understand their management techniques.
CO3 - To understand techniques for the preservation and conservation of historical records.

Program Outcomes (PO)

PO1 - Define archives, their significance, and their role in preserving historical and administrative records.
PO2 - Examine techniques for the preservation of manuscripts, documents, photographs, and digital records.
PO3 - Analyze how archives serve as primary sources for historical research.

- SEC-2 : Historical Tourism
  Course outcomes (CO)

CO1 - To understand importance of historical tourism.
CO2 - To develop travel industry.

CO3 - To learn about various aspect of historical tourism.

Program Outcomes (PO)

PO1 - To develop skills of preparing an itinerary.
PO2 - To identify various historical sites.
PO3 - To develop historical sites for tourism.

B.A.T.Y.- Semester V

- DSC–1-A2: History of China (1900-1992)

Course outcomes (CO)

CO1 - To Analyse the emergence of modern China and its impact on world policy.
CO2 - To Interpret the complexity and diversity events.
CO3 - To impact students the knowledge of major historical developments from the 19 to early 20th century in China.
CO4 - Understand the important events and themes of China' s modern history.

Program Outcomes (PO)

PO1 - Examine the rise and impact of ideologies like nationalism, communism, and socialism in shaping China's modern history.
PO2 - Evaluate the significance of the 1911 Revolution and the establishment of the Republic of China.
PO3 - Understand the failures of Mao's economic policies and their consequences for the Chinese people.

- **SEC-1C: Issues of Depressed Classes in India**

Course outcomes (CO)

CO1 - To study the issues of women's, minorities, cast and labours in India.
CO2 - To bring about social and educational improvement of the depressed classes in India .
CO3 - Understanding of women's issues including various approaches in women's history.

Program Outcomes (PO)

PO1 - Analyze the origins and evolution of the caste system in India.
PO2 - Analyze modern challenges such as caste-based discrimination and untouchability.
PO3 - Study the impact of globalization, urbanization, and economic liberalization on the depressed classes.

- **GE-1: History of Sufism in India**

Course Outcomes (CO)

CO1 - To explain the historical development of Sufism from its early Islamic roots to its global spread.
CO2 - To analyze the contributions of key Sufi saints and their influence on Islamic mysticism.
CO3 - To evaluate the role of Sufi orders in shaping Islamic history and culture.

Program Outcomes (PO)

PO1 - Understanding the Origins and Development of Sufism.
PO2- Examine the influence of Islamic mysticism and philosophical thought on Sufi practices.
PO3 - Study the contributions of major Sufi saints such as Al-Ghazali, Rumi, Ibn Arabi, and Bulleh Shah.

B.A.T.Y.- Semester VI

- DSE-B1: Research Methodology and Intellectual Property Rights

Course Outcomes (CO)

CO1 - To define and explain key concepts of research methodology and its significance in academic and professional fields.
CO2 - To apply appropriate research techniques for data collection, analysis, and interpretation.
CO3 - To explain the fundamentals of Intellectual Property Rights (IPR) and its relevance in research and innovation.

Program Outcomes (PO)

PO1 - Define research, its significance, and various methodologies
PO2 - Understand the concept of intellectual property and its importance in research and innovation.
PO3 - Understand the principles of hypothesis formulation, research design, and data collection techniques.

- **SEC-1D: Study of Archives**

Course outcomes (CO)

CO1 - To define the concept and significance of archives in historical and administrative contexts.
CO2 - To classify different types of archives and understand their management techniques.
CO3 - To understand techniques for the preservation and conservation of historical records.

Program Outcomes (PO)

PO1 - Define archives, their significance, and their role in preserving historical and administrative records.

PO2 - Examine techniques for the preservation of manuscripts, documents, photographs, and digital records.

PO3 - Analyze how archives serve as primary sources for historical research.

- GE-2: Dr. Babasaheb Ambedkar and his Movement

Course Outcomes (CO)

CO1 - To understand the knowledge about work of Dr. B. R. Ambedkar.

CO2 - Ideological contribution of the Dr. B.R. Ambedkar and various movements.

CO3 - To understand Dr.B.R. Ambedkar's social, religious, political and constitutional movements.

Program Outcomes (PO)

PO1 - Study his struggles against caste discrimination and his efforts for social justice.

PO2 - Understand his fight against untouchability and his contributions to the Dalit movement.

PO3 - Examine Ambedkar's role in advocating for women's education and property rights.

B.A. Physical Education (Optional Subject)

PROGRAM OUTCOMES;

PO1: Student will understand of the sub disciplines that make up the field of Physical Education/Kinesiology.
PO2: Students knowledge about importance of regular exercise and healthy eating.
PO3: To know various types and methods of physical fitness.
PO4: Identify the concepts of sports management.

COURSE OUTCOMES:

DSC Paper -I

Title of the Course: Introduction to Physical Education and Sports Science.

Course Outcome (CO):

1. Analyze the historical and philosophical underpinnings of Physical Education and Sports Science.
2. Apply theoretical frameworks to understand the interdisciplinary nature of the field.
3. Demonstrate a basic understanding of human anatomy, physiology, and biomechanics in the context of sports science.
4. Evaluate the psychological and nutritional factors influencing athletic performance.
5. Design and implement fitness assessment programs for individuals and groups.
6. Apply coaching techniques and pedagogical strategies in Physical Education settings.
7. Identify common sports injuries, implement preventive measures, and understand basic rehabilitation principles.
8. Critically assess emerging trends, technologies, and challenges in the field.

Title of the Course: Athletics: Track Events

Practical Paper-II

Course Outcome (CO):

1. Develop skills related to Athletics Field Events.
2. Students will be able to perform the skills related to Athletics Field Events.
3. Practical demonstration and performance skills will be learned by the students.
4. The students will get acquainted with the rules and regulations of the Athletics Field Events.

M-4 Course Number DSC-5(Theory Paper-I)

Title of the Course: Philosophical, sociological foundation and History of Physical Education)

Course Outcomes: (CO)

1. After completion of the syllabus the student will have basic understanding about the philosophical concepts in physical education, their applications with contemporary contempt scenario in applied philosophies based on idealism, naturalism, realism and humanism in physical education.
2. The students will be able to put forth the development of personality through socialization.
3. The student will be able to establish the relation between physical education and other faculties.
4. Will be able to establish the relationship between ancient and mediaeval physical education system in India, Greece, Rome and Egypt and USSR, USA and Germany respectively.
5. Will understand the Physical Education development in 20^{th} Century with special reference to AICS, NSNIS, SAI, LNIPE etc.
6. Understand the Historical and modern development perspectives of the Olympics.

M-4 Course Number DSC-06 (Theory Paper-I)

Title of the Course: Principles and Recent Development of Physical Education

Course Outcomes: (CO):

1. The students will be able to understand and explain about the principles of physical education with special reference to the biological, gender, principles of exercise, body types etc.
2. The students will understand about the sociological, principles of physical education.
3. The students will be able to distinguish between the classifications of children based characteristics, Psychological, biological on logical and sociological.
4. The students will be able to adapt with the recent developments in physical education.
5. The students will be aware about various levels of organizations for development of the sports arena.
6. The students understand about the role of associations and sports bodies in the development of sports culture.

M-4 Course Number DSC-07 (Practical Paper-I)

Title of the Course: Athletics: Track Events

Course Outcomes: (CO):

1. Develop skills related to Athletics Field Events.
2. Students will be able to perform the skills related to Athletics Field Events.
3. Practical demonstration and performance skills will be learned by the students.
4. The students will get acquainted with the rules and regulations of the Athletics Field Events.

M-4 Course Number DSC-08 (Practical Paper-II)

Title of the Course: Opted Games

Course Outcomes: (CO):

1. Develop skills related to Games Events.
2. Students will be able to perform the skills related to Games Events.
3. Practical demonstration and performance skills will be learned by the students.
4. The students will get acquainted with the rules and regulations of the Games Events.

Paper No.301: Ancient and Modern History of Physical Education and sports.

CO1: to know Physical Education in ancient India.
CO2: To learn about Physical Education centers in India.
CO3: Government bodies and policies formation in India.
CO4: Scheme and awards related to Physical Education.

Paper No.302: Sports Psychology and Management in Physical Education

CO1: To learn mental skill for enhanced performance.
CO2: Management of Physical Education and sports.
CO3: The learn leadership, decision making and problem-solving ability.
CO4: To know facilities and equipment.

Paper No.303: Organization, Administration and Supervision in Physical Education, Youth Welfare and Youth Services.

CO1: To know objectives of organization and administration.
CO2: To learn concepts, objectives of youth welfare.
CO3: Objectives of intramural and extramural programs.
CO4: Organization and conducting tournaments.

Paper No.304: Anatomy, Physiology and Kinesiology of Physical Education.

CO1: To know cell, blood composition, circulation.
CO2: Properties and functions of human physiology.
CO3: To study body systems like respiratory system, muscular system etc.
CO4: To study fundamentals of Kinesiology.

B. COM.

PROGRAM OUTCOMES (POS):

The National Education Policy (NEP) 2020 for India emphasizes several key aspects for Bachelor of Commerce (B.Com.) programs, aiming to produce graduates who are not only well-versed in their respective disciplines but also equipped with skills necessary for holistic development and employability. While specific program outcomes may vary between institutions and disciplines within B.Com. programs, here are some common outcomes aligned with NEP 2020:

- **PO1. Contribution to the Economy and Society:** Make significant contributions to the economy and society through their roles as business leaders, entrepreneurs, professionals, and responsible citizens, fostering economic growth, innovation, and social welfare.
- **PO2. Ethics, Environment and Sustainability:** Ability to develop sustainable practical solutions for complex business-related problems within positive professional and ethical boundaries. Develop understanding for social and sustainable business issues and demonstration the knowledge of and need for sustainable development.
- **PO3. Entrepreneurial Mindset and Innovation:** Cultivate an entrepreneurial mindset, fostering creativity, innovation, and a willingness to take calculated risks to identify and pursue opportunities for value creation and business innovation.
- **PO4. Individual and team work:** Work effectively in diverse teams, demonstrating leadership, interpersonal skills, and the ability to collaborate with others to achieve common goals and solve complex problems.
- **PO5. Communication:** Communicate effectively on complex business-related activities and issues with business counterparts in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation. To make effective presentations, and give and receive clear instructions.
- **PO6. Digital Literacy and Technological Proficiency:** Demonstrate proficiency in using digital tools, technologies, and information systems relevant to the field of

commerce, enabling them to analyze data, automate processes, and adapt to technological advancements.

- **PO7. Continuous Learning and Adaptability:** Embrace lifelong learning, proactively seeking opportunities for professional development, acquiring new skills, and adapting to changing business trends, technologies, and regulatory environments.

These program outcomes align with the broader goals of NEP 2020 to transform higher education in India and prepare students for the challenges and opportunities of the 21" century. Board of Studies designing B. Com curricula are encouraged to incorporate the outcomes into their program objectives and learning outcomes.

PROGRAM SPECIFIC OUTCOMES (PSOs):

(Programme specific outcomes are discipline/major specific. Different major will have different PSOs. Following is the example of PSOs for Accounting & Finance Major. Respective BoS is expected to draft PSOs related to their Major)

- **PSO1 Financial Reporting and Analysis:** Graduates will demonstrate proficiency in preparing, analyzing, and interpreting financial statements in accordance with accounting standards and regulations, enabling them to provide accurate and reliable financial information for decision-making.
- **PSO2 Managerial Accounting and Cost Management:** Graduates will apply managerial accounting techniques to analyze costs, budgets, and performance metrics, enabling them to support strategic decision-making and optimize resource allocation within organizations.
- **PS03 Taxation and Compliance:** Graduates will possess a comprehensive understanding of tax laws and regulations, enabling them to prepare tax returns, advise on tax planning strategies, and ensure compliance with tax obligations for individuals and businesses.
- **PSO4 Auditing and Assurance Services:** Graduates will understand the principles are practices of auditing, internal controls, and assurance services, enabling them to conduct

audits, assess risks, and provide assurance on the reliability and integrity of financial information.

- **PS05 Financial Management and Investment Analysis:** Graduates will analyze financial markets, evaluate investment opportunities, and make informed decisions regarding capital structure, capital budgeting, financing, dividends and risk management to maximize shareholder value and wealth creation.
- **PS06 Financial Markets and Institutions:** Graduates will demonstrate knowledge of financial markets, instruments, and institutions, including banking, securities, and derivatives markets, enabling them to analyze market trends, evaluate investment options, and manage financial assets.
- **PSO7 Ethics and Professional Standards:** Graduates will adhere to ethical principles and professional standards in their practice of accounting and finance, demonstrating integrity, objectivity, and professional skepticism in their decision-making and conduct.

These Program Specific Outcomes provide a focused framework for students pursuing a major in Accounting and Finance within the B. Com program, equipping them with the specialized knowledge, skills, and competencies required to excel in professional roles within the accounting, finance, and related fields.

COURSE OUTCOME (COS)

B. Com. First Year		
Paper	**Title of Paper**	**Course Outcome**
1.1	**Financial Accounting**	1. To prepare and analyses the financial statements. 2. Acquire the basic concept of accounting terms. 3. Record the different financial activities & Practices
1.2	**Principals of Management**	1) Demonstrate understanding of the role of managers in modern business organizations 2) Absorb various management concepts, principles and theories 3) Examine the managerial functions having in impact

		on the business effectiveness
1.3	**Entrepreneurship Development**	1) To Create Awareness Amongst students about Entrepreneurship. 2) To Understand Theories while applying in the Business. 3) To know about Foundation of Entrepreneurship and its theories. 4) To identify the type of entrepreneur and the steps involved in an entrepreneurial Venture.
B.Com. Second Year		
2.1	**Corporate Accounting**	1) Understand the procedures for the issue of shares. 2) Prepare final statement of Companies. 3) Calculate purchase consideration in case of amalgamation, absorption and reconstruction. 4) Ascertain profit or loss prior to incorporation by applying various methods. 5) Identify the methods of valuation of Goodwill and shares.
2.2	**Cost Accounting**	1) Understand the difference between Cost and Financial Accounting. 2) Prepare the profit reconciliation statement. 3) Define Job costing andProcess costing. 4) Determine contract costing, its elements and features of contract costing. 5) Classify normal &abnormal loss and normal & abnormal gain.
2.3	**Marketing Management**	1) Understand Core Marketing Concepts including the marketing mix, customer value, segmentation, targeting, and positioning. 2) Analyse internal and external marketing

		environments to identify opportunities and threats for developing strategic marketing plans. 3) Apply Marketing Strategies like product development, pricing, promotion, and distribution. 4) Evaluate Consumer Behavior and apply them to marketing decision-making processes.
2.4	**Business Mathematics &Statistics**	1) Write the measures, scope, function and limitation of statistics. 2) Calculate mean, median and mode and geometric mean. 3) Evaluate mean deviation, standard deviation and quartile deviation. 4) Solve Sequence, Karl Pearsons and co-efficient of co-relation.
B. Com. Third Year		
3.1	**Management Accounting**	1) Compare differences between Cost Accounting and Management Accounting. 2) Prepare cash budget and flexible budget. 3) Explain the meaning, importance and limitation of ratio analysis. 4) Calculate Ratio, acid test ratio, inventory turnover ratio. 5) Prepare statement showing changes in working capital and fund flow statement.
3.2	**Advanced Financial Accounting**	1) Create awareness among the students about Advanced accounting issue and practices. 2) Understand Nature and functions of Advance financial Accounting.
3.3	**New Auditing Trends & Direct Tax**	1) Acquaintthe students with the practical approach of auditing.

		2) Understand objects and importance of auditing. 3) Commerce different types of audits. 4) Understand the audit sampling. 5) Understanding the concept of Income tax. 6) Solve a numerical under the head of Income from five heads.
3.4	**Business Regulatory Framework**	1) Understanding the legal framework of negotiable Instruments 2) Analyse the key provisions of the Companies Act 2013 3) Evaluate the functioning and regulatory role of SEBI Act, 1992 4) Apply the fundamentals of Intellectual Property Rights. 5) Familiarize with other essential business laws.
3.5	**Computerised Accounting**	1) Understand the concept and importance of computerized accounting and differentiate it from manual accounting systems. 2) Create and manage company data in Tally ERP 9, including setting up accounting features and configurations. 3) Create and maintain various accounting masters such as ledgers, groups, inventory items, and units of measurement. 4) Record different types of accounting vouchers (e.g., Payment, Receipt, Contra, Sales, Purchase, Journal, etc.) in Tally ERP 9. 5) Generate financial reports such as Trial Balance, Profit & Loss Account, Balance Sheet, and Cash/Bank Book using Tally ERP 9.

3.6	**MSME Management & Advertising Salesmanship**	1) Understand the concept, scope, and role of MSMEs in the economic development of a country. 2) Analyze the legal and regulatory framework governing MSMEs, including various government policies and schemes. 3) Identify the challenges and opportunities in starting, managing, and growing MSMEs. 4) Understand the role of various institutions like SIDBI, NSIC, DIC, and MSME-DI in promoting and supporting MSMEs. 5) Understand the fundamentals of advertising and salesmanship and their roles in modern marketing. 6) Explain the types, objectives, and functions of advertising in the business environment. **7)** Develop knowledge of advertising media, media planning, and budgeting for effective advertising campaigns.

BSC (BOTANY)

Program Outcome (PO)

PO1. The Citizenship and Society: Apply broad understanding of ethical and professional skill in science in the context of global, economical, environmental & societal realities encompassing contemporary issues.

PO2. Environment and sustainability: Apply broad understanding of impact of science subjects in a global, economic, environmental & societal context & demonstrate the knowledge of, and need of sustainable development.

PO3. Ethics: Apply ability to develop sustainable practice al solutions for science subject related problems within positive professional and ethical boundaries**.**

PO4. Individual and team work: Function effectively as a leader and as well as team member in diverse/multidisciplinary environments.

PO5. Communication: Communicate effectively on complex science subject related activities with the scientific community in a particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentation, and give receive clear instructions.

PO6. Project management and finance: Demonstrate knowledge and understanding of the first principles of science and apply these to one's own work as a member and leader in a team, to complete project in any environment.

PO7: Life-long learning: Recognize the need for lifelong learning and have the ability to engage in independent and lifelong learning in the broadest context of technological change

Program Specific Outcomes (PSO)

PSO1. Domain knowledge: Apply the knowledge of fundamental and advanced areas of plant science for the wellbeing of the human.

PSO2. Understanding the various plant groups: The basic knowledge and evolution of different plant groups like bacteria, Algae, Fungi, Bryophytes, Pteridophytes, Gymnosperms and Angiosperms will be given to students.

PSO3. Understanding structure of plant body: The detailed morphological, anatomical, palynological, embryological structures will give the understanding about the plant body.

PSO4. Understanding processes in plant body: The mechanism of anabolic and catabolic activities, cell division and growth in plant bodies will be explained to increase the production of crop plants.

PSO5. Understanding properties and uses of plants to maintain health: The properties and uses of common medicinal plants, spices, vegetables etc. will be explained to maintain the good health.

PSO6. Enriching knowledge related with Agriculture: Use established knowledge regarding mannuaring, composting, use of Biofertilizers and ecofriendly insecticides and pesticide for the sustainable development.

Course Outcomes

BSc FY-Semester-I

(Theory Course Code – DSC1) Course Name **- Morphology of Angiosperms**

Course Outcomes- On the successful completion of this theory paper student will be able to;

1. Describe morphological peculiarities of vegetative organs of angiosperms.
2. Describe morphological peculiarities of reproductive organs of angiosperms
3. Know the diagnostic features of the plant species.

(**Practical Course Code –DSC2)** Course Name – **Lab course based on DSC 1 (Morphology of Angiosperms)**

Course Outcomes- On the successful completion of this practical paper student will be able to –

1. Identify and classify plant organs based on their external features and structural characteristics.
2. Understand the relationship between structure and function in various plant parts and their modifications.
3. Recognize and differentiate between normal structures and modified forms adapted for specialized functions like storage, support, protection, photosynthesis, and reproduction.
4. Analyse and compare the different types of inflorescences, placentation, and fruits.

(Theory Course-SEC-1) Kitchen Pharmacy-I : Spices

Course Outcomes- After learning this course, students will.

