Department of Marathi

File Name2. Teaching- Learning and Evaluation

Programme Outcomes, Programme Specific Outcomes,
Course Outcomes 2024-25

2.6.1 Program Outcomes Program Specific Outcomes and Course outcomes

B.A. Marathi

Department of Marathi	After successful completion of three year degree program in Marathi a student should be able to
Programme Outcomes	➢ PO1. विद्यार्थ्यांचा भाषिक आत्मविश्वास सुधारणे आणि समृद्ध करणे. ➢ PO2. विविध साहित्य प्रकार, साहित्यिक परंपरा आणि साहित्यिक सिद्धांतांबद्दल ज्ञान मिळवा. ➢ PO3. मूल्यशिक्षणातून विद्यार्थ्यांचे सर्वांगीण व्यक्तिमत्व सुधारावे. ➢ PO4. विद्यार्थ्यांमध्ये उपयोजित कौशल्यांचे मार्गदर्शन आणि संस्कार करा. ➢ POS5. सामाजिक आणि सांस्कृतिक विकासात मराठी भाषेची भूमिका स्पष्ट करा. ➢ PO6. विद्यार्थ्यांमध्ये साहित्याची आवड निर्माण करा. •
Programme Specific Outcomes	➢ PSO1. दलित आणि ग्रामीण साहित्याची विशेष वैशिष्ट्ये स्पष्ट करा. ➢ PSO2. दलित साहित्यातील नवीन ट्रेंडची चर्चा करा. ➢ PSO3. मध्ययुगीन पारंपरिक साहित्याचे ज्ञान देणे. ➢ PSO4. मराठी साहित्यातील विविध प्रवाहांबद्दल जागृती निर्माण करणे. ➢ PSO5. अस्तित्ववाद, मार्क्सवाद, गांधीवाद आणि स्त्रीवाद यासारख्या विविध धर्मांचे विश्लेषण करा. ➢ PSO6. गद्य, कविता, कथा, नाटक, कादंबरी, चरित्र, आत्मचरित्र इत्यादी साहित्याच्या विविध प्रकारांचा अभ्यास करा.
	COURSE OUTCOMES: B. A. Marathi
Course	**Outcomes After completion of these course students should be able to**
B.A.I I & II SEM DSC 1& 2	• CO.1. मराठी वाङ्मयातील कथा या मुलभूत वाङ्मय प्रकारची ओळख होण्यास मदत होते. • CO 2. कथा, तिचे स्वरूप, घटक आणि प्रमुख प्रकारांचा परिचय विद्यार्थ्यांना होतो • CO 3. मराठी कथेच्या आजवरच्या वाटचालीचा परिचय विद्यार्थ्यांना होतो.