1. Learn skill regrading identification of various spices & condiments used in our region.
2. To learn techniques for estimation of phytochemicals of different spices & condiments.
3. Use the spices as medicines in the common ailments.

(Practical Course-SEC-2) Kitchen Pharmacy-I : Spices

Course Outcomes- On the successful completion of this theory paper student will be able to –

1. Understand and apply basic techniques for post-harvest processing of plant materials, specifically the traditional method of preserving ginger rhizomes into a dried form (Sunth), and understand how drying methods affect the yield and composition of active constituents.
2. Master various extraction and isolation methods for obtaining specific bioactive compounds, including curcuminoids from Curcuma longa and essential oils from spices like cinnamon bark, garlic, clove, cumin, fennel, caraway, and Bishops weed.
3. Perform qualitative and potentially quantitative analysis of the extracted compounds, including conducting specific tests for authenticity and quality (e.g., the test for saffron).
4. Gain knowledge of the chemical properties and commercial significance of the isolated natural products (essential oils, curcuminoids, alkaloids), and their potential applications in food, pharmaceutical, and nutraceutical industries.

BSc FY – Semester - II

(Theory Course Code – DSC3) Course Name - **Diversity of Cryptogams-1**

Course Outcomes - After completion of the course, the learners would be able to:

1. Classify lichen, algae and fungi up to order according to the system of classification proposed by GM Smith, Alexopoulos and Mims.
2. Classify & describe the morphology, structure, life cycle of some lichens, algae, fungi & Gymnosperms
3. Exemplified lichens, algae and fungi of economic importance
4. Identify common plant diseases and devise the suitable control measures.

(Practical Course Code – DSC4) Course Name - **Diversity of Cryptogams-1**

Course Outcomes - After completion of the course, the learners would be able to:

1. Students will expose to classification of algae, fungi
2. Students will learn systematics, general characteristics of viruses, mycoplasma, Bacteria and life cycle of of algae fungi
3. Students will get insight on economic importance of lichens, algae. Students will aware about fungal diseases and its management.

(Theory Course – VSC-1 (ii) Course Name – **ii) Organic Composting**

Course Outcomes- On the successful completion of this theory paper student will be able to –

1) Acquire the knowledge of organic composting techniques.
2) Learn laboratory skills, lab organization & nutritional importance of different organic composts.
3) Understand about the composting techniques and its economics.

(Practical Course Code –VSC2 (ii)) Course Name – **Organic Composting**

Course Outcomes- On the successful completion of this practical paper student will be able to –

1. Gain proficiency in the hands-on preparation of green manure, FYM, dung manure, Vermicompost, Panchgavya and Neem-based pesticides.
2. Learn the agricultural benefits of each organic input, such as improving soil structure, enhancing water-holding capacity, nutrient cycling, and minimizing pests and diseases, along with their appropriate field applications.
3. Develop the skills to perform basic quality analysis, specifically determining the N, P, and K content of the prepared organic composts to assess their nutritional value.
4. Through a visit to a farmer's organic compost preparation site, students will observe and understand the practical, real-world application & techniques used by experienced farmers.
5. The overall outcome is to foster an understanding of organic farming principles, encouraging the use of on-farm, low-cost, environmentally safe nutrient supplements and pest management options.

BSc SY– Semester - III

Major (Core) Mandatory DSC 5 (Subject Code – BOT/DSC/T/200) Title of the Paper – Diversity of Cryptogams-II (Theory)

Course Outcomes: After completion of the course the students will;

1. Gain knowledge about diversity among the bryophytes and pteridophytes with their general characters.
2. Understand the classification of bryophytes and pteridophytes based on their structure, reproduction and life cycles.

3. Evaluate the ecological, ethnic and economic values of bryophytes and pteridophytes.

Major (Core) Mandatory DSC 7 (Subject/Paper Code – BOT/DSC/P/226) Title of Paper – Diversity of Cryptogams-II (Practical)

Course Outcomes: After completion of the course the students will;

1. Identify members of bryophytes and pteridophytes using morphological and Anatomical characteristics.
2. Demonstrate proficiency in preparing temporary and permanent slides of cryptogamic structures.
3. Compare reproductive structures of different cryptogamic groups and explain their evolutionary significance.
4. Analyze and interpret the life cycles of representative cryptogamic species.
5. Document and maintain the record of cryptogamic diversity through field collection and laboratory observations.

Major (Core) Mandatory DSC 6 (Subject Code – BOT/DSC/T/201) Title of the Paper – Plant Ecology (Theory)

Course outcomes (COs): After the successful completion of the module, the learner will be able to;

1. Interpret complex ecological datasets to explain plant distribution patterns across different spatial scales
2. Assess how plant functional traits influence community assembly, ecosystem processes, and evolutionary adaptations
3. Design field-based research protocols to investigate plant-environment relationships
4. Critically evaluate primary literature in plant ecology and synthesize current understanding of major ecological concepts
5. Predict potential impacts of global environmental change on plant communities and ecosystem functions.

Major (Core) Mandatory DSC 8 (Subject Code – BOT/DSC/P/227) Title of the Paper – Plant Ecology (Practical)

Course outcomes (COs): After the successful completion of the module, the learner will be able to;

1. To collect, analyze and interpret quantitative data on plant community structure and diversity using appropriate ecological metrics.
2. Gain proficiency in identifying local flora and understanding their ecological roles within different ecosystem types.
3. Develop technical skills in using field and laboratory equipment essential for plant ecological research (e.g. PAR sensors, soil moisture probes, spectrophotometers).
4. Effectively communicate scientific finding through formal Lab reports, data visualization and presentation that adheres to ecological research standards.
5. Evaluate how anthropogenic factor influence plant communities and apply ecological principles to conservation and restoring planning.

Minor (Subject Code – BOT/MN/T/200) Title of the Paper – Fundamentals of Soil Sciences (Theory)

Course Outcomes: After the successful completion of the course, students will be able to;

1. Explain the processes of soil formation and development.
2. Evaluate physical and chemical properties of soils.
3. Interpret basic soil classification systems.
4. Assess soil fertility status and nutrient requirements.
5. Apply soil science principles in agriculture and environmental contexts.

Minor (Subject Code – BOT/MN/T/201) Title of the Paper – Organic Farming (Theory)

Course Outcomes: After the successful completion of the course, students will be able to;

1. The course will address the ethical implications of organic farming such as fair-trade practices, social responsibility and community involvement.
2. Gain information about the impact of organic farming and indigenous practices on environment.
3. Student will learn about marketing Organic products understanding consumer demand and the economic aspects of the organic farming.
4. Student will gain a thorough understanding of the principals and philosophy behind organic farming including the importance of sustainability and ecological balance.
5. Learners will explore the significance of soil health in organic farming and various methods to enhance soil fertility through composting, cover cropping and crop rotation.

Vocational Skill Course (Subject Code – BOT/VSC/T/201) Title of the Paper – Biomass Management (Theory)

Course Outcomes: After the successful completion of the course, students will be able to;

1. Develop knowledge in properties of biomass and energy conversion process.
2. To be able to understand and perform the various characterization techniques of fuels.
3. To be able to identify available non-conventional (renewable) energy sources and techniques to utilize them effectively.
4. The student will able to set up Biomass conversation plant.

Vocational Skill Course (Subject Code – BOT/VSC/T/227) Title of the Paper – Biomass Management (Practical)

Course Outcomes: After the successful completion of the course, students will be able to;

1. Gain knowledge about Biomass resources and their role in energy production and waste management.
2. Demonstrate proficiency in Biomass conversion techniques like Bio-composting, briquetting and biogas production.
3. Analyze the environmental benefits and challenges associated with biomass utilization.
4. Apply scientific principles to design and implement Biomass management projects for sustainable development.

BSc SY– Semester - IV

Major (Core) Mandatory DSC 9 (Subject/Paper Code – BOT/DSC/T/250) Course Name – **Gymnosperms and Palaeobotany (Theory)**

Course Outcomes: -On completion of the course, students are able to:

1. Identify and classify major gymnosperm groups based on their distinctive morphological Anatomical and reproductive features.
2. Explain the evolutionary significance of gymnosperm and interpret their phylogenetic relationship with other plants groups.
3. Analyze and describe Fossil plant specimens using appropriate terminology and techniques relating them to extant texa.
4. Apply palaeobotanical principles to reconstruct past environments and understand plant evolution through geological time.
5. Demonstrate proficiency in laboratory and field techniques related to gymnosperm and Fossil plant studies including preparation Preservation and documentation of specimens.

Major (Core) Mandatory DSC 11 (Subject Code – BOT/DSC/P/276) Title of Paper- Gymnosperms & Palaeobotany (Practical)

Course Outcomes: After completion of the course the students will;

1. Identify and classify major gymnosperm taxa (Cycadales, Ginkgoales, Coniferales, Gnetales) based on their vegetative and reproductive structures.
2. Demonstrate proficiency in preparing and analyzing microscopic sections of gymnosperm tissues and interpreting their Anatomical significance.
3. Apply value Botanical techniques to identify, describe and classify fossil plant specimen from different geological eras.
4. Explain the evolutionary significance of key morphological and anatomical features in gymnosperms and their fossil ancestors.

Major (Core) Mandatory DSC 10 (Subject/Paper Code – BOT/DSC/T/250) Course Name – **Plant Physiology (Theory)**

Course Outcomes: After completion of the course the students will;

1. Apply concepts of plant water relations to explain phenomena such as wilting, stomatal Regulation and drought adaptation strategies.
2. Evaluate plant nutritional status and diagnose nutrient deficiency symptoms based on physiological knowledge.
3. Interpret experimental data from physiological studies on photosynthesis, respiration and carbon allocation patterns.
4. Predict plant growth and developmental responses to various hormonal treatments and environmental conditions.
5. Design strategies to enhance plant productivity and stress tolerance based on physiological principles.

Major (Core) Mandatory DSC 12 (Subject/Paper Code – BOT/DSC/P/277) Course Name – **Plant Physiology (Practical)**

Course Outcomes: After completion of the course the students will;

1. Student will be able to independently design, execute and troubleshoot experiments related to key plant physiological processes.
2. Student will demonstrate competence in data collection, analysis and presentation of results in scientific report format.
3. Student will explain the physiological mechanism underlying plant growth development and adaptation to changing environmental conditions.
4. Student will critically evaluate scientific literature in plant physiology and apply this knowledge to their own experimental work.
5. Student will collaborate effectively in teams to conduct complex experiments and communicate findings through oral presentation and written reports.

Minor (Subject Code – BOT/MN/T/250) Title of the Paper – Medicinal Plants (Theory)

Course Outcomes: After completion of the course student will able to;

1. Classify the drug plants.
2. Identify the medicinal plants, know the active principles, properties and uses of medicinal plants.
3. Utilize the medicinal plants as home remedy against the common diseases and disorders.

Minor (Subject Code – BOT/MN/T/251) Title of the Paper – Landscape Gardening (Theory)

Course Outcomes: After completion of the course student will able to;

1. Describe and differentiate between the types of gardens.
2. Practice different methods of propagation of plants.
3. Execute several nursery and gardening operations.
4. Assess growing conditions of different horticultural plants, their general requirements and understand their role in landscaping.

Skill Enhancement Course (Subject Code – BOT/SEC/T/250) Title of the Paper – Herbarium Techniques and Plant Preservation (Theory)

Course Outcomes: After the successful completion of the course, students will be able to;

1. Preserve the plant specimens for all biological studies.
2. Preserve the plant specimens belonging to different plant groups.
3. Prepare herbarium specimens and can deposit in responsible Herbaria.

Skill Enhancement Course (Subject Code – BOT/SEC/P/276) Title of the Paper – Herbarium Techniques and Plant Preservation (Practical)

Course Outcomes: After the successful completion of the course, students will be able to;

1. Student will be able to systematically collect and preserve plant specimen using standard herbarium techniques.
2. Develop expertise in proper identification, labelling, and documentation of herbarium specimens.
3. Understand the role of herbaria in botanical research ecological studies and biodiversity conservations.
4. Skilled in different plant preservation techniques, including dry and wet preservation methods.
5. Prepare a well-organized herbarium and contribute to plant taxonomy and conservation efforts.

BSc TY – Semester - V

(Course Code – BOT-511) Paper- IX Course Name – **Cell Biology & Molecular Biology- (Theory)**

Course Outcomes: - On completion of the course, students are able to:

1. Explain cell, types of cells, structure of cell, chemistry, prokaryotic & eukaryotic cells, cell organelles and functions of cell.
2. Describe the primary mechanisms by which cells import and export macromolecules
3. Examine karyotypes and identify the effects of significant changes in chromosome number
4. To describe cell division, compare chromosome structure in mitosis and meiosis divisions.
5. To know linkage, crossing over and variation in chromosome number
6. Understand the detailed structure of nucleic acids.
7. To know the molecular processes such as replication, transcription and translation.

(Lab Course –VII, BOT-521) Course Name – **Based on BOT-511 (Theory Paper- Cell Biology and Molecular Biology-IX) (Practical)**

Course Outcomes: After completion of the course the students will;

1. Prepare slide for the study of plant cell structure
2. Prepare slide for Measurement of cell size by the technique of micrometry.
3. Prepare cytological (AA, FAA etc.) fixatives and stains**.**
4. Study the plant cell and its organelles, viruses, bacteria and cyanobacteria with the help of electron micrographs.
5. Prepare slides for the study of Mitosis & meiosis.
6. Prepare slides for the study of giant chromosomes in Chironomus larvae.
7. Prepare wool/ Chart models of mitosis, meiosis, cell structure, Chromosome, DNA and RNA.
8. Prepare ideogram from the karyotype.

(Elective Course Code – BOT-512 (A)) Paper- X Course Name – **Diversity of Angiosperms-I (Theory)**

Course Outcomes: - On completion of the course, students are able to:

1. Understand fundamental concepts of Biodiversity
2. Examine threats, analyse data, understand human impact and conservation
3. Understand angiosperm diversity
4. Master plant systematics
5. Utilize identification tools

(Lab Course –VIII, BOT-522 (A)) Course Name – **Based on BOT-512 (A) -Theory Paper- XA) (Practical)**

Course Outcomes: - On completion of the course, students are able to:

1. Identify and classify
2. Master taxonomic techniques
3. Understand classification systems
4. Document floral diversity
5. Analyse economic importance
6. Develop laboratory skills

BOT – 513 Skill enhancement Course SEC 3 (F) Ethnobotany- (a) Theory)

Course Outcomes-After going through this unit student will be able to-

1. Define the ethnobotany and discuss the concept scope of the subject area covered by this discipline.
2. Explain and apply field techniques for documenting indigenous plant knowledge.
3. Understand the role of herbaria, ancient texts, and archaeological findings in ethnobotanical research.
4. Understand the lifestyles, cultures, and traditional plant knowledge of major Indian tribal groups.
5. Identify common plants used as vegetables, fruits, seeds, spices (pepper, cumin, cinnamon), and beverages (tea, coffee), recognize key timber (teak, neem, babul) and gum-yielding trees and their uses.
6. Identify Ocimum sanctum (Tulsi), Vitex negundo (Nirgundi), Withania somnifera (Ashwagandha), Asparagus racemosus (Shatavari), Curcuma longa (Turmeric), Aloe vera, and Adhatoda vasica (Adulsa), detail their specific medicinal uses in traditional practices.
7. Understand how documenting this knowledge aids in preserving biodiversity and cultural heritage.

BOT – 513 Skill enhancement Course SEC 3 (F) Ethnobotany- (b) Practical)

Course Outcomes: -On completion of the course, students are able to:

1. Learn methods to systematically document and record indigenous knowledge about locally available medicinal plants and their uses for treating common ailments like arthritis, jaundice, diabetes, and fever, contributing to the preservation of unwritten traditional knowledge.
2. The course will provide practical experience in conducting ethnobotanical field surveys, interacting with local communities or traditional healers ("natives"), and identifying the specific plant species used in folk medicine.
3. Develop the ability to correctly identify and study the morphology (physical form and structure) of specific, important medicinal plants, including ***Aloe vera***, ***Withania somnifera*** (Ashwagandha), ***Asparagus racemosus*** (Shatavari), and ***Adhatoda vasica*** (Vasaka).

4. Gain an increased awareness and appreciation for local flora and their significant role in the cultural heritage, health, and social life of indigenous populations, recognizing the link between cultural diversity and biodiversity.

BSc TY – Semester - VI

(Course Code – BOT-611) Paper- IX Course Name – **Genetics and Evolution - (Theory)**

Course Outcomes: -On completion of the course, students are able to:

1. Explain of Mendel's rules. Calculations of phenotypic and genotypic ratios of crosses, distinguish the monohybrid cross and other crosses & analyze of genotype with test cross.
2. Comprehensive, detailed understanding of the chemical basis of heredity
3. Define of basic concepts of genetics & explain of the gene linkage, multiple alleles.
4. Understand the mechanism of sex determination in various organisms.
5. Explain of sex-linked heredity.
6. Understanding the role of genetic mechanisms in evolution.
7. Learn about nature of quantitative traits, its inheritance and Hardy-Weinberg equilibrium.
8. To know the process of speciation & factors affecting the speciation

(Lab Course-IX Code – BOT-621) Course Name – **Based on BOT-611 (Theory Paper- Genetics & Evolution-XI) (Practical)**

Course Outcomes: -On completion of the course, students are able to:

1. Learn and understand Mendel's Laws of Inheritance (Law of Dominance, Law of Segregation, and Law of Independent Assortment) through practical exercises like working with seed mixtures and solving numerical problems.
2. The course enables students to apply concepts like Punnett squares and probability calculations to predict genotypes and phenotypes of offspring in various crosses (monohybrid and dihybrid).
3. Students will explore more complex inheritance patterns, such as gene interactions (e.g., incomplete dominance, co-dominance, epistasis) and sex-linked inheritance, by solving related problems and understanding their patterns.
4. The lab activities aim to enhance critical thinking and problem-solving skills related to tracing genetic traits and identifying the mode of inheritance (e.g., using pedigree analysis).
5. Students gain an understanding of the practical relevance of genetics in various fields, including human genetic disorders, agriculture, and animal breeding.

(Elective Course Code – BOT-612 (A)) Paper- XII Course Name – **Diversity of Angiosperms-II (Theory)**

Course Outcomes: - On completion of the course, students are able to:

1. Skill development in identification
2. Understanding evolutionary history
3. Understanding the need for scientific names and its application
4. Understand taxonomy and classification
5. Assess economic importance

(Lab Course X – BOT-622 (A)) Course Name – **Based on BOT-612 (A) (Theory Paper- XII) (Practical)**

Course Outcomes: -On completion of the course, students are able to:

1. Comparative analysis
2. Career readiness
3. Understanding epidermal structures
4. Application in research
5. Practical skills development in identification of plants

BOT-613 Skill enhancement Course SEC-4 (G) Semester-VI Horticulture (Theory)

Course Outcomes: -On completion of the course, students are able to:

1. Comprehend interdisciplinary science
2. Master cultivation practices
3. Develop practical skills
4. Promote sustainability
5. Foster entrepreneurship
6. Enhance communication & extension

BOT-613 Skill enhancement Course SEC-4 (G) Semester-VI Horticulture (Practical)

Course Outcomes: -On completion of the course, students are able to:

1. Proper usage & operational skills
2. Diagnosing plant problems & managing problem soils
3. Entrepreneurial skills in plantation and replantation
4. Improving fruit/flower quality and yield
5. Balancing vegetative growth and fruiting
6. In-depth understanding of cultivation practices

BSC (CHEMISTRY)

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

Programme Educational Objectives (PEOs) for the Bachelor of Science Curriculum under the National Education Policy 2020:

1. **Mastery of Discipline-Specific Knowledge**: Graduates of the Bachelor of Science program will demonstrate a deep understanding of fundamental principles, theories, and methodologies in their chosen scientific discipline, enabling them to analyze complex problems, propose innovative solutions, and contribute to advancements in their field.

2. **Interdisciplinary Proficiency**: Graduates will possess the ability to integrate knowledge and skills from multiple scientific disciplines, fostering a holistic approach to problem-solving and innovation. They will be equipped to address multifaceted challenges by drawing upon diverse perspectives and methodologies.