	• CO 4. कथेच्या अभ्यासाची दृष्टी विद्यार्थ्यांमध्ये रुजविण्यास मदत अभ्यासक्रमाची मदत होते.
B.A. I I II SEM SEC & VSC	• CO 1 . विद्यार्थ्यांना वैचारिक गद्य लेखनाच्या परंपरेची ओळख करून घेता आली. • CO 2. विद्यार्थ्यांना महात्मा फुले यांचे जीवन, कार्य व त्यांची वैचारिक जडणघडण याबाबत माहिती जाणून घेता आली. • CO 3. चरित्र-आत्मचरित्र लेखनाचे सामाजिक व वाङ्मयीनदृष्ट्या महत्व विद्यार्थ्यांना समजण्यास मदत होते. • CO 4. मराठीतील चरित्र व आत्मचरित्र लेखन परंपरेचा परिचय विद्यार्थ्यांना करून घेता येतो. • CO 5.) चरित्र - आत्मचरित्र लेखनाची सामाजिक वैशिष्ट्यपूर्णता व लेखनपद्धती याबाबत प्रात्यक्षिकाच्या माध्यमातून विद्यार्थ्यांना जाणीव करून घेता येते.
B.A.I I & II SEM GE/OE	• CO. 1. विद्यार्थ्यांना कादंबरी या वाङ्मय प्रकाराची ओळख करून घेता आली. • CO.2. विद्यार्थ्यांना आधुनिक काळातील कादंबरीच्या प्रेरणा समजून घेता येतात. • CO. 3. अवकाळी पावसाच्या ढरम्यानची गोष्ट या कादंबरीचा आशय, त्यातील संघर्ष, पात्रचित्रण यांचे प्रातिनिधिक स्वरुपात अध्ययन करण्यास मदत होते. • CO.4. अवकाळी पावसाच्या ढरम्यानची गोष्ट या कादंबरीतील ग्रामीण जीवनवास्तवाचे स्वरूप विद्यार्थी समजून घेतात. • CO 5 कादंबरीचे वाङ्मयीन मूल्यमापन करून घेण्याची दृष्टी
B.A.II[nd] year III & IV SEM DSC 3& DSC 4	•CO 1 पौवार्त्य व पश्चिमात्य साहित्यशास्त्रातील विविध संकल्पना यांचा स्थूल परिचय विद्यार्थ्यांना करून घेता येतो. •CO 2 साहित्याचे स्वरूप, साहित्याचे प्रयोजन आणि साहित्याची निर्मिती प्रक्रिया यांचा विद्यार्थ्यांना परिचय होतो. •CO3 साहित्याचे विविध उपप्रकारांचे स्वरूप व वैशिष्ट्यांचा स्थूल परिचय विद्यार्थ्यांना करून घेण्यास मदत होते. •CO4 साहित्य निर्मितीच्या प्रधान व गौण कारणांची ओळख विद्यार्थ्यांना करून घेता येते.

	•CO5 साहित्याच्या भाषेचे स्वरूप व शब्द शक्तीचे प्रकार समजून घेता येतात. •CO6 साहित्यातील रस प्रक्रिया संस्कृत साहित्यिकांनी मांडलेल्या रस विचाराच्या आधारे विद्यार्थ्यांना समजून घेता येतात. •CO7 साहित्यातून प्राप्त होणाऱ्या आनंदाचे स्वरूप जाणून घेता येते. ८) साहित्याची आस्वाद प्रक्रिया विद्यार्थ्यांना समजून घेण्यास मदत होते.
B.A.III[rd] V & VI SEM DSC	• CO1 मराठी वाङ्मयातील एकांकिका व ललित गद्य या मुलभूत वाङ्मय प्रकारची ओळख होण्यास मदत होते. • CO2 एकांकिका व ललित गद्य तिचे स्वरूप, संकल्पना, वैशिष्टये, वाटचाल आणि प्रमुख प्रकारांचा परिचय विद्यार्थ्यांना होतो. • CO3 मराठी वाङ्मयातील एकांकिका व ललित गद्य यांच्या अभ्यासाची दृष्टी विद्यार्थ्यांमध्ये रुजविण्यास सदर अभ्यासक्रमाची मदत होते. • CO4मध्ययुगीन मराठी वाङ्मयाच्या इतिहासाचा परिचय विद्यार्थ्यांना होतो., • CO5विद्यार्थ्यांना मध्ययुगीन मराठी वाङ्मयाच्या निर्मितीमागील प्रेरणा, स्वरूप व वैशिष्टये यांचा परिचय करून देता येतो. • CO6शाहिरी काव्य आस्वादक क्षमता विद्यार्थ्यांमध्ये निर्माणकरण्यास मदत होते. • CO7मध्ययुगीन काळातील वारकरी संप्रदायाच्या प्रमुख संत कवींच्या काव्यानिर्मितीचा परिचय करून घेता येतो. बखर या वाङ्मयनिर्मितीची ओळख करून देता येते तसेच विद्यार्थ्यांना तत्कालीन समाज व्यवस्था व राजकीय स्थितीचे वास्तवरूप समजून घेता येते.
B.A.III[rd] V & VI SEM SEC & OE	• CO1 भाषेचे स्वरूप, कार्य, भाषा उत्पतीचे सिद्धांत व भाषाकुल संकल्पना अंगांनी जाणवणारी वैशिष्टये विद्यार्थ्यांना समजण्यास मदत होते. • CO2 मराठीच्या कालिक भेदांचे स्वरूप, प्रांतिक भेद व त्यांची वैशिष्टये विद्यार्थी समजून घेतात. • CO3 मराठीच्या निवडक बोलींचा परिचय विद्यार्थ्यांना होतो. ४) मराठीवरील अन्य भाषांचा प्रभाव जाणून घेण्यास विद्यार्थी शिकतात. • CO 4 विद्यार्थ्यांना कीर्तन, भारुड, तमाशा, दशावतार, खान्देशी वहीं मराठी लोकरंगभूमी गायन, जलसे, पथनाट्य व रिंगणनाट्य या

	वाङ्मय प्रकारची ओळख करून घेता आली. • CO5 विद्यार्थ्यांना कीर्तन, भारुड, तमाशा, दशावतार, खान्देशी वही गायन, जलसे, पथनाट्य व रिंगणनाट्य प्रेरणा, संकल्पना व स्वरूप समजून घेता येतात. • CO6 लोकरंगभूमीचे स्वरूप तसेच लोकसाहित्य व लोकरंगभूमी या पारंपारिक रूपांची वैशिष्टये अध्ययन करण्यास मदत होते.

Head

Department of Marathi

Shivaji Arts, Commerce and Science College, Kannad

Department of English

Program Outcomes, Program Specific Outcomes and Course Outcomes

(2024-25)

Programme Outcomes

•To make the students obtain language skills

•To make the students competent in grammar structures and Phonetics

•To acquire language and grammatical skills

•Introduction to various textual literary forms

•To develop usage of words, sentences and grammar practically

•To promote the students to use Modern English in daily life

•To introduce the students to appropriate literary strategies to read literature

•To develop research attitude

•To make students a cultured citizen, well teacher and skilled administrator.

•To Assist students in the development of intellectual flexibility, creativity, and cultural literacy so that they may engage in life-long learning.

•To Educate students in both the artistry and utility of the English language through the study of literature and other contemporary forms of culture.

•To Provide students with the critical faculties necessary in an academic environment, on the job, and in an increasingly complex, interdependent world.

Programme Specific Outcomes

The undergraduate program in English aims to

1. Sensitize students to the aesthetic, cultural and social aspects of literature

2. Provide students with extensive view of social, political, cultural and other aspects of society as reflected in literature

3. Acquire life and communication skills and focus on vocational skills

4. Learn to appreciate creative art and literature

5. Develop students' abilities like creative thinking and writing

6. Engage students with major genres of literature 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 studetns for asking relevant/appropriate questions, problem solving, synthesizing and articulsting

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 recognised value system, moral dimensions and self responsibility for nation and society.

Course Outcomes

F.Y. B. A.

Semester I

English Paper I

DSC-1 English Poetry

By the end of course, the students will learn

CO1:Meaning of Poetry, its types and forms

CO2: The rise and development of English Poetry, trends in English poetry

CO3: Major and minor British poets, texts and contexts.

CO4: Reflection of human values in English poetry

CO5: Undertake projects, research in English poetry

CO6: Write poetry on current situations

English Paper II

General Elective or Open Elective(GE/OE)- Functional English

By the end of course, the students will learn

CO1:Basic grammar in English language.

CO2:Writing skills with the help of clause elements, phrases, clause types, sentenc types.

CO3:To prepare for various competitive examinations.

CO4:To spot common errors, sentence improvement, build vocabulary, selectin proper words, subject-verb concord, ordering of words in sentences etc.

English Paper III

Skill Enhancement Course

SEC-ENG-I-Metalinguistic Skill

At the end of the course, the student can understand

CO1: Acts of writing, the ability to think grammatically and to reflect on the effectiveness o language choices

CO2: Phonemic awareness, syntactic awareness, and lexical awareness

CO3: Conversational interaction the role of metalinguistic skills

CO4: understand the intended message of the speaker through metalinguistic skills

CO5: Relation between language and culture

English Paper III

Ability Enhancement Course

AEC-ENG-I-Communication Skills in English

At the end of course, students will learn

CO1: To communication skills, importance of all skills and use of effective communication skills.