3. **Critical Thinking and Analytical Skills:** Graduates will develop strong critical thinking abilities, enabling them to evaluate information rigorously, analyze data effectively, and make informed decisions based on evidence. They will demonstrate proficiency in applying logical reasoning and scientific methods to solve problems and generate new knowledge.

4. **Leadership and Innovation:** Graduates will demonstrate leadership qualities and entrepreneurial mindset, capable of initiating and driving positive change in their organizations and communities. They will exhibit creativity, resilience, and adaptability, harnessing innovation to address complex challenges and seize opportunities for growth and advancement.

5. **Global Citizenship and Cultural Sensitivity**: Graduates will possess a global perspective and cultural sensitivity, recognizing the interconnectedness of diverse communities and the importance of collaboration across borders. They will engage in cross-cultural dialogue, embrace diversity, and contribute to the advancement of knowledge and understanding on a global scale.

These Programme Educational Objectives serve as guiding principles for the Bachelor of Science curriculum, reflecting our commitment to nurturing well-rounded graduates who are prepared to excel in their careers, contribute to society, and lead meaningful lives in a rapidly changing world.

PROGRAM OUTCOMES (POs) :

The National Education Policy (NEP) 2020 for India emphasizes several key aspects for Bachelor of Science (B.Sc.) programs, aiming to produce graduates who are not only well-versed in their respective disciplines but also equipped with skills necessary for holistic development and employability. While specific program outcomes may vary between institutions and disciplines within B.Sc. programs, here are some common outcomes aligned with NEP 2020:

- **PO1. The citizenship and society:** Apply broad understanding of ethical and professional skill in science subjects in the context of global, economic, environmental and societal realities while encompassing relevant contemporary issues.

- **PO2. Environment and sustainability**: Apply broad understanding of impact of science subjects in a global, economic, environmental and societal context and demonstrate the knowledge of, and need for sustainable development.

- **PO3. Ethics:** Apply ability to develop sustainable practical solutions for science subject related problems within positive professional and ethical boundaries.

- **PO4. Individual and team work:** Function effectively as a leader and as well as team member in diverse/ multidisciplinary environments.

- **PO5. Communication:** Communicate effectively on complex science subject related activities with the scientific community in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- **PO6. Project management and finance**: Demonstrate knowledge and understanding of the first principles of science and apply these to one's own work as a member and leader in a team, to complete project in any environment.

- **PO7. Life-long learning**: Recognize the need for lifelong learning and have the ability to engage in independent and life-long learning in the broadest context of technological change.

These program outcomes align with the broader goals of NEP 2020 to transform higher education in India and prepare students for the challenges and opportunities of the 21st century. Board of Studies designing B.Sc. curricula are encouraged to incorporate these outcomes into their program objectives and learning outcomes.

PROGRAM SPECIFIC OUTCOMES (PSOs):

PSO1; Core competency: The chemistry graduates will know the fundamental concepts of chemistry and applied chemistry. These fundamental concepts would reflect the latest understanding of the field, and therefore, are dynamic in nature and require frequent and time-bound revisions.

PSO2; Communication skills: Chemistry graduates will possess minimum standards of communication skills expected of a Chemistry graduate in the country. They are expected to read and understand the documents with in-depth analyses and logical arguments. Graduates are expected to be well peaking and communicating the finding/concepts to wider audience.

PSO3; Critical thinking: Chemistry graduates are expected to know basics of cognitive biases, mental models, logical fallacies, scientific methodology and constructing cogent scientific arguments.

PSO4; Psychological skills: Chemistry Graduates are expected to possess basic psychological skills required to face the world at large, as well as the skills to deal with individuals and students of various socio cultural, economic and educational levels. Psychological skills may include feedback loops, self-compassion, self-reflection, goal-setting, interpersonal relationships, and emotional management.

PSO5; Problem-solving: Chemistry Graduates will be equipped with problem-solving philosophical approaches that are pertinent across the disciplines.

PSO6; Analytical reasoning: Chemistry Graduates acquire formulate cogent arguments and spot logical flaws, inconsistencies, circular reasoning etc.

PSO7; Research-skills: Chemistry Graduates will be keenly observant about what is going on in the natural surroundings to awake their curiosity. Chemistry Graduates are expected to design scientific experiment through statistical hypothesis testing and other *apriority* reasoning including logical deduction.

PSO8; Teamwork: Chemistry Graduates will be team players, with productive cooperation involving members from diverse socio-cultural backgrounds.

PSO9; Digital Literacy: Chemistry Graduates are expected to be digitally literate for them to enroll and increase their core competency viae- learning resources such as MOOC and other digital tools for lifelong learning. Chemistry Graduates should be able to spot data fabrication and fake news by applying rational skepticism and analytical reasoning.

PSO10; Moral and ethical awareness: Chemistry Graduates will be responsible citizen of India and beware of moral and ethical base line of the country and the world. They are expected to define their core ethical virtues good enough to distinguish what construes asillegalandcrimeinIndianconstitution.Emphasisbegivenonacademicandresearch ethics, including fair Benefit Sharing, Plagiarism, Scientific Misconduct and so on.

PSO11; Leadership readiness: Chemistry Graduates are expected to be familiar with decision making process and basic managerial skills to become better leader. Skills may include defining objective vision and mission.

COURSE OUTCOMES

Semester-I

DSC-1: FUNDAMENTALS OF CHEMISTRY-1

Course Outcomes (COs):

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

i) Write the electronic configurations of the elements
ii) Understand the changes in periodic properties in modern periodic table
iii) Understand the different types of electron displacement in a molecule
iv) Differentiate between inductive, electromeric, resonance, and mesomeric effects.
v) Understand the methods of formation, structure and properties of the intermediate.
vi) Understand the basic concepts and different laws of thermodynamics and thermo chemistry
vii) The concept of chemical equilibrium

DSC-2 : Lab Course -1

Course Outcomes (COs) :

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

i) ToconsistentlyfollowestablishedSOPsforvariouschemicalexperiments.
ii) To prepare solution of desired concentration.
iii) To maintain accurate and thorough records of experimental data ,and analyze results to draw meaningful conclusions.
iv) To apply critical thinking skills to identify and address challenges that may arise during experiments, show casing the ability to troubleshoot and optimize procedures.
v) To gain insights into how chemical lab practices are applied in professional research or industrial settings, preparing them for future careers in diverse scientific and industrial fields.
vi) Students will demonstrate ethical conduct in all aspects of laboratory work, emphasizing integrity, responsibility, and professionalism.

SEC-1 B : -Stoichiometry-I

Course Outcomes (COs) :

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

1. understand theoretical aspects and working principles of chemistry labwares,
2. prepare all standards solutions, buffer solutions, indicators, common laboratory reagents,
3. perform some basic experiments,

4. develop skills in common laboratory techniques,

Lab Course- SEC-1 B Course Outcomes (COs) :

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

1. apply working principles of chemistry labwares,
2. prepare all standards solutions, buffer solutions, indicators, common laboratory reagents,
3. perform some basic experiments with accuracy.
4. use skilfully common laboratory techniques,

GE/ OE -1 : Herbal Chemistry - I

Course Outcomes (COs) :

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

CO1: acquainted with importance of herbal drugs,

CO2: know the different sources of herbal medicine and their preparation

CO3: acquire the knowledge of organic farming

CO4: know about the Indian system of drugs ayurveda, Unani, siddha and homeopathy

CO5: know health benefits and role of nutraceuticals

Semester-II

DSC-3 : FUNDAMENTALS OF CHEMISTRY-2

Course Outcomes (COs) :

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

i) Identify the type bond

ii) Predict the shape and geometry and bond angle in a molecule

iii) Understand the factors affecting ionic bond formation

iv) Identify types of isomerism

v) Apply the CIP rules for nomenclature of stereoisomers

vi) Rate of reactions and factors affecting it

vii) Solve the numerical on order reactions

DSC-4 : Lab course-2

Course Outcomes (COs) :

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

i) Acquire skills in common techniques for the Volumetric estimations of inorganic compound

ii) Acquire skills in common techniques preparation and purification of organic compounds.

iii) Assess the effectiveness of purification techniques

iv) Develop precision in measuring and recording physical constants

v) Analyze the relationship between melting/boiling points and purity.

vi) Develop skills in recording and reporting experimental procedures and results

vii) Handle different apparatus like eudiometer viscometer, stalagmometer for determining physical properties

VSC-1 B : - Soap and detergents

Course Outcomes (COs) :

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

CO1: Can gain the information about soaps, detergents and shampoos.

CO2: Can Acquire knowledge of basic concepts and techniques of soap and detergent industry.

CO3: Get hands training of analysis of soaps and detergents.

CO4: Aware about environmental aspects of detergents.

CO5: Development Skill for detergent, liquid soap and laundry soap making

VSC-2 B : (Lab Course) - Soap and detergents

Course Outcomes (COs) :

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

CO1: Can gain the information about soaps, detergents and shampoos.

CO2: Can Acquire knowledge of basic concepts and techniques of soap and detergent industry.

CO3: Get hands training of analysis of soaps and detergents.

CO4: Aware about environmental aspects of detergents.

CO5: Development Skill for detergent, liquid soap and laundry soap making

GE/OE-2 : Herbal Chemistry-II

Course Outcomes (COs) :

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

CO1: acquainted with importance of herbal drugs,

CO2: know the different sources of herbal medicine and their preparation

CO3: acquire the knowledge of organic farming

CO4: know about the Indian system of drugs ayurveda, Unani, siddha and homeopathy

THIRD SEMESTER

SAC00022003T CHE/DSC/T/ 200 Title of Paper: Organic Chemistry

Learning Objectives of the Course:

1. To develop critical thinking about the Structure of Benzene and its derivatives
2. To understand Huckel's rule and Aromaticity.
3. To understand electrophilic substitution reactions of benzene
4. To understand the basic concept of organic reaction mechanism.
5. To understand preparations and reactions of alcohols carboxylic acids, aldehyde and ketones.

6. To understand the nomenclature of organic compounds
7. To understand various name reactions with mechanism

Course Outcomes (COs):

After completion of the course, students will be able to:

1. Understand the structure of benzene and its derivatives.
2. Understand the aromatic and antiaromatic compounds.
3. Understand that different name reactions are involved in organic chemistry.
4. Apply the mechanism of organic reaction mechanisms.
5. Understand preparations and reactions of alcohols, carboxylic acids, aldehydes and ketones.
6. Understand the nomenclature of organic compounds

SAC00022263P CHE/DSC/P/226: Title of Paper: Organic Chemistry

Lab Course:

Learning Objectives of the Course:

1. To understand the stoichiometry.
2. To understand the isolation of organic compound
3. To develop basic skills in organic synthesis.
4. To develop the skill of purification of compounds by using TLC and crystallization.
5. To develop the skill of separation technique of organic compounds.
6. To develop the skill for element detection and functional group detection in organic compounds.

Course Outcomes (COs):

After completion of the course, students will be able to:

1. Understand the stoichiometry.
2. Understand the isolation of organic compound.
3. Develop basic skills in organic synthesis.
4. Develop the skill of purification of compounds by using TLC and crystallization.
5. Develop the separation technique skills of organic compounds.
6. Develop the skill for element detection and functional group detection in organic compounds.

SAC00022013T CHE/DSC/T/ 201 Title of Paper: Physical Chemistry

Learning Objectives of the Course:

1. To develop critical thinking about the phase equilibrium.
2. To understand conductance and conductometry.
3. To understand laws of quantum theory.
4. To understand the basic concept of photochemistry

5. To understand laws of photochemistry
6. To understand the fluorescence, phosphoresce and chemiluminescence

Course Outcomes (COs):
After completion of the course, students will be able to:

1. Understand the phase equilibrium.
2. Understand and apply concept of conductance and conductometry.
3. Understand and apply laws of quantum theory.
4. Apply the mathematical equation for quantum chemistry
5. Understand and apply photochemical concept and laws
6. Understand use the fluorescence, phosphoresce and chemiluminescence

SAC00022273P CHE/DSC/P/227: Title of Paper: Physical Chemistry Lab Course:

Learning Objectives of the Course:

1. To understand the procedure for determining order of reaction.
2. To understand the experiment for determining viscosity and surface tension
3. To develop basic skills in pH metry.
4. To develop the skill of conductometry and colorimetry
5. To develop the skill of potentiometry.
6. To understand the method for heterogeneous equilibria

Course Outcomes (COs):
After completion of the course, students will be able to

1. Understand the chemical kinetics of reaction.
2. Select and apply method for determining viscosity and surface tension
3. Calibrate and Use Ph meter.
4. Use conductometer and colorimeter.
5. Develop the skill in handling potentiometer
6. Develop the skill for determination of heterogenous equilibria

SCC00022003T CHE/MN/T/200 Title of Paper: Concepts of Chemistry I

Learning Objectives of the Course:

1. To understand the structure and functions of carbohydrates
2. To understand the concept, reaction and significance of amino acids.
3. To understand structure, function and significance of proteins.
4. To understand the basic concept of organic reaction mechanism.
5. To understand preparations and reactions of alcohols carboxylic acids, aldehyde and ketones.
6. To understand the nomenclature of organic compounds.
7. To understand various name reactions with mechanism

Course Outcomes (COs):

After completion of the course, students will be able to:

1. Apply knowledge of carbohydrates, amino acids and proteins for dietary analysis
2. Understand that different name reactions are involved in organic chemistry.
3. Apply the mechanism of organic reaction mechanisms.
4. Understand preparations and reactions of alcohols, carboxylic acids, aldehydes and ketones.
5. Understand the nomenclature of organic compounds

SCC00022013T CHE/MN/T/201 Title of Paper: Concepts of Chemistry II

Learning Objectives of the Course:

1. To understand principles of electrolytic conduction and its applications.
2. To study various theories and phenomenon related to atomic structure.
3. To understand various laws of photochemistry and photochemical processes.

Course Outcomes (COs):

After completion of the course, students will be able to:

1. Understand the principles of electrolytic conduction.
2. Apply the principles of electrolytic conduction.
3. Analyse the phenomenon related to atomic structure.
4. Remember the various laws of photochemistry.
5. Evaluate the photochemical processes.

SEC00022013T CHEM/VSC/T/201: (Title of Paper) Sauces and Ketchups

Learning Objectives of the Course:

1. To impart knowledge about preparation and analysis of sauces and ketchups
2. To impart knowledge in the legislator aspects of adulteration.
3. To be able to extend their knowledge to other kinds adulteration, detection and consumer protection.
4. To introduce students to food safety and standardization act and quality control of foods.

Course Outcomes (COs) : After completion of the course, students will be able to -

1. Get basic knowledge of various Sauce and ketchups.
2. Understand the adulteration of common foods and their adverse impact on health.
3. Comprehend certain skills of detecting adulteration of common foods.
4. Know the basic laws and procedures regarding food adulteration and consumer protection.
5. Apply the knowledge of food adulteration to other kinds of adulteration.

SEC00022273P CHE/VSC/P/227: (Title of Paper)– SAUCE AND KETCHUPS

Lab Course

Learning Objectives of the Course:

1. To educate about common food adulterants and their detection.
2. To impart practical knowledge in aspects of food adulteration.
3. To be able to extend their practical knowledge to other kinds adulteration, detection and consumer protection.
4. To make students skilled in food adulteration testing and analytical instrumentation.

Course Outcomes (COs) :
After completion of the course, students will be able to -

1. Know the basic and procedures regarding food adulteration.
2. Comprehend certain skills of detecting adulteration of common foods.
3. Analyse the quality and adulteration of various food materials.
4. Perform practicals skilfully related to sauce and ketchups.
5. Detets skilfully adulterants in given sample by using chemical test.
6. Understand the exact chemical reaction involved in food adulteration chemical tests.

FOURTH SEMESTER

SAC00022504T CHE/DSC/T/250 : (Inorganic Chemistry) : Theory Course

Learning Objectives of the Course:

1. Student will learn electronic configuration of first transition element.
2. To understand the properties of first transition element.
3. To understand coordination compound and different isomerism.
4. To understand the formation of coordination compound on basis of VBT.
5. To understand assumptions and application of CFT towards different geometry.
6. Students will learn volumetric analysis.

Course Outcomes (COs) :
After completion of the course, students will be able to –

1. To understand transition elements and its characteristic properties.
2. Understand the assumptions and Werner's coordination theory.
3. Understand the different types of isomerism.
4. Differentiate between VBT and CFT.
5. Understand the formation of outer and inner orbital complexes.
6. Understand the basic concepts of volumetric analysis

SAC00022764P CHE/DSC/P/ 276 : (Inorganic Chemistry) Lab Course 7

Learning Objectives of the Course:

1. The principles of gravimetric analysis and apply the same for coordination complexes.
2. To train how to prepare coordination complexes.
3. To characterization the coordination compounds.
4. Follow established SOPs for various chemical experiments

Course Outcomes (COs) :
After completion of the course, students will be able to –

1. Understand synthesis of coordination compounds and metal and ligand bonding.
2. Understand the principle of gravimetric analysis and able to estimate Ni, Cu, Fe, Al, Ba, Ca, Mn and Zn
3. Know how to prepare coordination complexes
4. Know how to calculation of Experiments.

SAC00022514T CHE/DSC /T/251 : (Title of Paper) APPLIED CHEMISTRY

Learning Objectives of the Course:

1. To understand the basic concept of spectroscopy.
2. To understand the nature and regions of electromagnetic radiations.
3. To understand the absorption of UV radiation by organic molecules leading to different excitations
4. To understand principle and instrumentation of IR spectroscopy
5. To understand the difference between IR and Raman spectroscopy.

Course Outcomes (COs) :

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

1. Know the different analytical spectroscopic techniques.
2. Understand the phenomenon used in the UV-Visible Spectroscopy
3. Understand the interaction of radiation with matter.
4. Able to interpreting UV-Visible, IR spectra.
5. Understand the methods of formation, structure and properties of the intermediate.
6. Understand the principle used in IR and Raman Spectroscopy

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SAC00022774P CHE/DSC/P/277: (Title of Paper) Lab Course -Applied chemistry

Learning Objectives of the Course:

1. To introduce applied chemistry practicals for skill development.
2. To understand how to estimate the content of drug molecule.
3. To understand the various determination methods for analysis of commercial products.
4. Develop proficiency in applied chemical laboratory techniques.
5. To understand the handling of sophisticated analytical instruments.
6. To follow established SOPs for analysis of various products.

Course Outcomes (COs) :

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

1. To consistently follow established SOPs for various chemical analysis.
2. To know the handling of various sophisticated analytical instruments.
3. To maintain accurate and thorough records of experimental data, and analyze results to draw meaningful conclusions.
4. To apply critical thinking skills to identify and address challenges that may arise during
   experiments, showcasing the ability to troubleshoot and optimize procedures.
5. To gain insights into how chemical lab practices are applied in professional research or
   industrial settings, preparing them for future careers in diverse scientific and industrial fields.
6. Students will exhibit ethical conduct in all features of laboratory work, highlighting integrity, accountability, and professionalism

SCC00022504T CHEM/MN/T/250: Title of the Paper (Concepts of Chemistry III) :

Learning Objectives of the Course:

1. Student will learn electronic configuration of first transition element.
2. To understand the properties of first transition element.
3. To understand coordination compound and different isomerism.
4. To understand the formation of coordination compound on basis of VBT.
5. To understand assumptions and application of CFT towards different geometry.
6. Students will learn Lanthanides and Actinides

Course Outcomes (COs) :

After completion of the course, students will be able to –

1. To understand transition elements and its characteristic properties.
2. Understand the assumptions and Werner's coordination theory.
3. Understand the different types of isomerism.
4. Differentiate between VBT and CFT.
5. Understand the formation of outer and inner orbital complexes.
6. Understand the basic concepts of Lanthanides and Actinides.

SCC00022514T CHE/MN/T/251 Title of the Paper: Concepts of Chemistry IV

Learning Objectives of the Course:

1. To part knowledge of Electromagnetic Radiation (EMR)
2. To understand the energy bands of EMR.
3. Acquaint the interaction of EMR with matter
4. Understand the basics of colour compounds
5. To develop skill for the interpretation of IR and UV-Vis graphs.