CO2: To speak at public places.

CO3: To prepare for job interview

CO4: Manners, etiquettes, and maintain good relations with others

CO5: To show higher level of critical thinking and sharpen their accuracy in writing.

Semester II

English Paper V

DSC-4 English Drama

By the end of course, the students will learn

CO1:Meaning and elements of English drama

CO2:Various in English drama

CO3:To demonstrate a broad knowledge of major and minor British playwrights and texts and contexts

CO4:Will play various roles in drama/theatre

CO5:Will write dramas

English Paper VI

General Elective or Open Elective(GE/OE)- English for Competetive Examination

At the end of course, the students will learn

CO1:The use of basic grammar in English language learning.

CO2:To prepare for various competitive examinations.

CO3:To spot common errors, sentence improvement, build vocabulary, selecting proper words, subject-verb concord, Ordering of words in sentences etc.

CO4:To enable students for employment with requisite professional skills, ethics and values.

English Paper VII

Vocational Skill Course

VSC-ENG-I-Translation in Practice

At the end of course, the students will learn

CO1:Translation as important branch of study and what is good translation.

CO1:Basic but valuable techniques used by a good translator in the translation between English and Marathi or English and Hindi.

CO1: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.

CO1:What makes a qualified professional translator and acquire the abilities and skills that such a translator needs.

English Paper VIII

Ability Enhancement Course

AEC2-Additional English-Business English

At the end of course, students will learn

CO 1: Business English

CO 2: Business Communication skills

CO 3: Language skills, grammar, advanced business vocabulary

CO 4: Social cultural differences

S.Y. B. A.

Semester III

Paper III -English Compulsory

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

CO 1: Distinguish between spoken language and the written

CO 2: Understand and acquire English language skills through creative writing

CO 3: Use English language appropriately, creatively and imaginatively

CO 4: Identify the main ideas and themes depicted in a text

CO5: Have competence in various concepts in grammar and writing skills

CO 6: The Students would emerge as good communicators

Paper V & VI– Optional English: Literature in English I

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

CO 1: will develop awareness about British literature,American literature,Indian literature

CO1: Have developed and applied the literary knowledge

CO2: Know the nature and structure of epic and mock epic

CO3: Differentiate between various types of literary genres

CO4: Distinguish between good and evil, moral & immoral depicted in literature

CO5: Study literature critically

CO 6: will develop awareness about different literatures written/translated in English

Semester IV

Paper VI & VIII– Optional English: Periods of British Literature

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

CO1: will develop understanding of British Literature to a fair extent.

CO2: Understand old English Period,Middle English Period,The Renaissance,Elizabethan Period,Romanticism

CO3: Be acquainted with the dramatic techniques of John Webster by studying his play

Duchess of Malfi

CO4: Understand different genres of poetry like Ballad,Ode,Elegy

CO5: Have the ability of reading and interpreting Thomas More's Utopia

Paper VIII– Optional English: Postcolonial Literature

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

CO1: will develop understanding of definition and theory of Postcolonial Literature to a fair extent.

CO2: Understand contemporary discourse and literature

CO3: Be acquainted with the poetic techniques of Derek Walcott,Leopold Senghor,Namdeo Dhasal

CO4: Have the ability of interpreting essays of Chinua Achebe,Edward Said,Frantz Fanon.

Paper III & IV–Additional English

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

CO1: Distinguish the difference between speech and writing

CO2: Understand and acquire English language skills through creative writing

CO3: Use English language appropriately, creatively and imaginatively

CO4: Identify the main ideas and themes portrayed in a text

CO5: Be proficient in various concepts in grammar and writing skills

T.Y. B. A.

Semester V

DSE-1-A2

Canadian Literature

At the end of the course, students will learn

CO1: Canadian Culture as melting pot

CO2: Different histories, ethnicities, regions, and gender identities

CO3: Broaden the knowledge of national Literature

CO4: Comprehend all the features of the novels-River Thieves,No Man's Land and Power Politics

Paper X SEC 1 A2

Postmodern Literature

At the end of the course, students will be

CO1: Familiarized with the theoretical concepts of postmodernism.