Course Outcomes:

After completion of the course, students will be able to

1) Understand the interaction of EMR and matter.
2) Get idea about relationship between Energy, wavelength, frequency and wavenumbers.
3) Understand energy transitions, absorption and emission spectral phenomenon.

SEC00022504T CHE/SEC//T/250 Lab Safety and Laboratory Practices

Learning objective of Course: -

1. To understand safety protocols.
2. To understand the procedures of handling hazardous chemicals and its storage.
3. Develop proficiency in fundamental chemical lab safety and emergency response.
4. To develop skill in fire prevention burns, fire drills and risk control.
5. To access and utilize MSDS information.

Learning Course Outcomes: -

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

1. To consistently follow the established safety protocols.
2. To recognize hazards and implement safety measures.
3. To apply thinking skills to administer first aid for fire and chemical exposure.

4. To enhance workplace safety.
5. Able to disposed of hazardous chemicals/waste.

SEC00022764P CHE/SEC/P//276 Lab Safety and Laboratory Practices

Learning objectives of the Course: -

1. To enhance the ability to recognize and interpret various safety symbols.
2. To provide practical knowledge on precautionary measures.
3. To facilitate individuals on first aid measures to overcome chemical accidents.
4. To develop awareness and competence in the safe disposal of hazardous chemicals.
5. To provide in-depth knowledge on the treatment and safety measures required in the case of chemical accidents,

Learning Course Outcomes: -

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

1. Understand various safety symbols, chemical packaging information.
2. Understand the precautionary measures required when handling hazardous substances.
3. To perform first aid effectively for chemical accidents.
5. Understand best practices for the disposal of hazardous chemicals

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SEMESER V- B. Sc. T. Y. CBCS Pattern 2022

COURSE OUTCOMES

B.Sc. TY (SEM -V) Physical Chemistry Paper-XIII

1) This course also discusses details of synthesis, structure of some specific nano molecules.
2) To enable the students to solve the simple quantum mechanical models such as simple harmonic oscillator, particle in a 1D- box, rigid rotor, H atom etc.
3) To impart a thorough knowledge of the fundamentals of microwave, infra-red, Raman, electronic and magnetic resonance spectroscopy.
4). To enable the students to learn about the kinetics of reaction To study the magnetic properties of molecules, chemical kinetics and photo chemistry
5) To gain skill to apply group theory to vibrational and electronic spectroscopy

Organic Chemistry Paper-XIV

1). This course gives a detail knowledge to the student about the analysis of statistical data they got through from different chemical experiment.
2) To identify organic compound using UV, IR and PMR spectroscopic techniques and elucidate the structure of compounds by analyzing the spectral data
3) This course will give insight into the processes involved in the production of soaps, detergents, cosmetics
4). Understanding the need of modern tools in chemical sciences
5). To impart the student's thorough idea in in the chemistry of carbohydrates, heterocyclic compounds, amino acids, proteins and nucleic acids.

6) To know the basics principle of different techniques employed in molecular spectroscopy

SEMESTER VI-B.Sc. TY (SEM -VI) Inorganic Chemistry Paper-XVI

1. This course discussed about the synthesis and properties of these organometallics, important in biological bodies like hemoglobin, chlorophylls, Vitamin B12, metal carbonyls and metal clusters
2. This course gives student knowledge about the synthesis of different complexes and their analytical study by spectroscopy
3. To understand the functions and applications of bioorganic compounds, valence bond and molecular orbital theory
4. Students learn the application of solvent extraction, chromatographies it.
5. To understand the general characteristics of the d and f block elements
6. To give the students a thorough knowledge of the different theories to explain the bonding in coordination compounds.

Organic Chemistry Paper-XVII

7. To enable the students to learn about carbohydrates, amino acids and hetero cyclic compounds.
8. To understand the importance of carbohydrate, amino acids in chemistry
9. To develop the ability to apply the principles of Chemistry.
10. Interpretation of collected information and use of information to evaluate Chemical Compounds.

Lab Course Paper XV & XVIII

11. Students will gain an understanding of methods of analysis related to chemical analysis such as detection of function groups.
12. The students will develop basic skills in the techniques of crystallization, distillation, TLC.
13. To learn the separation and purification of an organic mixture by chemical/solvent separation methods, Enable the students to prepare organic compounds
14. The design and execution of the experiment should demonstrate an understanding of good laboratory and the proper handling of chemical waste streams and also explain how the applications of Chemistry relate to the real world.
15. To impart the students a thorough knowledge of Systematic qualitative analysis of mixtures containing two acid and two basic radicals with interfering radical by Semi micro method

BSC (PHYSICS)

PROGRAM SPECIFIC OUTCOMES

On completion of 03/04 years degree in **BSc Physics** student will be able to:

- **PSO1: Domain Knowledge**: Graduates will have an in-depth comprehension of fundamental theories and principles across various domains of Physics, encompassing classical mechanics, electromagnetism, thermodynamics, quantum mechanics, nuclear and high energy physics, solid state physics, material science, electronics and modern physics.
- **PSO2: Problem Analysis**: Graduates will demonstrate adeptness in analyzing complex physical problems, formulating hypotheses and employing appropriate mathematical and computational techniques and solutions. They will understand the significance of equations, formulas, graphs and mathematical tools. Furthermore, they will effectively utilize technology for experimental design and implementation, data analysis, numerical methods and computational techniques in problem solving.
- **PSO3: Design development of solutions**: Graduates will possess the capability to create and execute experimental setup, simulations and theoretical models, effectively addressing scientific inquiries and resolving practical physics related issues. They will have both fundamental and advanced level expertise in physics, enabling them to proficiently utilize computational tools and scientific software.
- **PSO4: Conduct Investigation of complex problems**: Graduates will exhibit proficiency in conducting investigations of intricate physics problems, which involves effectively utilizing established knowledge and methodologies to design experiments, meticulously analyzing resulting data to extract pertinent information and accurately interpreting data to draw valid conclusions, thereby contributing to a deeper comprehension of the problem under scrutiny.
- **PSO5: Modern Tools**: Graduates will demonstrate proficiency in employing modern experimental, computational and data analysis tools and techniques prevalent in physics research and industrial settings. They will adeptly apply and cultivate skills in physics and engineering for industrial applications, production and technology development and transfer. Furthermore, they will hone advanced analytical skills tailored for job requirements in industries, consultancies, educational institutions research organizations or public administration.

- **PSO6: Communication Skills:** Graduates will effectively communicate scientific ideas, methodologies and results through written reports, oral presentations and scientific publications, facilitating collaboration and dissemination of knowledge within the scientific community.

COURSE OUTCOMES:

B. Sc. F. Y. Semester I: DSC-1: Mechanics, Properties of matter

On completion of this course students will be able to understand-

- To understand Newton's law of motion
- Recognize different forces existing in nature and their physical significance
- Acquire deep knowledge of physical quantities such as elasticity, viscosity, surface tension.
- Develop the capacity to investigate and analyze daily problem related to mechanical movement.

B. Sc. F. Y. Semester I: DSC-2: Practical course based on DSC-1

On completion of this course students will be able to understand-

- Understand gravitational acceleration through pendulum analysis and learn material stiffness and viscosity determination techniques using various setups.
- Explore rotational dynamics through flywheel experiments for moment of inertia and torsional property analysis.
- Develop instrument precision skills via least count analysis, crucial for physics and related field pursuits.

B. Sc. F. Y. Semester II: DSC-3: Optics

On completion of this course students will be able –

- Acquire the basic concept of optics and its applications
- Explain how image formation takes place in lenses
- Understand the operations of many modern optical devices
- Understand the optical phenomenon such as interference and diffraction

B. Sc. F. Y. Semester II: DSC-4: Practical course based on DSC-3

On completion of this course students will be able to understand-

- Understanding of interference and diffraction phenomena through hands-on experimentation.
- Appreciation of practical applications of optical instruments across various scientific disciplines.
- Proficiency in conducting precise measurements and observations using optical instruments.
- Analyse experimental results critically and compare them with theoretical expectations.

B. Sc. F. Y. Semester I: SEC-I: Basic Instrumentation Skill

On completion of this course students will be able to understand-

- Gain understanding of measurement fundamentals including instrument accuracy, precision, and errors, as well as principles of voltage, current, and resistance measurement using voltmeters, ammeters, and multimeters.
- Master the use of CRO for voltage (DC and AC), frequency, and time period measurements, and understand signal and pulse generator specifications, alongside distortion factor meter usage and wave analysis.
- Learn analog versus digital instrument distinctions, comprehend digital multimeter block diagrams and operations, and understand time interval, frequency, and period measurements using universal counters, emphasizing time-base stability, accuracy, and resolution.

B. Sc. F. Y. Semester II: VSC-I: Electrical Measurements

On completion of this course students will be able to understand-

- Understand and apply fundamental electrical measurement concepts. In
- Gain the skill in selecting appropriate measurement methods and minimizing errors.
- Understanding of electrical device characteristics and their role in measurement circuits. Calibrate instruments and verify their accuracy against standards.

B. Sc. S. Y. Semester III: DSC-5: Modern Physics
Course code: PHY/DSC/T/200
Examination code: SAC00062003T
Course outcomes:

After successful completion of this course students will be able to

- Explain the factors influencing photoelectric effect, experimental setup and apply it for applications
- Understand the fundamentals of lasers, laser systems, their characteristics and diversified applications including industry, medicine and defense
- Use this knowledge for applications of lasers in specific fields of their interest
- Solve numerical problems on Photoelectric effect, X- rays and lasers

B. Sc. S. Y. Semester III: DSC-6: Electricity and Magnetism
Course code: PHY/DSC/T/201
Examination code: SAC00062013T
Course outcomes:

After successful completion of this course students will be able to

- Develop an understanding on the concepts of electricity and magnetism

- Understand the knowledge of various fundamental operations required for electrostatics and magneto statics
- Explain the fundamental concepts and operations of vector analysis
- Increase the ability to perform calculations of various mathematical expressions and laws
- Develop ability among the students to identify, remember and grasp the meanings and definitions and laws of electricity and magnetism

B. Sc. S. Y. Semester III: DSC-7: Practical based on DSC-5-Modern Physics
Course code: PHY/DSC/P/226
Examination code: SAC00062263P
Course outcomes:

On successful completion of this course students will be able to

- Verify the inverse square law and measure Planck's constant using photoelectric Effect
- Compare Luminous intensities of different light sources using photocells
- Understand and apply the principles of laser optics for diffraction, beam divergence and precision measurement.
- Analyse experimental data from photocell and laser based experiments to draw meaningful conclusions about physical constants.

B. Sc. S. Y. Semester III: DSC-8: Practical based on DSC-6 Electricity and Magnetism
Course code: PHY/DSC/P/227
Examination code: SAC00062273P
Course outcomes:

On successful completion of this course students will be able to

- Measure the energy band gap of a semiconductor and analyse temperature dependence.
- Perform accurate resistance and capacitance measurements using bridges
- Define high resistance and absolute capacity of a condenser using B.G. technique
- Investigate transit behavior in RC circuits and determine e/m using Thomson method

B. Sc. S. Y. Semester III: Minor 1 :- Soil Physics
Course code: PHY/Mn/T/200
Examination code: SCC00062003T
Course outcomes:

After successful completion of this course students will be able to

- Explain the fundamental concepts, importance and interdisciplinary interactions of soil physics

- Describe soil formation, profile development, texture and methods of particle size analysis
- Analyse soil physical properties including density, porosity, structure and water content
- Interpret the energy state of soil water, soil moisture potential and measurement techniques

B. Sc. S. Y. Semester III: Minor 2 :- Digital Electronics
Course code: PHY/Mn/T/201
Examination code: SCC03062013T
Course outcomes:

After successful completion of this course students will be able to

- Describe and explain the fundamentals of digital electronics
- Perform number system conversions and basic logic operations
- Design and simulate simple combinational and sequential logic circuits
- Recognize the importance of digital systems in scientific research and experiments

B. Sc. S. Y. Semester III: VSC-1:- Solar Cell Devices
Course code: PHY/VSC/T/200
Examination code: SEC00062003T
Course outcomes:

After successful completion of this course students will be able to

- Explain the principles of photovoltaic energy conversion
- Identify and compare materials used in various types of solar cells
- Demonstrate an understanding of solar cell fabrication and testing techniques
- Analyse solar cell performance using key metrics like efficiency and fill factor
- Discuss challenges and future trends in solar cell technology

B. Sc. S. Y. Semester III: VSC-3:- Practicals based on Solar Cell Devices
Course code: PHY/VSC/P/226
Examination code: SEC00062263P
Course outcomes:

After successful completion of this course students will be able to

- Analyse the I-V characteristics of solar cell and determine key performance parameters
- Evaluate the effect of light intensity and temperature variations on solar cell efficiency
- Compare electrical behaviour of solar cells connected in series and parallel configurations

- Interpret spectral response and quantum efficiency data fir solar cell performance assessment

B. Sc. S. Y. Semester IV: DSC-9: Heat and Thermodynamics
Course code: PHY/DSC/T/250
Examination code: SAC00062504T
Course outcomes:

On successful completion of this course students will be able to

- Understand the concepts of heat and thermodynamics
- Describe and apply physical concepts of heat and laws of thermodynamics
- Develop ability among the students to identify remember and grasp the meanings, definitions and laws of heat and thermodynamics
- Perform calculations of heat conduction in various geometries.

B. Sc. S. Y. Semester IV: DSC-10: Electrodynamics
Course code: PHY/DSC/T/251
Examination code: SAC00062514T
Course outcomes:

On successful completion of this course students will be able to

- Apply Gauss's law to calculate electric fields
- Explain and derive Maxwell's equations
- Analyze electromagnetic waves in different media
- Solve problems on induction and displacement current
- Use Poynting's Theorem for energy flow analysis

B. Sc. S. Y. Semester IV: DSC-11: Practical based on Heat and Thermodynamics
Course code: PHY/DSC/P/276
Examination code: SAC00062764P
Course outcomes:

On successful completion of this course students will be able to

- Understand theoretical principles of basic practical Physics
- Develop awareness of minimizing errors
- Handle carefully various instruments
- Correlate theoretical concepts with the help of experiments
- Gain knowledge about heat, thermal conductivity of different materials and phenomena of heat

B. Sc. S. Y. Semester IV: DSC-12: Practicals based on Electrodynamics
Course code: PHY/DSC/P/277
Examination code: SAC03062774P
Course outcomes:

On successful completion of this course students will be able to

- Measure and analyse magnetic properties of materials using Magnetometer
- Determine inductance and charge sensitivity using bridge and galvanometer techniques
- Verify the capacities of condenser using De Sauty's method
- Determine the AC mains frequency using sonometer experiment

B. Sc. S. Y. Semester IV: Minor 3 :- Nuclear Chemistry
Course code: PHY/Mn/T/250
Examination code: SCC00062504T
Course outcomes:

After successful completion of this course students will be able to

- Understands principles of radioactivity and radioactive decay, including half-life and radioactive equilibrium and their applications in various fields
- Analyse nuclear reactions including fission fusion and evaluate processes and energy changes involved in nuclear reactors and radiation chemistry
- Apply the use of radioactive isotopes and tracers in medicine agriculture, analytical chemistry and age determination techniques

B. Sc. S. Y. Semester IV: Minor 4 :- Thermal Physics
Course code: PHY/Mn/T/251
Examination code: SCC00062514T
Course outcomes:

After successful completion of this course students will be able to

- Explain and apply the concepts of temperature, thermometers and various temperature scales
- Develop proficiency in calculating and interpreting conductivity using different methods
- Apply laws of thermodynamics to various thermodynamic processes and calculate work done in specific processes
- Students will be capable of using and understanding temperature measurement techniques and solving problems related to heat transfer and thermodynamics

B. Sc. S. Y. Semester IV: SEC -2 :- Generative AI
Course code: PHY/SEC/T/251
Examination code: SEC00062514T
Course outcomes:

After successful completion of this course students will be able to

- Understands the foundational principles of Generative AI including its capabilities and limitations
- Apply Generative AI tools to create innovative and content across domains
- Evaluate and address ethical considerations such as copyright misinformation and privacy.
- Explore career opportunities and emerging trends in Generative AI

B. Sc. S. Y. Semester IV: SEC -4 :- Practicals based on Generative AI
Course code: PHY/SEC/P/277
Examination code: SEC00062774P
Course outcomes:

After successful completion of this course students will be able to

- Demonstrate proficiency in using generative AI tools on mobile platforms to generate text images audio and video effectively
- Apply generative AI technique to solve practical problems and create innovative content for arts commerce and business applications
- Showcase creativity and technical skills in utilizing generative AI tools responsibility and ethically in real world scenarios.

T Y BSc Sem V : PHY 511: Classical and Quantum Mechanics

On completion of this course students will be able to understand-

- Idea and concepts in classical physics
- Basic concepts in Vibrational principle and Principle of Least Actions
- Difference between classical and quantum mechanical theory and approach
- Linear Vector Space, operators and tools to calculate Eigen values
- Various techniques to solve time dependent and time independent Schrodinger equations using different coordinate systems.

T Y BSc Sem V : PHY 512: Electrodynamics

On completion of this course students will be able to understand-

- The difference between static and dynamical systems
- Maxwell's equations and time-varying fields
- Gauges in electrodynamics, retarded potentials and its applications
- Radiation from time varying source, charged particle dynamics and relativistic electrodynamics

T Y BSc Sem VI : PHY 611: Atomic and Molecular Physics

On completion of this course students will be able to understand-

- Gain the through understanding of the basic structure of hydrogen like atoms

- Learn the selection rules for two electron atoms and many electron atoms
- Apply various molecular spectroscopy principles
- Apply knowledge of physics to become successful in national level examinations

T Y BSc Sem VI : PHY 612: Optical Fiber and Communication

On completion of this course students will be able to understand-

- Realize the significance of optical fiber communication
- Designing the optical system
- Understand the construction and working of optical fiber cable
- Develop the knowledge of fiber fabrication
- Identify and understand the needs of OFC

BSC (MATHEMATICS)

PROGRAM OBJECTIVES

The undergraduate degree course in Mathematics aims to provide:

a) In-depth knowledge in Mathematics through understanding of key mathematical concepts, principals, theories and their applications.
b) Inculcate strong interest in learning mathematics.
c) Evolve broad and balanced knowledge and understanding of definitions, key concepts, principles and theorems in mathematics.
d) Enable learners/students to apply the knowledge and skills acquired by them during the programme to solve specific theoretical and applied problems in mathematics.
e) Develop in students the ability to apply relevant tools developed in mathematical theory to handle issues and problems in social and natural sciences.
f) Provide students with sufficient knowledge and skills that enable them to undertake further studies in mathematics and related disciplines.
g) Sufficient subject matter competence enables students to prepare for various competitive examinations such as IIT-JAM, GATE, GRE, UGC-CSIR, NET-JRF and civil services examinations etc.

PROGRAM OUTCOMES

The learning outcomes of the undergraduate degree course in Mathematics are as follows:

a) Communicate mathematics effectively by written, computational and graphic means.
b) Create mathematical ideas from basic axioms.
c) Gauge the hypothesis, theories, techniques and proofs provisionally
d) Utilize mathematics to solve theoretical and applied problems by critical understanding, analysis and synthesis.
e) Identify applications of mathematics in other disciplines and in the real world leading to enhancement of career prospects in a plethora of fields and research.

PROGRAM SPECIFIC OUTCOMES;

On completion of the 03/04 years degree in B.Sc. (Mathematics) students will be able to:

a) Disciplinary Knowledge – bachelor's degree in mathematics is the culmination of in-depth knowledge of Algebra, Calculus, Geometry, Differential Equations and several other branches of pure and applied mathematics. This also leads to study the related areas.

b) Communication Skills – ability to communicate various mathematical concepts effectively using examples and their geometrical visualization. The skills and knowledge gained in this programme will lead to proficiency in analytical reasoning which can be used for modelling and solving real life problems.
c) Critical Thinking And Analytical Reasoning – the students undergoing this programme acquire ability of critical thinking and logical reasoning and capability of recognizing and distinguishing various aspects of real-life problems.
d) Problem Solving – the mathematical knowledge gained by the students through this programme develops an ability to analyze the problem, identify and define appropriate computing requirements for its solution. This programme enhances students' overall developments.
e) Research Related Skills – Completing of this programme develops capability of inquiring about appropriate questions relating to the mathematical concepts different areas of mathematics.
f) Information/digital literacy – the completion of this programme will enable the learner to use appropriate software to solve algebraic equations and differential equations.
g) Self-Directed Learning – the students completing this programme will develop ability of working independently and to make an in-depth study of various notions of mathematics.
h) Moral And Ethical Awareness/reasoning – the student completing this programme will develop an ability to identify unethical behavior such as fabrication, falsification or misinterpretation of data and adopting objectives, unbiased and truthful actions in all aspects of life in general and mathematical studies in specific.
i) Lifelong Learning – this programme provides self directed learning and lifelong learning skills. This programme helps the learner to think independently and develop algorithms and computational skills for solving real world problems.
j) Ability to pursue advanced studies and research in pure and applied mathematical sciences.

COURSE OUTCOMES

DSC 1 Calculus

After completion of course students will be able to:

1) Find derivative of hyperbolic, inverse hyperbolic functions and n^{th} derivative of given functions.
2) Find the Maclaurin's series expansion of functions.
3) Find the partial derivatives of functions.
4) Determine areas of plane regions, length of curves and volume of solid of revolution.

DSC 2 Lab Course On Calculus

After completion of course students will be able to:

1) Find derivative of hyperbolic, inverse hyperbolic functions and n^{th} derivative of given functions.
2) Find the Maclaurin's series expansion of functions.
3) Find the partial derivatives of functions.
4) Determine areas of plane regions, length of curves and volume of solid of revolution.

Sec 1A Combinatorial Mathematics

After completion of course students will be able to:

1) Apply permutations and combinations.
2) Find the number of circular permutations.
3) Find the number of ways of selection out of given things.
4) Apply pigeonhole principle and inclusion-exclusion principle.

Sec 2 Lab Course Outcomes

After completion of course students will be able to:

1) Apply permutations and combinations.
2) Find the number of circular permutations.
3) Find the number of ways of selection out of given things.
4) Apply pigeonhole principle and inclusion-exclusion principle.

DSC 3 Differential Equations

After completion of course students will be able to:

1) Determine the solution of first order linear differential equations,
2) Determine the solution of exact differential equation.
3) Determine the solution of linear equations with constant coefficients using general and short method.
4) Determine the solution of linear homogeneous differential equations.

DSC 4 Lab Course 2 Depending on Differential Equations
After completion of course students will be able to:

1) Determine the solution of first order linear differential equations.
2) Determine the solution of exact differential equation.
3) Determine the solution of linear equations with constant coefficients using general and short method.

4) Determine the solution of linear homogeneous differential equations.

VSC 1B Basic Statistics

After completion of course students will be able to:

1) Derivation of mean, mode and median and derivation for the given data.
2) Apply the concepts of probability.

VSC 2 Lab Course Depending on Basic Statistics
After completion of course students will be able to:

1) Understand the Basic Statistics.

MAT/DSC/T/200 : Number Theory
Course outcomes

- Find the ged & lcm of integers.
- Find solution of linear Diophantine equations
- Solve the linear congruencies
- Solve the system of linear congruencies
- Evaluate for a given number

MAT/DSC/T/201: Partial Differential Equations Course outcomes

- Solve Lagrange's equation
- Find the solutions such as complete integral, singular integral and general integral
- Determine the solution of partial differential equations using Charpit's Method
- Describe and apply Monge's Method

MAT/DSC/P/226: Lab Course Based on MAT/DSC/T/200 Course outcomes

- Determine ged & lcm of integers using Euclidean Algorithm
- Find Solution of Linear Equation using Method of linear Diophantine Equatior
- Solve the system of linear Congruencies
- Find the remainder using Wilson's theorem.
- Evaluate sum of divisors and the number of divisors of a given number.

MAT/DSC/P/227: Lab Course Based on MAT/DSC/T/201
Course outcomes

- Solve Lagrange's equation
- Find the solutions such as complete integral, singular integral and general integral.

- Determine the solution of partial differential equations using Charpit's Method.
- Describe and apply Monge's Method

MAT/Mn/T/200 : Logic and Sets
Course outcomes

- Construct the truth tables of given proposition.
- Prove equivalence of two given propositions.
- Prove the properties of set operations.
- Find Cartesian product of two sets.

MAT/Mn/T/201: Vector Algebra Course outcomes

- Define scalar, vector and angle between two vectors.
- Find the directional cosine of the line.
- Find the scalar triple product and vector triple product.

MAT/VSC/T/200: Numerical Methods-I
Course outcomes

- Analyse the error in numerical methods.
- Construct interpolating polynomial when the points are equally spaced.
- Obtain interpolating polynomial when the points are unequally spaced.

MAT/VSC/P/226: Lab Course Based on MAT/VSC/T/200 Course outcomes

- Analyse the error in numerical methods.
- Construct interpolating polynomial when the points are equally spaced.
- Obtain interpolating polynomial when the points are unequally spaced.
- Apply numerical methods using mathematical software.

MAT/DSC/T/250: Algebra
Course outcomes

- Identify and apply group structure properties.
- Identify and apply subgroup, normal subgroup and quotient group properties.
- Define and construct homomorphism of groups.
- Define and construct homomorphism and isomorphism of rings and characterize integral domains.

MAT/DSC/T/251: Integral Transforms Course outcomes

- Apply the Laplace transform for various functions.
- Obtain the inverse Laplace transform.
- Find the solution of differential equations by using Laplace transform.
- Find the Fourier transform for various functions, Fourier sine and cosine transforms of functions.

MAT/DSC/P/276: Lab Course based on MAT/DSC/T/250 Course outcomes

- Identify and apply group structure properties.
- Identify and apply subgroup, normal subgroup and quotient group properties.
- Define and construct homomorphism of groups.
- Define and construct homomorphism and isomorphism of rings and characterize integral domains.

MAT/DSC/P/277: Lab Course based on MAT/DSC/T/251 Course outcomes

- Apply the Laplace transform for various functions.
- Obtain the inverse Laplace transform.
- Find the solution of differential equations by using Laplace transform.
- Find the Fourier transform for various functions, Fourier sine and cosine transforms of functions.

MAT/Mn/T/250: Discrete Mathematics
Course outcomes

- Identify the types of relation and function.
- Prove laws of Boolean algebra.
- Apply the laws of Boolean algebra.
- Apply logic gates to adder, encoder and decoder.

MAT/Mn/T/251 : Vector Calculus
Course outcomes

- Find the derivatives and partial derivatives of vector-valued functions of three variables.
- Define and apply the gradient, divergence and curl operators.
- Evaluate line and surface integrals.

MAT/SEC/T/250; Numerical Methods-II

Course outcomes

- Apply numerical methods and find the integration by numerical methods.
- Derive and apply numerical methods to find the roots of algebraic and transcendental equations.
- Apply numerical methods to obtain numerical solution of ordinary differential equations.

MAT/SEC/P/276: Lab Course Based on MAT/SEC/T/250 Course outcomes

- Apply numerical methods and find the integration by numerical methods.
- Derive and apply numerical methods to find the roots of algebraic and transcendental equations.
- Apply numerical methods to obtain numerical solution of ordinary differential equations.
- Use of mathematical software for numerical methods.

MAT 501 Real Analysis 1

Course Outcomes:

1) To introduce the basic concepts and notions of real analysis.
2) To learn the basic concepts of Sequence and Series of Real Numbers.
3) To acquire the skills of finding Jacobians.

MAT 502 Abstract Algebra 1

Course Outcomes:

1) Describe Group and Subgroup.
2) Explain Normal Subgroup and Quotient groups.
3) Define Rings and some special type of Rings.
4) Describe Ideals and Maximal Ideals.

MAT 503P Lab Course 3

Based on MAT 501 and MAT 502:

Course Outcomes:

1) Define and recognize bounded, convergent, divergent, Cauchy's and Monotonic Sequences.
2) Define and recognize convergence and divergence of series.
3) Determine the Jacobian of Implicit and Explicit Function.
4) Describe Group and Subgroup.

5) Explain Normal Subgroup and Quotient groups.
6) Define rings and some special types of rings.
7) Describe ideals and maximal ideals.

MAT 601 Real Analysis 2 Course Outcomes:

1) Describe several basic concepts of metric spaces and their properties.
2) Understand properties of Riemann integrable functions and applications of fundamental theorems of calculus.
3) Find Fourier Series of some standard functions and its applications.

MAT 602 Ordinary Differential Equation
Course Outcomes:

1) Classify and identify types of functions.
2) Solve first and Second Order Differential Equations.
3) Solve Initial Value Problems and study properties of solutions of IVP.
4) Find Wronskian of the solutions.

MAT 603P Lab Course 4 based MAT 601 and 602
Course Outcomes:

1) Describe several basic concepts of metric spaces and their properties.
2) Understand properties of Riemann integrable functions and applications of fundamental theorems of calculus.
3) Find Fourier Series of some standard functions and its applications.
4) Classify and identify types of functions.
5) Solve first order and second order differential equations.
6) Solve Initial Value Problems and study properties of solutions of IVP.
7) Find Wronskian of the solutions.

BSC (ZOOLOGY)

PROGRAM OUTCOMES (POs):

The National Education Policy (NEP) 2020 for India emphasizes several key aspects for Bachelor of Science (B.Sc.) programs, aiming to produce graduates who are not only well-versed in their respective disciplines but also equipped with skills necessary for holistic development and employability. While specific program outcomes may vary between institutions and disciplines within B.Sc. programs, here are some common outcomes aligned with NEP 2020:

- **PO1**. The citizenship and society: Apply broad understanding of ethical and professional skill in science subjects in the context of global, economic, environmental and societal realities while encompassing relevant contemporary issues.
- **PO2**. Environment and sustainability: Apply broad understanding of impact of science subjects in a global, economic, environmental and societal context and demonstrate the knowledge of, and need for sustainable development.
- **PO3**. Ethics: Apply ability to develop sustainable practical solutions for science subject related problems within positive professional and ethical boundaries.
- **PO4**. Individual and teamwork: Function effectively as a leader and as well as team member in diverse/multidisciplinary environments.
- **PO5**. Communication: Communicate effectively on complex science subject related activities with the scientific community in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO6**. Project management and finance: Demonstrate knowledge and understanding of the first principles of science and apply these to one's own work as a member and leader in a team, to complete project in any environment.
- **PO7**. Life-long learning: Recognize the need for lifelong learning and have the ability to engage in independent and life-long learning in the broadest context of technological change.

These program outcomes align with the broader goals of NEP 2020 to transform higher education in India and prepare students for the challenges and opportunities of the 21st century. Board of Studies designing B.Sc. curricula are encouraged to incorporate these outcomes into their program objectives and learning outcomes.

PROGRAM SPECIFIC OUTCOMES PSOs):

On completion of the 03/04 years Degree in B.Sc. (Zoology) students will be able to:

- **PSO1**: Domain knowledge: This programme will demonstrate and apply the deep knowledge of fundamental and advanced areas of subject zoology that will provide both classical and modern concepts of zoology in higher education.
- **PSO2**: Problem Analysis: Identify the problems related to subject at varied complexity and develop strong, critical thinking and abilities for substantiated solution and conclusion effectively.
- **PSO3**: Design Development of solutions: Graduates will possess the capability to create and execute research ideas. They will have both fundamental and scientific approach towards Zoology.
- **PSO4**: Conduct Investigation of complex problems: Graduates will be established knowledge and methods to design experiments, analyze resulting data and interpret the same to provide valid conclusions. Importance is given to practical learning and presentation skill of students. The lab courses and skill provide students to their employability.
- **PSO5**: Modern Tools and techniques: Graduate will create appropriate techniques and cultivate skills in life science for agricultural, animal husbandry and relevant to human studies more emphasis is given to branches like biochemistry, economic zoology, behavioural biology, evolutionary biology, molecular biology, genetic engineering, bioinformatics etc.
- **PSO6**: Communication Skills: Graduates will effectively communicate scientific ideas, methodologies, and results through written reports, oral presentations, and scientific publications, facilitating collaboration and dissemination of knowledge within the scientific community.
- **PSO7**: Research related skill: Ability to pursue advanced studies and research in zoology and provide opportunity for the mobility of the student both within and across the world.

B Sc - I
Revised Course Structure and Curriculum (As per NEP-2020)

Semester: I
Class: B.Sc I
Title/Number of the Paper: Animal Diversity-I (Non-Chordata)/DSC-1
Course Outcomes (COs): After completion of the course, students will be able to -
CO1. Understand general organization of unicellular and multicellular animals.
CO2. Recognize diversity and adaptation of invertebrate animals and significance.

CO3. Acquire deep knowledge and importance of biodiversity conservation. iv Develop the capacity to investigate pathogenicity of micro and macro fauna.

Semester: I
Class: B.Sc I
Title/Number of the Paper: DSC-2: Practical's Based on DSC-1, Animal Diversity-I (Non-Chordata)
Course Outcomes (COs): After completion of the course, students will be able to-
CO1. Understand systemic position, habit and habitat of invertebrate animals.
CO2. Understand the pathogenicity and life cycle of parasite and vectors.
CO3. Develop skills to recognize surrounding animals and their importance

Semester: II
Class: B.Sc I
Title/Number of the Paper: DSC-3: Animal Diversity-II (Chordata)
Course Outcomes (COs): On completion of the course, students will be able to,
CO1. Understand general organization of vertebrate animals.
CO2. Recognize diversity, migration and adaptive radiation of vertebrate, animal
CO3. Acquire deep knowledge and importance of biodiversity conservation.
CO4. Develop the capacity to understand biological importance and their conservation methods.

Semester: II
Class: B.Sc I
Title/Number of the Paper: DSC-4: Practical Based on DSC-3 (Animal Diversity-II)
Course Outcomes (COs): On completion of the course, students will be able to,
CO1. Understand systemic position, habit and habitat of vertebrate animals.
CO2. Understand the adaptive features of fishes, birds.
CO3. Understand the physiological and anatomical study of vertebrate animals
CO4. Develop skills to recognize biodiversity of animals and their importance

Semester: I
Class: B.Sc I (Skill Enhancement Course)
Title/Number of the Paper: SEC-1: Bee Keeping
Course Outcomes (COs): After completion of the course, students will be able to –
CO1. The learner will able to differentiate in different types of honey bee castes.
CO2. Learner will be able to use the artificial hive for beekeeping
CO3. Learner will be able to use the technique of honey purification and processing.
CO4. Learner will be able to construct the artificial honey hive and maintain it.
CO5. Learner if is not employed can find own employment by doing Bee keeping vi Lerner can start own beekeeping equipment agency for farmers or beekeepers

Semester: I
Class: B.Sc I (Skill Enhancement Course)
Title/Number of the Paper: SEC-2: Practical's based on SEC-1 (Bee Keeping)
Course Outcomes (COs): After completion of the course,
CO1. The learner will able to differentiate in different types of honey bee castes.
CO2. Learner will be able to use the artificial hive for beekeeping
CO3. Learner will be able to use the technique of honey purification and processing.
CO4. Learner will be able to construct the artificial honey hive and maintain it
CO5. Learner if is not employed can find own employment by doing Bee keeping
CO6. Lerner can start own beekeeping equipment agency for farmers or beekeepers

Semester: I
Class: B.Sc I (Generic/Open Elective)
Title/Number of the Paper: Vectors, Diseases and Management /GE/OE- 1
Course Outcomes (COs): After completion of the course, students will be able to-
CO1. To develop awareness about the causative agents and control measures of many commonly vector borne diseases
CO2. Recognize the symptoms and proper identification of vectors.
CO3. Learn feeding mechanism and causing ideas.
CO4. Understand the strategies for the management of vector borne diseases by Chemical, Biological and IPM

Semester: II
Class: B.Sc I (Vocational Skill Courses)
Title/Number of the Paper: VSC-1: Poultry Farming
Course Outcomes (COs): On completion of the course, students will be able to,
CO1. Understand the status of Indian Poultry Industry.
CO2. Learn the Scientific Poultry farming.
CO3. Applied diversified Poultry practices
CO4. Recognize the different breeds of chicken

Semester: II
Class: B.Sc I (Vocational Skill Courses)
Title/Number of the Paper: VSC-2: Practical Based on VSC-1 (Poultry Farming)
Course Outcomes (COs): On completion of the course, students will be able to,
CO1. Understand the status of Indian Poultry Industry.
CO2. Learn the Scientific Poultry farming.
CO3. Applied diversified Poultry practices.
CO4. Recognize the different breeds of chicken.
Semester: II

Class: B.Sc I (Generic/Open Elective)
Title/Number of the Paper: Dairy Production Technology/ GE/OE-2
Course Outcomes (COs): On completion of the course, students will be able to,
CO1. Understand the pre-requisites for starting a Dairy farm.
CO2. Recognize different breeds of Cows & buffaloes following safety precautions.
CO3. Prepare and give recommended feed and water for livestock
CO4. Maintain health of livestock along with productivity
CO5. Vaccination of cattle, nutrients requirements
CO6. Entrepreneurship i.e., Effectively market dairy products
CO7. Ensure safe and clean dairy farm and Standard safety measures to be taken in establishing an industry
CO7. Efficiently start and manage to establish or develop a Dairy Industry

B.Sc II
Semester Pattern Curriculum under, Choice based Credit System (CBCS)

NEP
BSc II Semester- III

Title/Number of the Paper: Cell Biology/Major Core (Mandatory DSC) ZOO/DSC/ T/200
Course Outcomes (COs):
CO1. Understand the importance of cell as a structural and functional unit of life.
CO2. The students understand and compare between the prokaryotic and eukaryotic system and extrapolates the life to the aspect of development.
CO3. The cellular mechanisms and its functioning depend on endo-membranes and structures.
CO4. They are best studied with microscopy.

Title/Number of the Paper: ZOO/DSC/P/226: Cell Biology/Practical
Course Outcomes:
CO1. To learn the different staining techniques
CO2. To understand the cell structure, microscopy, slide preparation etc

Title/Number of the Paper: ZOO/DSC/P/227: Animal Physiology-I (Practical)
Course Outcomes (COs): After completion of the course, students will be able to –
CO1. Students can enlist various sensory receptors in human body and describe the structure and functioning of the sense organs-eye, ear, nose, tongue and skin.
CO2. To understand the functions of important physiological systems including the digestive, cardiorespiratory, renal, reproductive, nervous and muscular systems.
CO3. To analyze the life sustaining, controlling and coordinating systems

Title/No. of the Paper: ZOO/Mn/T/201: Fundamentals of Biochemistry
Course Outcomes (COs): After completion of the course, students will be able to –
CO1. Understand the principles of various fields of chemistry and biology (organic chemistry, analytical chemistry, biochemistry, genetics, metabolism, and molecular biology).
CO2. Apply modern instrumentation theory and practice to biochemical problems.
CO3. On completion of the course the student should be able to know mechanism of body functions and the basic knowledge of chemistry of biomolecule

Title/No. of the Paper: ZOO/Mn/T/201/Value added products of Animals
Course Outcomes (COs):
CO1. After completion of the course, students will be able to - Apply knowledge and skill to establish its own apiary or provides services to apiary.
CO2. Learn various products of honey bees and value addition in these products, create scope for entrepreneurship.
CO3. Meat products and milk products and Poultry Products processing help in boosting entrepreneurial attitude amongst students wherein they can generate resources of their own.

Title/No. of the Paper: ZOO/VSC/T/200: Vermicomposting
Course Outcomes (COs): After completion of the course, students will be able to –
CO1. Acquire a critical knowledge on role of earth worms in making organic matter from biodegradable wastes.
CO2. Understand the biology of some important species of earth worms used in vermiculture.
CO3. Acquire skills on production of vermicompost.
CO4. Explain benefits and problems with vermiculture and vermicompost.

Title/No. of the Paper: ZOO/VSC/P/226: Vermicomposting (Practical)
Course Outcomes (COs): After completion of the course, students will be able to –
CO1. Acquire a critical knowledge on role of earth worms in making organic matter from biodegradable wastes
CO2. Understand the biology of some important species of earth worms used in vermiculture.
CO3. Acquire skills on production of vermicompost.
CO4. Explain benefits and problems with vermiculture and vermicompost.