CO2: Acquaintted the learners with the postmodern works of literature which defy categorization and prove to be experimental in nature, subverting what is conventionally revered as the norm.

CO3: would be acquainted with postmodernism as an approach and as critical study.

Paper XI GE1

Indian English Literature

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

CO1: : would be acquainted with Indian literature at a higher level.

CO2: will produce pan-Indian point of view among the students.

CO3: The students would have furthered their interest in I literature.

Semester VI

DSE-1-B2

Indian Diaspora Literature

By the end of the course,

CO1:students can analyze the major themes in the writings of the Indian diaspora,

CO2: can contrast the concerns of different Indian diasporas, and

CO3:can distinguish between the different phases of Indian diaspora

SEC-1-B2

African Literature

At the end of the course, the students will learn

CO1:Socio-cultural contexts in which literature functions in Africa and draws parallels between its manifestation there and in other continents particularly Europe and America.

CO2:to analyze primary texts covering the genres of poetry, drama, fiction. and nonfiction, and will discuss them from different critical stances including historical, feminist, postcolonial etc.

CO3:to demonstrate their knowledge and understanding of the he historical, cultural, social, political, or biographical contexts of the works production

GE-2

Indian English Literature

By the end of the course,

CO1:students can analyze the major themes in the writings of the Indian diaspora.

CO2: student can contrast the concerns of different Indian diasporas.

CO3:student can distinguish between the different phases of Indian Literature

Head

Department of English

Head
Department of English
Shivaji Arts, Commerce & Scien

Shivaji Arts, Commerce & Science college kannad.

Department of Economics 2024-25

Program Outcomes, Program Specific Outcomes and Course outcomes

Department of Economics	**After successful completion of three-year degree program in economics a student should be able to**
Programme Outcomes	PO1: The students will get trained to collect primary data and presentation skills. PO2: The program also empowers the graduates to understand various competitive examinations or choose the post graduate programme of their choice. PO3: The students will get knowledge with human values framing the base to deal with various problems in life with courage and humanity. PO4: The students will get an understanding of basic economic theory. PO5: The students will get an introduction to economic issues and problems facing the country.
Programme Specific Outcomes	PSO1: Students will be able to explain the basic and core terms, concepts and theories in Economics. PSO2: Students will be able to Use the acquired knowledge and skills in taking up higher studies. PSO3: Students will able to apply economic reasoning to solve the problems of the economy. PSO4: Students will able to evaluate substantive knowledge of core areas in Economics and the ability to think critically about them. PSO5: Students will able to analyze history of the discipline of Economics.

Shivaji Arts, Comm. & Science, College ★ Kannad ★

Course	Course outcomes: B.A. Economics
	After completion of the course, students will be able to -
B.A.I Year NEP DSC-1 Micro Economics	i)Students will be able to analyze about meaning, nature, scope, significance and limitations of micro economics. ii)Students will be able to analyze demand and supply analysis. iii)Students will be able to understand the consumer behavior. iv)Students will be able to develop strong conceptual knowledge of the subject. v)Students will be able to examine welfare economics
B.A.I Year NEP GE/OE-1 Indian Banking System	i)Students will be able to describe NABARD. ii)Students will be able to understand Indian banking structure. iii)Students will be able to analyze functions of commercial banks. iv)Students will be able to analyze functions of Co-operative banks. v)Students will be able to examine role of banking in development.
B.A.I Year NEP SEC-1 Data Collection	i)Students will be able to analyze primary data collection methods. ii)Students will be able to describe secondary data collection methods. iii)Students will be able to examine questionnaires and schedule. iv)Students will be able to differentiate between primary and secondary data. v)Students will be able to practical skills related to data collection.
B.A.I Year NEP DSC-4 Price Theory	i)Students will be able to analyze theory of production. ii)Students will be able to compare costs and revenue. iii)Students will be able to examine market. iv)Students will be able to describe various concepts in production and costs. v)Students will be able to analyze selling cost.
B.A.I Year NEP GE/OE-2 Reserve Bank of India and Monetary Policy	i)Students will be able to analyze about money measures. ii)Students will be able to understand the function of RBI. iii)Students will be able to examine monetary policy. iv)Students will be able to describe methods of credit control. v)Students will be able to describe current monetary policy.
B.A.I Year NEP VSC-1 Modern Banking Techniques	i)Students will be able to describe the need and importance of technology in banking. ii)Students will be able to understand E- Banking and Digital Payments. iii)Students will be able to examine cyber security. iv)Students will be able to understand security measures. v)Students will be able to practical skills.
B.A.II Year Paper ECO-CC-1E Public Finance	On completion of the course students will be able to Understand the sources of Finance, role of the government in the economy, public borrowing, public expenditures, Taxation.
B.A.II Year Paper ECO-SEC-1A Financial Institution and Market	On completion of the course students would be able to understand knowledge of modern financial system, the recent trends and development in banking system, Role of RBI, knowledge of financial and non-financial institutions.
B.A.II Year Paper	On completion of the course students would be able to understand the ideas