BSc II /Sem IV
Title/No. of the Paper: ZOO/DSC/T/250: Genetics
Course Outcomes (COs): After completion of the course, students will be able to –
CO1. Comprehensive, detailed understanding of the chemical basis of heredity.
CO2. Comprehensive and detailed understanding of genetic methodology and how quantification of heritable traits in families and populations provides insight into cellular and molecular mechanisms.

Title/Number of the Paper: ZOO/DSC/P/276: Genetics (Practical)
Course Outcomes:
CO1. Comprehensive, detailed understanding of the chemical basis of heredity.
CO2. Comprehensive and detailed understanding of genetic methodology and how quantification of heritable traits in families and populations provides insight into cellular and molecular mechanisms

Title/Number of the Paper: ZOO/DSC/T/251: Animal Physiology –II
Course Outcomes (COs):
CO1. Know mechanism of body functions and the basic knowledge of chemistry of biomolecules
CO2. Students can enlist various sensory receptors in human body and describe the structure and functioning of the sense organs–eye, ear, nose, tongue and skin.
CO3. Students can identify properties of hormones and mention their nature and manner of functioning.
CO4. Know the effects of over functioning (hyperactivity) and hypoactivity (under functioning) of pituitary and thyroid

Title/Number of the Paper: ZOO/DSC/P/277: Animal Physiology –II (Practical)
Course Outcomes (COs):
CO1. Students can enlist various sensory receptors in human body and describe the structure and functioning of the sense organs–eye, ear, nose, tongue and skin.
CO2. Students can identify properties of hormones and mention their nature and manner of functioning.
CO3. Know the effects of over functioning (hyperactivity) and hypoactivity (under functioning) of pituitary and thyroid

Title/No. of the Paper: ZOO/Mn/T/250: Agricultural Entomology
Course Outcomes (COs):
CO1. After completion of the course students will be acquainted with various insect-pests of horticultural crops their damage symptoms.
CO2. Students will able to identify the common natural enemies of crop pests.
CO3. They acquire the knowledge of mass production of egg, common predators, microbes and their laboratory hosts.
CO4. The students will be acquainted with the different means of insect-pest management in agricultural crops.
CO5. They will also learn about the different application techniques of insecticides, their dosages, different types of chemical imposition appliances etc. under field condition.

Title/No. of the Paper: ZOO/Mn/T/250: Economic Zoology

Course Outcomes (COs): After completion of the course, students will be able to –

CO1. Develop an understanding of the beneficial higher and lower organisms in terms of economic prospective

CO2. Develop a critical understanding of the contribution of organisms to the welfare of society

Title/No. of the Paper: ZOO/SEC/T/250: Biological Techniques

Course Outcome: After successfully completing this course,

CO1. Students will be able to understand the purpose of the technique, its proper use and possible modifications/ improvement

CO2. Learn the theoretical basis of technique, its principle of working and its correct application

CO3. Learn the maintenance laboratory equipment / tools, safety hazards and precautions. Understand the technique of cell and tissue culture

CO4. Learn the preparation of solution of given percentage and molarity

CO5. Understand the process of preparation of buffer

CO6. Learn the techniques of separation of amino acids, proteins and nucleic acids

Title/No. of the Paper: ZOO/ SEC /P/276: Biological Techniques (Practical)

Course Outcome: After successfully completing this course,

CO1. Students will be able to understand the purpose of the technique, its proper use and possible modifications/ improvement

CO3. Learn the maintenance laboratory equipment / tools, safety hazards and precautions. Understand the technique of cell and tissue culture

CO4. Learn the preparation of solution of given percentage and molarity

CO5. Understand the process of preparation of buffer

CO6. Learn the techniques of separation of amino acids, proteins and nucleic acids

Pattern CBCS

Class: B.Sc II

Title/Number of the Paper: Developmental Biology of Vertebrates/V

Course Outcomes:

CO1. To know the basic concepts related to embryonic development

CO2. To understand the basis of life of animal.

Semester: III

Class: B.Sc II

Title/Number of the Paper: ZOL-321 Practical based on Developmental Biology of Vertebrates

Course Outcomes:

CO1. To learn the different developmental stages in vertebrates

CO2. To understand the reproductive functions and types in various vertebrates

Semester: III
Class: B.Sc II
Title/Number of the Paper: Ecology /VI
Course Outcomes:
CO1. Demonstrate knowledge of biotic and abiotic interactions.
CO2. Express understanding of environmental issues, and inter-relation between different components of ecosystems.
CO3. Ability to elaborate about distribution and abundance of organisms.
CO4. Apply different experimental techniques to study any ecosystem or its components.
CO5. Describe the relation between structures and function species in environment

Semester: III
Class: B.Sc II
Title/Number of the Paper: ZOL-322 Practical based on Ecology
Course Outcomes:
CO1. To study physicochemical parameters of abiotic components
CO2. Learn the water ecosystem organism through permanent slides

Semester: III
Class: B.Sc II
Skill Enhancement Course (SEC)
ZOL-SEC-313: Haematology
Course Outcomes:
At the end of course, student should be –
CO1. Able to analyze, study and report on material learned.
CO2. Able to assess the scope of animal biology and select appropriate area for further study.
CO3. Ability to explain composition and functions of blood.
CO2. Knowledge about compounds used in processing and storage of blood

Semester: IV
Class: B.Sc II
Title/Number of the Paper: Biochemistry and Endocrinology/VII
Course Outcomes:
CO1. Students will learn the fundamentals of biochemical process and their applications
CO2. Students will understand the structure and function of endocrine system.
Semester: IV
Class: B.Sc II
Title/Number of the Paper: ZOL-411 Practical based on Biochemistry and Endocrinology
Course Outcomes:
CO1. To gain skills of chemical preparations

CO2. Knowledge of analytical instruments
CO3. Learn histology of endocrine glands

Semester: IV
Class: B.Sc II
Title/Number of the Paper: Evolution /VIII
Course Outcomes:
On successful completion of the course, the students will be able to -
CO1. Understand the theories and concepts of evolution
CO2. Learn the process of evolution in animals
CO3. Understand the patterns of evolutionary changes in animals

Semester: IV
Class: B.Sc II
Title/Number of the Paper: ZOL-422 Practical based on Evolution
Course Outcomes:
CO1. Undertsand evidences of Evolution
CO2. Learn adaptations and successive stages in Evolution
CO3. Identify patterns of speciation

Semester: IV
Class: B.Sc II
Skill Enhancement Course
ZOL-413 Apiculture
Course Outcomes:
CO1. Ability to understand and describe the life stages and social organization of honey bee species.
CO2. Ability to correctly explain and perform bee rearing, farming and harvesting practices.
CO3. Appreciate the economic importance of derivative benefits and byproducts of apiculture.
CO4. To identify and take remedial measures against the different bee diseases and predators

<u>B.Sc III</u>
<u>Semester Pattern Curriculum under, Choice based Credit System (CBCS)</u>

Semester: V
Class: B.Sc III
Title/Number of the Paper: Animal Physiology I /IX
Course Outcomes:
CO1. Understand the nutrition and physiology of digestion in man.
CO2. Describe the structure and respiratory mechanism and transport of gases.

CO3. Learn the structure and working of mammalian heart, blood composition and clotting mechanism.

Semester: V
Class: B.Sc III
Title/Number of the Paper: Practical ZOL 521 based on ZOL511 Animal Physiology I
Course Outcomes:
CO1. Acquire increased practical knowledge of role of enzymes in organ system
CO2. Learn the blood composition
CO3. Describe blood count methods

Semester: V
Class: B.Sc III
Title/Number of the Paper: C2-- Fishery Science I /X
Course Outcomes:By the end of course students will be able to -
CO1. Identify the marine, brackish as well as freshwater fishes.
CO2. Develop knowledge on inland and marine fisheries resources of India

Semester: V
Class: B.Sc III
Title/Number of the Paper: ZOL 522 based on ZOL 512 C2 - Fishery Science I
Course Outcomes:
CO1. Identify fish species
CO2. Identify fishing nets and gears
CO3. Recognize edible fish species

Title/No. of the Paper: Skill Enhancement Course (SEC-3) ZOL 513 SEC3 - (F) Apiculture
Course outcome:
CO1. Students can start their own business of Apiculture/Bee farming, train others and will be able to enter in private, Govt sectors or in the research related to Apiculture/Bee keeping.

Semester: VI
Class: B.Sc III
Title/Number of the Paper: Animal Physiology II /XI
Course Outcomes: After completion of the course, students will be able to —
CO1. Understand the structure and functional anatomy of kidney, osmoregulation and homeostasis.
CO2. Describe the structure of nerve cells, and synapse muscles, and eye and ear and its physiology.
CO3. Learn the process of gametogenesis, r hormones, reproductive cycle and methods of contraception.

Semester: VI
Class: B.Sc III
Title/Number of the Paper: ZOL-621 Practical based on ZOL611 Animal Physiology II
Course Outcomes:
CO1. Acquire increased practical knowledge of role of biomolecules in organ system
CO2. Understand the reproductive control measures
CO3. Identify histological structures of various organ system

Semester: VI
Class: B.Sc III
Title/Number of the Paper: C2 - Fishery Science II /XII
Course Outcomes: By the end of course students will be able to
CO1. Identify the freshwater fishes.
CO2. Develop knowledge on freshwater fish farming and fish seed production techniques.
CO3. Apply skills for identifying fish diseases and their control

Semester: VI
Class: B.Sc III
Title/Number of the Paper: ZOL-622 Practical based on C2 - Fishery Science II
Course Outcomes:
CO1. Identify Crafts and Gears
CO2. Describe fish parasites

Title/No. of the Paper: Skill Enhancement Course SEC 4 ZOL 613 - (H) / Credits -2
Course Outcome:
CO1. The students will get the knowledge about what is sericulture, types of sericulture and its importance as agrobased, employment generating industry.
CO2. The students will get knowledge about Life cycle of silk worm, Cocoon formation and Silk thread.
CO3. The students will acquire skill of how to manage a sericulture farm: Rearing shade, Mulberry Garden, Silk and cocoon market and other value added and by products from sericulture.

BSC (COMPUTER SCIENCE)

PROGRAM OUTCOMES

PO 1. To develop problem solving abilities using a computer.

PO2. To prepare necessary knowledge base for research and development in Computer Science.

PO 3. **Ethics**: Apply ability to develop sustainable practical solutions for science subject related problems within positive professional and ethical boundaries.

PO 4. **Individual and team work**: Function effectively as a leader and as well as team member in diverse/ multidisciplinary environments.

PO 5. **Communication**: Communicate effectively on complex science subject related activities with the scientific community in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 6. **Project management**: Demonstrate knowledge and understanding of the first principles of science and apply these to one's own work as a member and leader in a team, to complete project in any environment.

PO 7. **Life-long learning**: Recognize the need for lifelong learning and have the ability to engage in independent and life-long learning in the broadest context of technological change.

PO 8. To train students in professional skill related to Software Industry.

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1. **Domain knowledge**: Apply the knowledge of Computer Science fundamental, and advanced areas of Computer Science to provide comprehensive solution.

PSO2. **Problem Analysis**: Identify Computer Science related problems at varied complexity and analyse the same to formulate/ develop substantiated conclusion.

PSO3. **Design Development of solutions**: Design/ develop solutions for problems at varied complexity in various areas of Computer Science to address changing challenges put forward by market demand/ stakeholder

PSO4. **Conduct Investigation of complex problems**: Use established knowledge and methods to design of experiments, analyse resulting data and interpret the same to provide valid conclusions.

PSO5. **Modern tools**: Create, select, and apply appropriate techniques, resources, and modern electronics and relevant IT tools including prediction and modelling to complex Information Technology related activities with clear understanding of the limitations.

Course Outcome

B.Sc. Computer Science First Year (First Semester) BCS

B.Sc. Computer Science F.Y. First Semester	
Course	**Course Outcomes**
M1-DSC-1: Programming in C	1. Implement basic C programs 2. Develop and implement conditional and iterative statements 3. Implement different types of arrays 4. Develop and implement modular applications in C using functions 5. Implement structure and pointers
M2: DSC-3 : Database Management System (DBMS)	1. Design data models, schemas and instances. 2. Design E-R Model for given requirements and convert he same into database tables. 3. Implement SQL: Data definition, constraints, schema, queries and operations in SQL.
M3-DSC-5: Operating System	1. Gain a comprehensive understanding of the distinction between system software and application software. 2. Grasp the diverse types of operating systems, their fundamental functions, and the evolutionary progression of OS, encapsulating advancements in functionality and compatibility over time. 3. Gain insight into the concept of processes, process control blocks, 4. Understand CPU Scheduling. 5. Understand device management
SEC-1-A): HTML and CSS	1. Understand fundamentals of web technologies. 2. Construct visually appealing static web page. 3. Understand linking in web page. 4. Understand basics of forms. 5. Use CSS for enhanced presentation and user experience.
SEC-1 B): P.C. Maintenance	1. Understanding of computer hardware components and peripheral devices

	2. identify and troubleshoot common hardware issues 3. Perform routine maintenance tasks ensure optimal performance 4. Install, configure, and update operating systems, drivers, and software applications to maintain system stability and security 5. Assembling and disassembling computer systems
GE/OE-1: Cyber Security	1. Understands the concept and process of cyber security 2. Understands the Online Dispute Resolution. 3. Knows the Network & Mobile Security Techniques

Course Outcome

B.Sc. Computer Science First Year (Second Semester)

B.Sc. Computer Science F.Y. Second Semester	
Course	**Course Outcomes**
M1-DSC-7 : Programming in C++	1. Understand Principles of OOP's using C++ 2. Design and implement OOP programs using C++ 3. Understand Classes, Objects Inheritance and Polymorphism using C++ 4. Develop Object oriented programming Skills and gain practical Experience 5. Handling exceptions to control errors
M2: DSC-9: Advanced Database Management System (ADBMS)	i) Design E-R Model for given requirements and convert the same into database tables ii) Use database techniques such as SQL & PL/SQL- iii) Explain transaction Management in relational database System.
M3-DSC-11: Linux Operating System	i) Upon successful completion of the course, the students will: ii) To acquaint students with various Linux commands and installation of iii) open-source operating system. iv) To cultivate implementation skill of open-source operating system. v) To develop skills in managing software and system administration tool. vi) To prepare students for future courses having technical operating system knowledge.
VSC-IA : JavaScript	i) Ability to understand fundamentals of JavaScript ii) Proficiency in developing interactive and dynamic web applications. iii) Understanding of basic functions in JavaScript.

	iv) Understand Internet and web technology
VSC-1B Basics OF Networking	i) Design and implement Computer Network ii) Analyse and troubleshoot Computer Network elated problems iii) Understand the various Newark protocols and services: iv) Understand network security threats and Vulnerability as well as various security protocols and encryption techniques
GE/OE-2: E-Commerce and E-Contracts	i) Understand issues in e-commerce. ii) Understands E-Commerce and E-Business and Approaches

Course Outcome

B.Sc. Computer Science S.Y. Third Semester

Subject	Course Outcomes
CS/DSC/T/200: Fundamentals of PHP	1) Understand PHP Basics. 2) Implement Control Structures. 3) Manage Data Using Arrays and Functions.
CS/DSC/T/ 201: Data Structure.	1) To introduce fundamental data structures and their implementation in C. 2) "To develop efficient problem-solving skills using various data structures. 3) To analyse the efficiency of algorithms
CSIVSC/I/ 200 (A): Introduction to MySQL	1) Understand the need for database systems and the basic concepts of DBMS. 2) Lear and apply the relational data model and SQL language. 3) Gain practical knowledge of MySQL. to manage and query databases. 4) Identify key elements like constraints, keys, and joins in relational databases. 5) Apply concepts through simple real-world database design and implementation.
Digital Electronics | BCA307T (B)	1.To provide the fundamental concepts associated with the digital logic and circuit design. 2. To introduce the basic concepts and laws involved in the Boolean algebra and families and digital circuits 3. To familiarize with the different number systems, logic gates, and combinational and sequential circuits utilized in the different digital circuits and systems.
DDBMS DS/Mn/T/201	1. Explore various DDBMS architectures. 2. Comprehend data distribution strategies. 3. Design and manage a Global Data Dictionary (GDD). 4. Implement security measures in DDBMS. 5. view management, authentication, and semantic integrity

CS/AEC/T/200 English (Common for all the Faculty)	1. Understand and answer comprehension passages effectively. 2. Write clear and structured paragraphs, essays, and summaries. 3. Improve vocabulary, idioms, and phrases. 4. Identify and correct common grammar and sentence errors.
CS/VEC/T/201 Environmental Studies	1. Understand the structure and function of the environment and ecosystems. 2. Identify major environmental issues and their impact on human life. 3. Explain the importance of natural resources and their sustainable use. 4. Recognize the need for biodiversity conservation.
CS/CC/P/226 Culture Activity/NSS, NCC (Common for all Faculty)	1. **Cultural Activities**: Enhances creativity, confidence, and appreciation of cultural diversity. 2. **NSS (National Service Scheme)**: Develops social responsibility, leadership, and community service skills. 3. **NCC (National Cadet Corps)**: Promotes discipline, physical fitness, patriotism, and leadership.

Course Outcome

B.Sc. Computer Science S.Y. Fourth Semester	
Subject	**Objectives**
CS/IDSC/T/250: Advanced PHP	i) Understand advanced features and syntax of PLP. ii) Develop web applications using object-oriented PHP programming. iii) Integrate MySQL with PHP for dynamic content generation. iv) Manage sessions, cookies, and user authentication securely. v)Implement error handling, operations, and form validation. vi) Understand the basics of PHP frameworks and RESTful APT development.
CS/DSC/T/ 251: Software Engineering	i) Understand the fundamental principles and lifecycle of software development. ii) Explore various software development process models. iii) Lear the techniques involved in requirement analysis, design, coding, testing, and maintenance. iv) Understand project management concepts including cost estimation, risk analysis.

CS/Mn/T/250 Data Mining	1. Students will be able to explain the fundamental concepts and terminology used in data 'mining, such as classification, regression, clustering techniques. 2. Students will develop proficiency in preparing raw data for analysis by handling missing data, outliers and data transformation. 3. Students will be able to understand and implement various data mining algorithms, such as decision trees, k-nearest neighbours (K-NN).
CS/Mn/T/251 NO SQL	1.Understand the need for NoSQL databases and their Characteristics 2. Understand the concepts of NoSQL databases 3. Explain and compare different types of NoSQL Databases. 4. Demonstrate the detailed architecture and performance tune of Document- oriented NoSQL databases.
CS/GE/OE/T/250 BCA MGMT	1. Understand basic concepts of computer networks, types, and their advantages. 2. Describe the structure and functioning of OSI and TCP/IP models. 3. Apply knowledge of IP addressing, sub netting, and identify proper addressing schemes. 4. Demonstrate the use of networking devices, protocols, and understand basic network security concepts.
CS/SEC/T/250 IOT	1.To introduce the basic concepts and applications of the Internet of Things. 2.To familiarize students with the components and architecture of oT systems. 3.To provide an overview of IoT communication protocols and technologies. 4. To encourage students to explore simple ToT-based projects or case studies. 5. To develop a foundational understanding of how loT impacts real-world domains.
CS/AEC/T/250 Modern Indian Language (MIL-2)	1. Understand and use correct Marathi grammar and sentence structure. 2. Read and analyze different forms of Marathi literature such as poetry, short stories, and essays. 3. Develop skills in reading, writing, and speaking in Marathi. 4. Understand the relationship between Marathi literature, society, and culture.

CS/FP/P/276 Field Project	1. Apply theoretical knowledge to real-world situations through fieldwork. 2. Collect, analyze, and interpret data from field observations. 3. Develop research, survey, and report-writing skills. 4. Understand local issues, community needs, or environmental concerns.
CS/CC/P/277 (Fine/Applied/Visual/Performing Arts) (commen for all faculty)	1. Understand the basic principles and elements of fine arts such as line, color, texture, and form. 2. Develop skills in various artistic techniques like drawing, painting, and sculpture. 3. Analyze and appreciate different styles and movements in art history.

Course Outcome

B.Sc. Computer Science Third Year (Fifth Semester)

Sr. No	Course Code	Course Outcomes
1	**DSE-1A (1)** A1: Advanced Java	1. Implement Networking and Data base connectivity in Java for given application. 2. Implement webpage with dynamic content and server-side web application using Servlet and JSP. 3. Use web application framework JSF to build user interfaces. 4. Apply Model-View-Controller architecture to build complex client-server applications.
2	**DSE-1A (2)** B2: Data Mining	1. Perform the pre-processing of data and apply mining techniques on it. 2. Identify the association rules, classification, and clusters in large data sets. 3. Solve real world problems in business and scientific information using data mining. 4. Use data analysis tools for scientific applications. 5. Implement various supervised machine learning algorithms.
3	**DSE-2A (1)** A1: Software Engineering	1. Prepare SRS (Software Requirement Specification) document and SPMP (Software Project Management Plan) document. Apply the concept of Functional Oriented and Object-Oriented Approach for Software Design. 2. Recognize how to ensure the quality of software product, different quality standards and software review techniques. 3. Apply various testing techniques and test plan in.

		4. Able to understand modern Agile Development.
4	**DSE-2A (2)** B2: Basic Data Science	1. Recognize various disciplines that contribute to a successful data science effort. 2. Understand the processes of data science - identifying the problem to be solved, data collection, preparation, modelling, evaluation and visualization. 3. Be aware of the challenges that arise in data sciences. 4. Develop and appreciate various techniques for data modelling and mining.
5	**DSE-3A (1)** A1: Artificial Intelligence	1. Understand the search technique procedures applied to real world problems. 2. Understand and use various types of logic and knowledge representation schemes. 3. Understand various Game Playing techniques and apply them in programs. 4. Gain knowledge in AI Applications and advances in Artificial Intelligence.
4	**DSE-3A (2)** A1: Android Programming	1. To obtain knowledge of android and its features like history, designing, Sql lite etc 2. To understand these concepts students should be aware from basic Java environment and its concepts with connectivity. 3. It is one type of advance Operating System by learning this OS Students would be able to create smart phones application by themselves with database connectivity.
5	**SEC-3(E)** Aptitude and Reasoning	1. Understand the basic concepts of quantitative ability 2. Understand the basic concepts of logical reasoning Skills, Acquire satisfactory competency in use of reasoning 3. Solve campus placements aptitude papers covering Quantitative Ability, Logical Reasoning Ability 4. Compete in various competitive exams like CAT, CMAT, GATE, GRE, GATE, UPSC, GPSC etc.

Course Outcome

B.Sc. Computer Science Third Year (Sixth Semester)

Sr. No	Course Code	Course Outcomes
1	**DSE-1B (1)** A1: Java Web Frameworks	1. Implement MVC structure & its types in Java Web application. 2. Understand use of Struct web frame work in web site development 3. Use web application framework JSF to build user interfaces. 4. Apply Model-View-Controller architecture to build complex client-server applications using hibernate and Spring boot.

2	**DSE-1B (2)** B2: Data Warehouse	1. Learn and understand the usage, need and cost of Data Warehouse 2. Learn various techniques for Data Warehouse. **3.** Understand Market Basket Analysis.
3	**DSE-2B (1)** A1: Software Quality Assurance & Testing	1. Utilize the concepts in software development life cycle. 2. Demonstrate their capability to adopt quality standards. 3. Assess the quality of software product. **4.** Apply the concepts in preparing the quality plan & documents.
4	**DSE-2B (2)** B2: Advance Data Science	1. Recognize various disciplines that contribute to a successful data science effort. 2. Identify the data types, relation between data and visualization technique for data. 3. Explain probability, distribution, sampling, Estimation 4. Solve regression and classification problem. **5.** Develop and appreciate various techniques for data modelling and mining.
5	**DSE-3B (1)** A1: Machine Learning	1. Explore the fundamental issues and challenges in Machine Learning including data and model selection and complexity. 2. Appreciate the underlying mathematical relationships within and across Machine Learning algorithms 3. Evaluate the various Supervised Learning algorithms using appropriate Dataset. 4. Evaluate the various unsupervised Learning algorithms using appropriate Dataset. **5.** Design and implement various machine learning algorithms in a range of real-world applications.
6	**SEC-4(G):** Personality Development	1. The students will be able to perform well on social ground. 2. To help the student to be creative, and analytical. 3. To develop their own specific skills. 4. Polishing manners to behave appropriately in professional circles. 5. Developing and maintaining optimistic nature. **6.** Understanding the art of entertaining.

B.Sc. Computer Science F.Y. First Semester (Optional)

B.Sc. Computer Science F.Y. First Semester Opt	
Subject	**Course Outcomes**
M1-DSC-1: Basics of Computer	1. Implement basic L programs | 2. Develop and implement conditional and iterative statements. 3. Implement different types of arrays 4. Develop and implement modular applications in C using functions 5. Implement structure and pointers
SEC-1 A: HTML and CSS |	1. Understand fundamentals of web technologies. 2. Construct visually appealing static web page. 3. Understand linking in web page. 4. Understand basics of forms. 5. Use CSS for enhanced presentation and user experience.

B.Sc. Computer Science F.Y. Second Semester Opt	
Subject	**Course Outcomes**
M1-DSC-7: Programming in C	1 Implement basic L programs | 2. Develop and implement conditional and iterative statements. 3. Implement different types of arrays 4.Develop and implement modular applications in C using functions 5. Implement structure and pointers
VSC-1A: JavaScript	6.Ability to understand fundamentals of JavaScript |. 7.Proficiency in developing interactive and dynamic web applications. 8.Understanding of basic functions in JavaScript 9.Understand Internet and web technology.

B.Sc. Computer Science S.Y. Third Semester Opt	
Subject	**Objectives**
CS/DSC/T/200: Fundamentals of PHP |	1) Understand PHP Basics. 2) Implement Control Structures. 3) Manage Data Using Arrays and Functions
CS/DSC/T/ 201: Data Structure	1.To impart students for develop and refine their programming skills. 2.In particular, the importance of this subject is on the organization of information, the implementation of linear data structures such as arrays, lists, stacks, queues, and techniques of data abstraction, including searching and sorting.

	3.Choose an appropriate data structure for a particular problem
CS/VSC/T/ 200 (B): Basics of Networking	1.To introduce the fundamentals of communication systems. 2.To provide an overview of networking basics. 3.To introduce students to the fundamental concepts of computer networks

B.Sc. Computer Science S.Y. Fourth Semester	
Subject	**Objectives**
CS/IDSC/T/250: Advanced PHP	1. Understand advanced features and syntax of PLP. 2. Develop web applications using object-oriented PHP programming. 3.Integrate MySQL with PHP for dynamic content generation. 4.Manage sessions, cookies, and user authentication securely. 5Implement error handling, operations, and form validation. 6 Understand the basics of PHP frameworks and RESTful APT development
CS/DSC/T/ 251: Software Engineering	1.Understand the fundamental principles and lifecycle of software development. 2. Explore various software development process models. 3. Lear the techniques involved in requirement analysis, design, coding, testing, and maintenance. 4. Understand project management concepts including cost estimation, risk analysis
CS/VSC/T/ 200 (B): Big Data	**1.U**nderstanding of Big Data concepts, tools, and technologies. 2.The course aims to equip learners with the skills to collect, store, process, and analyse large and complex datasets using modern Big Data platforms. 3.Students will gain practical experience with tools such as Hadoop, Spark, and NoSQL databases, enabling them to solve real-world data-driven problems and make informed decisions based on large-scale data analytics.

B.Sc. Computer Science T.Y. Fifth Semester Opt	
Subject	**Objectives**
COM-511 -DSE-1 C (1) Software Engineering	1. To study Software Development Life Cycle, 2. To study different Software Development models 3. To study Agile Software development. 4. To study software project planning 5. To study software cost estimation, ~~ |
COM-512 -DSE-1B (2) Basic Computer Networks	1. Design and implement Computer Network 2. Analyze and troubleshoot Computer Network related problems 3. Understand the various network protocols and services

	4. Understand network security treats and vulnerability, as well as various security protocols.
COM-513 - SEC-3 (F) R Programming	1.Student will learn how to program in R 2.Student will learn how to use R for effective data analysis. 3.Student will learn reading data into R, accessing R packages, 4.Student will learn writing R functions, debugging, profiling R code |

B.Sc. Computer Science TY. Six Semester Opt	
Subject	**Objectives**
COM-611 - DSE-2C (1) Software Testing	1.To study fundamental concepts in software testing, including software testing objectives, process, criteria, |strategies, and methods2. 2.To discuss various software testing issues and solutions in software unit test; integ ration, regression and system testing 3. To learn the process of improving the quality of software work products.
COM-612 - DSE-2B (2) Advance Computer Network	1.The major components of computer-based information systems is computer networks. 2.Through computer networks we can share hardware, Software, Processing, Data a nd Applications besides getting global connectivity for internet-based communication and services. 3.To make students learn the technology of establishing, commissioning (making op erational) and maintaining computer network
COM- 612 - DSE-2D (2) Python	1. Student will understand basic of Python viz. keywords, data types, built in functio ns. 2. They will understand python control flow 3. Get Knowledge about Python Functions and stings, 4. Get Knowledge about Python list, dictionaries, tuples and sets 5. Get Knowledge about Python il handling and exception handling. 6 Get Knowledge of OPP concepts used in Python 7. Get Knowledge about Python user interface, data analysis and data visualisation,

B.C.A. (MANAGEMENT SCIENCE)

PROGRAM OUTCOMES

PO1: Computational information: Appreciate and apply mathematical organization, computing and domain information for the conceptualization of computing models harms.

P02; Difficultly Analysis: Talent to classify, significantly evaluate and prepare compels computing problems using fundamentals of computer knowledge and request domains.

PO3: Drawing / improvement of Solutions: Facility to transform composite production scenarios and present-day issues into problems, explore, recognize and propose included solutions using rising technologies.

PO4: Accomplish Investigations of Compound Computing Troubles: Ability to invent and ways experiments interpret data and present well up to date conclusions.

PO5; Current Implement Procedure; Skill to select recent computing tools, skills and techniques compulsory for original software solutions.

PO6: Acquire Knowledge of business functions and associated regulations.

PO7: Develop Problem solving abilities

PO8: Acquire Administrative and managerial skills with desired technical proficiency

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1: Software Development Skills

Apply fundamental knowledge of programming languages, databases, and software engineering to design, develop, and maintain software applications.

PSO2: Computing and IT Skills

Demonstrate practical skills in various areas of computer applications including web development, mobile applications, data structures, networking, and operating systems.

PSO3: Problem Solving and Logical Thinking

Utilize computational thinking and algorithmic principles to analyse and solve real-world problems effectively.

PSO4: IT Industry Readiness

Exhibit knowledge and technical competencies required for employment in the IT industry, including teamwork, communication, and project management skills.

PSO5: Ethics and Lifelong Learning

Recognize the need for continuous learning and apply ethical principles and responsibilities in the field of computing and professional practices.

BCA (MANAGEMENT SCIENCE)

Course Outcome

B.C.A. Management Science First Year (First Semester)

Sr.No	Course Code	Course Outcomes
1	**Fundamentals of Computer (BCA 101T)**	1.Implement basic C program. 2.Develop and implement conditional and iterative statements 3. Implement different types of arrays 4. Develop and implement modular application in C using functions
2	**Fundamentals of Computer Lab (BCA 102T)**	1. Understanding the basic Application of Computer Software 2. Study the basic Components of Computer system 3. Learn browsing and searching. Establish virtual Communication using various online Platforms.
3	**Principles of Management (BCA 103T)**	1. Learners will absorb various management concepts such as planning, organizing, implementing, staffing, coordinating, controlling, motivating and Managerial Grid 2. Learners will recognize the human skills and conceptual skills as per industry requirements about basic management skills. 3. Learners will diagnose various styles and qualities of efficient leadership, Coordination, Controlling, Green Management
4	**Accountancy (BCA 104T)**	1.Understand the theoretical framework of accounting and to prepare financial statements 2. Explain and determine depreciation and value 3.Understand the concepts of partnership firm and prepare accounts 4. Develop the skill of preparation of trading and profit and loss account and balance sheet using computerized accounting
5	**Cyber Security Generic Elective**	1. Understanding the concept and process of cyber security 2. Understanding the online dispute and resolution 3. Knows the network and mobile security techniques

	(from Science Faculty)	
6	**Web development using HTML (BCA 106P)**	1. Recognize the structure and purpose of HTML and use basic tag 2. Create structure documents and organize content using headings, paragraphs, lists and tables 3. Create hyperlinks and navigation menus incorporate Multimedia: embed images, audio, and video into web pages.
7	**English: Communication skill /BCA 107T**	1. To develop awareness of the complexity of the communication process 2. To develop effective listening skills in students so as to enable them to comprehend instructions and become a critical listener 3. To develop effective oral skills so as to enable students to speak confidently interpersonally as well as in large groups 4. To develop effective writing skills so as enable students to write in a clear, concise, persuasive and audience centred manner 5. To develop ability to communicate effectively with the help of electronic media
8	**IKS-1 (BCA 108T)**	1.Explain the importance of Forts. 2.Study of Forts in Marathwada. 3.Creating a public awareness about the fort in Marathwada.
9	**CC-1 Health and Wellness (BCA 109T)**	1.Understand the awareness about the concept of Health and Wellness. 2.Study the physical, mental, Social, emotional, wellbeing and lifestyle of an individual.

Course Outcome

B.C.A. Management Science First Year (Second Semester)

Sr.No	Course Code	Course Outcomes
1	**Programming in C (BCA 201T)**	1: illustrate the flowchart and design an algorithm for a given problem and to develop IC programs using operators 2: Develop conditional and iterative statements to write C programs 3: Exercise user defined functions to solve real time

		problems 4: Inscribe C programs that use Pointers to access arrays, strings and functions. 5: Exercise user defined data types including structures and unions to solve problems
2	**Business Statistics (BCA 203T)**	1. Comprehend the concept and scope of statistics 2. Understand types and classification of data with analytical perspective 3. Application of various statistical tools. 4. identify and apply various methods of survey
3	**Accountancy-II (BCA 204T)**	1. Describe concept and methods of goodwill for business with social perspective. 2. Understand preparation of receipt and payment accounts 3. Understand accounts of non-trading with company final accounts 4. Describe concept of Single-Entry System 5. Apply steps to prepare income and expenditure account with balance sheet for business
4	**E-business & Contract Generic Elective (BCA 205T)**	1.Understand issues in e-commerce 2. Understand E-Commerce and E-Business-Models and Approach 3. To make the student understand the E-commerce and its application. 4. To make the student understand the Electronic Contract.
5	**E-Business (BCA 206T)**	1. Understand E-Commerce and e-Business and their different platform 2. Understand business models of- marketing 3. Infer online financial services with all recent changes as per global need 4. Acquire knowledge about c-Business systems and network topology 5. Analyze growth of e-Commerce and associated regulatory act
6	**Constitution of India (BCA 208T)**	1. To realise the significance of constitution of India to students from all walks of life and help them to understand the basic concepts of Indian constitution. 2. To identify the importance of fundamental rights as well as fundamental duties. 3.To understand the functioning of Union, State and Local Governments in Indian federal system. 4.To learn procedure and effects of emergency, composition and activities of election commission and amendment procedure.
7	**Yoga Education (BCA 209T)**	1) To enable the student to have good health. 2) To practice mental hygiene. 3) To possess emotional stability. 4) To integrate moral values. 5) To attain higher level of consciousness.

Course Outcome

BCA. Management Science S.Y. Third Semester	
Subject	**Course Outcomes**
DBMS(BCA – 301T)	1.Understand and describe basic concepts of database systems. 2. understand concept of transaction its importance in dbms. 3.map concepts of transactions dead lock and locking techniques with examples. 4. create tables and use them to store data efficiently. 5. execute commands to retrieve data with and without conditions
Oops using C++ (BCA-302T)	1.To enhance the advance concepts of Object-Oriented Programming 2.To provide the knowledge of classes and Object for Data hiding 3.To understand importance of various functions and their uses 4.To develop skills to apply appropriate uses of Inheritance, exception and file handling.
E-business (GE)	1.The nature and scope of e-business technologies along with a brief history of their development and implementation. The course familiarizes students with the way e-business technologies can be applied within business firms. This subject considers the organizational dimension of e-business implementation in order to reflect the likely nature of future challenges and opportunities. 2. To prepare student to acquire the knowledge of recent trend in e-commerce. also, students are preparing for websites management which can helpful in industry.
Business Mathematics and statistics	On completion of the course student will able to

	1.understand the concept and scope of statistics 2.understand data collection method and classify data.
Entrepreneurship development I	1. learner will recognize the fundamental components of business. 2. learner will able to identify to entrepreneurial traits and skills. 3. Learner will able to apply theoretical knowledge to real world scenarios within business sector. 4. To create comprehensive understanding of the risk and challenges associated with business world.
Business Law	1.Learn Indian contract act 1872.Sale of goods act 1930.Negotiable Instrument act 1881.Consumer protection act (amended 2002) and cyber and IT act 2000. 2. Understand the basics structures, rules and power of consumer protection act. 3. To know the provision regarding consumer protection act and redressal.
English	1.Demonstrate improved listening,speaking,reading,& writing skills in English 2.Develop effective presentation & interpersonal skills suitable for interviews 3.Exhibit confidence in public speaking,debate,& professional communication situations
Field Project	1.Apply throretical knowledge of real-life industry or community situationsthrough practical exposure 2.Demonstrate problem solving & decision-making skills while handling field challenges 3.prepare a comprehensive project report with proper documentation,analysis & presentation
Cultural Activity	1.Demonstrate appreciation for art,culture & traditions through active participation & performance 2.develop creativity,self-expression &confidence through various cultural forms like dance,music,drama & art

BCA. Management Science S.Y. Fourth Semester	
Subject	**Objectives**
Java programming (BCA401T)	1.Write compile and execute java programs that may include basic data type and control flow construct using J2SE or other integrated development environments such as eclipse, net bins and J developer. 2.Demonstrate the use of good objects. Oriented design principle including encapsulation information hiding inheritance full abstraction, partial abstraction. 3.Create GUI application using applet and html Implement the multi-threading concept with real time applications.
Cost Accountancy (BCA403T)	1.Understand the nature and scope of cost accountancy. 2.Analyse the components and classification of cost. 3.Prepare cost sheets and apply cost concepts to solve basic numerical problems. Evaluate material and wage control system with appropriate methods.
Entrepreneurship development II (ECOM405T)	1.Learner will identify Business opportunities that suits them 2.Learner will create comprehensive understanding of new trends in entrepreneurship that associated with business world. 3.Learner will able to apply various market research techniques suitable for business.
Business statistics & mathematics- II	Learner will able to 1.Compute extent of deviation and coefficient of skewness 2.Determine coefficient of correlation and interpret the same 3.Determine probability of an experiment or event.
Ethical Hacking	1.Understand the role of ethical hacking in cyber security. 2.Identify security vulnerabilities in system and networks. 3.Understand legal and ethical aspects of hacking.
RDBMS	1.Students will learn fundamental knowledge of relational database model. 2.To explain student about cursors and exception handling and demonstrate the concepts by implementing to solve the problem. 3.To understand concepts of data storage, retrieval and

	administration of the data in elational models.
Marathi/Hindi	1.Develop reading, writing, listening & speaking skills in Marathi 2.communicate effectively using accurate & expressive Marathi language 3.Develop proficiency in reading, writing, listening & speaking Hindi 4.Strengthen critical & creative thinking skills through literary analysis
Community service eng.	1. Identify community needs that can be addressed using engineering knowledge and skills. 2.Apply engineering principles to design appropriate and sustainable solutions for community-based problems. 3. Work effectively in multidisciplinary and multicultural teams to plan and execute community service projects.
Fine Art	1.demonstrate understanding of fundamental concepts,principles & techniques in drawing,painting & design. 2.Apply visual elements such as line,colour,texture,& composition effectively in artworks.

Course Outcome

B.C.A. Management Science Second Year (Fifth Semester)

Sr. No	Course Code	Course Outcomes
1	**Management accounting: XXV**	1. To familiarise the student with the basics management accounting concepts and process. 2. Learn analysis and interpretation of financial statement, fund flow statement and cash flow analysis ratios analysis. 3. understand the concept of relevant and irrelevant costs and make decisions related to different business situations using marginal costing and differential costing techniques.
2	**SQL2017-XXVI**	1. Understand user requirement and frame it in data model. 2.Understand the impotence and major issues of database security and the maintenance of data integrity.

3	**VB (XXVII)**	1.The objective of this course is to provide students with a comprehensive understanding of Visual Basic programming, including its development environment, programming paradigms, GUI design, and database connectivity. 2.The course aims to equip students with the skills needed to create functional applications using Visual Basic, covering both basic and advanced programming concepts.
4	**Organisational Behavioural :(XXVIII)**	1. To prepare students to understand human behaviour at work 2. To study human behaviour at work 3. To get knowledge of individual and interpersonal perspectives. 4. To get the depth knowledge of motivation, leadership and organisational change.
5	**Software Engineering (XXIX)**	1. To study Software Development Life Cycle, Development models and Agile Software development. 2. To study fundamental concepts in software testing, including software testing objectives, process, criteria, strategies, and methods. 3. o discuss various software testing issues and solutions in software unit test; integration, regression, and system testing. 4. To learn the process of improving the quality of software work products. 5. To gain the techniques and skills on how to use modern software testing tools to support software testing projects.
6	**Banking and Insurance/XXX**	1.To acquaint the fundamental principles of banking supervision and its practices in India 2. To explain about the various technologies used in banking 3. To acquaint the working of insurance companies 4. :To explain about Insurance Industry Environment

Course Outcome

B.C.A. Management Science Third Year (Sixth Semester)

Sr.No	**Course Code**	**Course Outcomes**
1	**Elements of Commercial Portal (ECP) (XXXI)**	1. Student will be able to know the Elements of commercial portal with XML, JQuery, and other details.

2	**Android 9(XXXII)**	1.To obtain knowledge of android and its features like history, designing, Sql lite etc 2.To understand these concepts students should be aware from basic Java environment and its concepts with connectivity. 3.provide basic ideas about how to create mobile application using android operating System
4	**Business Law-III(XXXIII)**	1The course aims to give the learners a broad understanding about important aspects of legal environment of business 2 to make them study how various special contracts are brought into force 3 to impart knowledge about legal agreement so that they get acquainted with the process of establishing legal relationships. 4 To have knowledge of various measures protecting the interest of the consumers.
5	**Software Testing (XXXV)**	1. Understand and describe the basic concepts of functional (black box) software testing. 2. Identify a number of test styles and techniques and assess their usefulness in your context. 3. Understand the basic application of techniques used to identify useful ideas for tests. 4. Help determine the mission and communicate the status of your testing with the rest of your project team. 5. Characterize a good bug report, peer-review the reports of your colleagues, and improve your own report writing. 6. Understand where key testing concepts apply within the context of unified processes.
6	**Service marketing (XXXVI)**	1.The course brings out the emerging service environment in India and the world. 2. It emphasises the distinctive aspects of Services Marketing. 3. It aims at equipping students with concepts and techniques that help in taking decisions relating to various services marketing situations.

<u>B.B.A. Management Science</u>

PROGRAM OUTCOMES (POs):

The National Education Policy (NEP) 2020 for India emphasizes several key aspects for Bachelor of Business Administration (BBA.) programs, aiming to produce graduates who are not only well versed in their respective disciplines but also equipped with skills necessary for holistic development and employability. While specific program outcomes may vary between, environmental and societal realities while encompassing relevant contemporary issues.

<u>PO2. Environment and sustainability</u>: Apply broad understanding of impact of Bachelor of Business Administration subjects in a global, economic, environmental and institutions and disciplines within BBA. programs, here are some common outcomes aligned with NEP 2020.

<u>PO1. The citizenship and society</u>: Apply broad understanding of ethical and professional skill in Bachelor of Business Administration subjects in the context of global, economicsocietal context and demonstrate the knowledge of, and need for sustainable development.

<u>PO3. Ethics:</u> Apply ability to develop sustainable practical solutions for Bachelor of Business Administration subject related problems within positive professional and ethical boundaries.

<u>PO4. Individual and team work</u>: Function effectively as a leader and as well as team member in diverse/ multidisciplinary environments.

<u>PO5. Communication:</u> Communicate effectively on complex Business Problems for effective solution, Bachelor of Business Administration subject has related activities with the social sciences community in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations to solve the issues.

<u>PO6. Project management And finance:</u> Express knowledge and understanding of the Management principles of Bachelor of Business Administration and apply these to one's own work as a member and leader in a team, to complete a project in any environment.

<u>PO7. Life-long learning:</u> Be acquainted with the need for lifelong learning and have the ability to engage in independent and life-long learning in the broadest context of Socio-technological change.

Programme Specific Outcome (PSO) :

PSO 1: Gain knowledge and skills in the areas of Management principles and practices, Human Resource Management, Financial Management and Marketing Management.

PSO 2: An ability to apply conceptual foundations of management to solve practically decision-making problems.

PSO 3: An ability to adapt to dynamic changes in a competitive market environment with an understanding of societal and ecological issues relevant to professional managerial practice through life-long learning

PSO4: Excellent adaptability to role in multi-disciplinary work environment, good interpersonal skills as a leader in a team in appreciation of professional ethics and societal responsibilities.

Programme Educational Objectives_(PEOs):

Programme Educational Objectives (PEOs) for the Bachelor of Business Administration Curriculum under the National Education Policy 2020:

1. Mastery of Discipline-Specific Knowledge: Graduates of the Bachelor of Business Administration program will reveal a deep perceptive of fundamental principles. theories. And methodologies n their chosen Management discipline, enabling them to analyse complex problems, propose innovative solutions, and contribute to advancements in their field.

2. Interdisciplinary Proficiency: Graduates will acquire the ability to incorporate knowledge and skills from multiple Management disciplines, fostering a holistic approach to problem solving and innovation. They will be prepared to address comprehensive challenges by drawing upon varied perspectives.

3. Critical Thinking and Analytical Skills: Graduates will enlarge strong critical thinking abilities. enabling them to evaluate information rigorously, analyse data effectively. And make informed decisions based on evidence. They will demonstrate proficiency in applying logical reasoning and methods to solve business problems and generate solution.

4. Leadership and Innovation: Graduates will demonstrate leadership qualities and Entrepreneurial mind set, capable of initiating and driving positive change in their Organizations and communities. They will exhibit creativity. resilience, and adaptability, harnessing innovation to address complex challenges and seize opportunities for growth and advancement.

5. Global Citizenship and Cultural Sensitivity: Graduates will possess a global perspective and cultural sensitivity, recognizing _the interconnectedness of diverse communities and the importance of collaboration across borders. They will engage in cross-cultural dialogue, embrace diversity, and contribute to the advancement of knowledge and understanding on a global scale.

Course Outcome

B.B.A. Management Science First Year (First Semester)

Sr.No	Course Code	Course Outcomes
1	**Principles of management & OB (DSC-1)**	1)Understand the basic principles of management and important roles and skills of a manager. 2)To have a basic knowledge of Evolution of Management thoughts and Organization Behaviour and about the management thinker 3)To gain knowledge of core functions of management. 4)To know the basics of organization behaviour and the foundation of individual behaviour in an organization. 5)Use the knowledge properly about die group dynamics and organization, its culture and creativity concepts of organization behaviour
2	**Fundamentals of Finance (DSC-2)**	1)To aquatint Students with the techniques of financial management and these for business decision making 2)Students will be able to Explain the concepts of Capital Structure and basis of Capitalization 3)Students will be able to elaborate the concept of Capital Budgeting for Business decisions 4)Students will be able to solve the problems of working capital for Small Businesses.
3	**Introduction to Marketing (DSC-3)**	1)To introduce marketing as a critical business function that drive value creation & customer satisfaction. 2)To analyse the impact of external environmental factors on marketing decision making 3)To help students learn about the systematic process of developing and implementing marketing strategies.
4	**Cyber Security (GE/OE – 1)**	1)Understands the concept and process of cyber security 2)Understands the Online Dispute Resolution. 3)Knows the Network & Mobile Security Techniques
5	**Statistical Analysis (SEC-1.1)**	1)Students will to familiarize students with fundamentals of Statistics. 2)Students will be able to solve the measures of central tendencies and Dispersion 3)Students will apply the concepts of Coefficient of Correlation and Time Series for different Data Sets
6	**English (AEC-1)**	1)**Communicate effectively** in written and spoken English in academic and business contexts. 2)**Develop vocabulary** relevant to business and professional

		settings. 3)**Write professional documents** such as emails, letters, reports, and notices. 4)**Improve grammar and sentence structure** for clear and error-free communication.
7	**IKS (IKS-1)**	1)Understand the concept, scope, and importance of Indian Knowledge Systems. 2)Gain knowledge of ancient Indian contributions in science, technology, mathematics, and education. 3)Learn the philosophical foundations and cultural values of India. 4)Appreciate traditional practices related to health, wellness, and sustainable living. 5)Understand India's achievements in art, literature, architecture, and linguistics.
8	**Health & Wellness (CC-1)**	1)Understand the basic concepts of health, wellness, and well-being. 2) Learn healthy lifestyle practices related to nutrition, exercise, and hygiene. 3)Develop awareness of physical, mental, emotional, and social health. 4)Learn stress management techniques and ways to improve mental wellness. 5) Understand the importance of physical activity for overall health.

Course Outcome

B.B.A. Management Science First Year (Second Semester)

Sr. No.	Course Code	Course Outcomes
1	**Human Resource Management (DSC-4)**	1)To make the students remember the concept of Employability & Human Resource The Objectives of this course is to sensitize students to the various facets of managing people and to create an understanding of the policies and practices of human resource management. 2)To make the students understand the HR Skills required in the industry 3)To make the students able to apply their knowledge of human resource management which can lead to organisational success. 4)To make the students analyse their potential through understanding and implementing functions of Human Resource Management 5)To make the students evaluate and formulate the HR Policies which would not only achieve the individual, organisational as well as societal goal
2	**Financial management (DSC-5)**	1)Students will be able to explain the importance of Time Value of Money. 2)Students will be able to demonstrate the concepts of Capital Structure and basis of Capitalization 3)To acquaint students with the different types of Leverages and their applications for business decision making 4)Students will be able to elaborate the concept of Working Capital for Business decisions
3	**Marketing Management (DSC-6)**	1)Students will understand marketing role in business, including creating customer value and applying the Marketing Mix (4Ps). They will also analyse the Product Life Cycle and distinguish between sales and marketing functions. 2)Students will be able to explore Brand Identity, Brand Association, Brand image, and the significance of Brand Equity. 3)Students will be able to identify roles of distribution channel and its criteria 4)Students will be able to explain different types of Marketing Research and Marketing information System.

4	**Ethical Hacking (GE/OE-2)**	1)Understand the role of ethical hacking in cyber security. 2)Identify security vulnerabilities in systems and networks 3)Understand legal and ethical aspects of hacking.
5	**Book Keeping & Computerized Accounting (VSC-1.2)**	1)To understand the core principles of bookkeeping and accounting and the significance of accurate financial record-keeping for business success. 2)To help learn and apply the rules of debit and credit and prepare the accounting vouchers with the help of supporting documents 3)Understand the importance of regular data backups and ensuring data integrity
6	**English (AEC-2)**	1)**Communicate effectively** in written and spoken English in academic and business contexts. 2)**Develop vocabulary** relevant to business and professional settings. 3)**Write professional documents** such as emails, letters, reports, and notices. 4)**Improve grammar and sentence structure** for clear and error-free communication.
7	**Constitution of India (VEC-1)**	1)Understand the historical background of the Indian Constitution. 2)Learn the key features of the Constitution. 3)Study Fundamental Rights, Fundamental Duties, and Directive Principles. 4)Understand the structure and functions of Union and State governments. 5)Learn the roles of the Legislature, Executive, and Judiciary.

MSC (CHEMISTRY)

1. VISION STATEMENT:

A Master of Science (M.Sc.) in Chemistry is a postgraduate degree that provides students with in-depth knowledge, research skills, and practical expertise in the field of chemistry.

Some of key points of our M. Sc. Chemistry program are mentioned below:

1. **Comprehensive Core Curriculum**: Our course having a strong core curriculum covering fundamental principles in organic, inorganic, physical, and analytical chemistry. This foundational knowledge is crucial to build a solid understanding of the discipline.
2. **Specialization Options**: To cater to the diverse interests of students, students have option to select different specialization that is Organic, Inorganic, Physical, Analytical and Drug Chemistry at University level and affiliated colleges. Our college **offering Organic Chemistry specializations.** By choosing a specialization, students can focus on topics that align with their career aspirations and research interests.
3. **Research Emphasis**: Research is a crucial aspect of a M.Sc. Chemistry program. Students have opportunities to work on research projects under the guidance of experienced faculty members. This hands-on experience will enhance critical thinking, problem-solving skills, and laboratory techniques.
4. **Modern Analytical Techniques**: The course will provide the training or interpretation in modern analytical techniques, such as spectroscopy, chromatography, mass spectrometry, and so on. Proficiency in these techniques is vital for conducting advanced research and for industry applications.
5. **Green Chemistry and Sustainability**: Incorporation of principles of green chemistry and sustainability into the curriculum will promote awareness of environmental impact and encourage students to develop eco-friendly solutions.

   Overall, the vision for M.Sc. Chemistry course is to produce well-rounded, skilled, and ethical chemists who can contribute meaningfully to scientific advancements and societal needs

2. MISSION STATEMENT;

The mission of the M.Sc. Chemistry program is to provide advanced education and training in the field of chemistry. Student will get the understanding of chemical principles, analytical techniques, and specialized knowledge in various sub-disciplines.

The program aims to foster critical thinking, research skills, and ethical practices among students, enabling them to contribute significantly to scientific advancement, innovation, and societal needs.

Further, program focus is to encourage the students to stand in competitive examinations in the field of chemistry such as NET, SET and GATE and contribute to the academic field.

1. To bring sustainable progress of society by nurturing chemistry with responsibilities.
2. To create and maintain programs of excellence in the areas of research, education and public outreach. It will produce students who are knowledge in chemistry and can think critically.
3. To develop the researcher and scientist in chemical science through post-graduate education and research programme.
4. To develop the competent manpower with technology-based experimentation methodologies and value-based practices for business and industries.
5. To undertake projects to solve field base problems.
6. To provide student centric learning facilities for the development of overall personality of learner.

PROGRAM OBJECTIVES:

M. Sc. Chemistry program aims to provide the following objectives:

1. Provide the Advanced Knowledge: The program aims to provide the core/basic concepts in chemistry, including organic, inorganic, physical, and analytical chemistry, while also exploring interdisciplinary areas.

2. Provide the Research Skills: Students will get the research-oriented environment in the department and learns the laboratory techniques and methodologies required in the research.

3. Create Analytical Thinking: We will encourage the students to create analytical thinking and encouraging, approaching complex challenges with creativity and scientific reasoning.

4. Ability of Communication and Collaboration:

In the program, students will work on their abilities to present and discuss scientific ideas clearly and work collaboratively with others

PROGRAM OUTCOMES:

The program outcomes (PO's) are the statement of competencies/ abilities. POs are the statement that describes the knowledge and the abilities, the post-graduate will have by the end of program studies.

i) In-depth and detailed functional knowledge of the fundamental, theoretical concepts and experimental methods of chemistry.

ii) Apply or implement interface between on the one hand, the history of chemistry and natural science and on the other hand, issues pertaining to the areas of modern technology, health, and environment.

iii) Skills in planning and conducting advanced chemical experiments and applying structural-chemical characterization techniques.

iv) Skill in examining specific phenomena theoretically and experimentally.

v). Generation of new scientific insights or to the innovation of new applications of chemical research.

COURSE PRORAM OUTCOMES

Analytical Chemistry

COURSE OUTCOMES

On completion of this course student will be able to:

1. Understand analytical measurements.
2. Understand the importance of producing reliable results.
3. Understand the importance of sampling and able to identify different types of samples.
4. Understand the basics in each separation techniques, *viz.* crystallization, sublimation, distillation, extraction.
5. Understand the theory of liquid-liquid extraction.
6. Understand the theory of solid-phase extraction.

7. Understand basic of chromatographic Techniques for separation of constituents of mixtures

8. Understand rate and plate theory of chromatography.

Inorganic Chemistry

To understand the stability constant of metal complex, stepwise and overall formation constant.

To describe the factors affecting for stability of metal complexes.

To identify and describe techniques for determination of formation constant of metal complexes.

To analyse the structural and stereoisomerism of metal complexes and their classifications.

To understand the mechanism in metal complexes.

To understand acid and base hydrolysis of metal complex and their mechanism.

To understand the role of trans effect in the synthesis of platinum complex.

To distinguish between the inner and outer sphere mechanism of electron transfer reaction of metal complexes.

To memorise the function of essential and trace elements in biological systems.

To describe the structure and function of metalloporphyrins, Haemoglobin, cytochrome and hemocyanin.

COURSE OUTCOMES;

Student will be able to

1. Understand the chemical and molecular processes in organic chemical reactions.
2. Study the concept of Alternant and non-alternant hydrocarbons
3. Study the energy levels of π-molecular orbitals
4. Explain the concept of aromaticity
5. Know the types of mechanism in organic reactions
6. Understand the correlation between the thermodynamic and kinetic parameters
7. Study the different intermediates involved in organic chemical reactions
8. Learn the various types of aliphatic nucleophilic substitution reactions
9. To understand the electron transfer, respiration and photosynthesis of biological system.

Course Name: Organic Chemistry

1. To Understand the chemical and molecular processes in organic chemical reactions.
2. Study the concept of Alternant and non-alternant hydrocarbons
3. Study the energy levels of π-molecular orbitals
4. Explain the concept of aromaticity
5. Know the types of mechanism in organic reactions
6. Understand the correlation between the thermodynamic and kinetic parameters
7. Study the different intermediates involved in organic chemical reactions
8. Learn the various types of aliphatic nucleophilic substitution reactions

Course Outcome:

After completion of the course, students will be able to;

1. Explore conceptual fact of chemical bonding and basis of reactivity
2. Apply the concept of aromaticity to various molecules
3. Explain the types of reactions and reaction intermediates
4. Compare the SN^1, SN^2 and SN^i with respect to mechanism, orientation and stereochemical outcome

Course Name: Physical Chemistry-1

Course outcomes: student will be able

1. To understand the fundamental principles of chemical kinetics.
2. To learn different theories of chemical kinetics.
3. To understand concept of fast and slow reactions based on their rate constant and reaction rates.
4. To understand the concept of thermodynamics.
5. To apply critical thinking and problem-solving skills to solve problem related to thermodynamics and chemical kinetics.
6. To understand the basic concept of micelles.

Course Name: Inorganic Chemistry Laboratory Course-1

Course outcomes:

On completion of this course, the students will be able:

1. To understand the difference between qualitative and quantitative analysis.
2. To understand the concept of qualitative and quantitative chemical analysis and their chemical reactions and constituents.
3. To understand the design and development of experimental setup and procedure, for volumetric and gravimetric analysis of chemical compound.
4. To identify constituents of chemicals qualitatively and quantitively
5. To understand importance of accuracy and precision in measurement of chemical analysis
6. To apply grasped knowledge to solve chemical analysis related issues of stakeholder.
7. To understand importance of laboratory skills, precaution, accuracy and precision.
8. To separate and identify acidic & basic radicals from chemical sample.
9. To apply the knowledge in chemical analysis of unknown sample.

Course Name: Organic Chemistry Laboratory Course-1

Learning Outcome:

On completion of this course, the students will be able

1. Understand the separation and purification techniques
2. Understand various step involved in identification of organic compounds
3. Understand the handling of equipment required for the analysis of organic compounds.
4. Understand the Stoichiometry of the reaction,
5. Students able check the purity of compound using TLC.

Course Name: Physical Chemistry Laboratory Course-1

Course outcomes:

1. On completion of this course, students will be able to;
2. Analyse samples by various instrumental techniques.
3. To handle electronic equipment.
4. To understand laboratory skills, precautions, accuracy and precision.
5. To design experimental procedure for analysis important chemicals and samples.
6. To understand the physical properties of chemical.
7. To distinguish accuracy of results in instrumental and non-instrumental methods.