ECO-CC-1F Indian Economy	of basic characteristics of Indian economy, potential of natural resources, nature of poverty, unemployment, major problem of economy and solution, Nature and objective of Niti Aayog, population growth and economy.
B.A.II Year Paper ECO -SEC- 1B Data Collection and Analysis	On completion of this course students would be able to explain key research concepts and issues. This course will be able to read comprehend and explain research in their academic discipline.
B.A.III Year Paper DSE-A1 International economics	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 payments.
B.A.III Year Paper SEC-1C Indian Stock Market	Know the functioning of Indian Stock Market. Understand the structure and functions of Indian Stock Market. Understand the SEBI and its Functions. Knowledge about futures and option trading.
B.A.III Year Paper GE-1 Introduction to Elementary Economics	Students aware about the Concepts of Micro Economics. Understood the Concepts of Macro Economics. Students aware about the knowledge of Indian Economy. Students got the information regarding Money and Banking.
B.A.III Year Paper DSE-B2 Industrial Economics	Understood the importance of Industries in economic development of Economy. Students aware about the theories of industrial location. Students understood types of industries. Students aware about the industrial policy after 1991.
B.A.III Year Paper SEC-1D Insurance Market and its Products	Students understand the meaning, nature and importance insurance. The course enables Functions of Insurance Companies and their agents. Students are able to evaluate the Indian Insurance framework. Students are able to understand the legal aspects of Insurance
B.A.III Year Paper GE-2 Indian Economy	The course equips students to understanding the Structure of Indian Economy & Its problems. Students enable to analyze income & Inflation. Students sensitized to the various issues faced by Indian Agricultural and Industrial Sectors. Students are able to evaluate the role of International Institutions and Organisations

Dr. S. A. Gorde
Professor and head Department of Economics

Shivaji Arts, Commerce and Science College, Kannad
Department of History
Programme Outcomes, Programme Specific outcomes and Course outcomes
Department of History 2024-25
Programme Outcomes,

Department of History	After successful completion of three year degree program in History a student should be able to :
Programme Outcomes	PO-1.Student will have firsthand experience of conservation. PO-2.Taking interest to find out local history PO-3.To stimulate intellectual curiosity and research attitude in the students through the study and research of local regional, nation and Global history PO-4. The programme will give critical understanding of Indian Society, Economy, Polity and Culture through a historical perspective.
Programme Specific outcomes	PSO-1.To study Great personality in India and the world. PSO-2.To visit's Historical place which are around the Marathwada region. PSO-3.To study the Indian freedom struggle and Freedom Fighter's sacrifice for the sake of Nation. PSO-4.To know the local activist and their contribution in Indian freedom struggle

Course Outcomes Department of History

Course Outcomes	**Outcomes** After completion of these sources students should be able to:
IKS-02, World Heritage sites of Marathwada	CO1.Explain the Concept of Cave Temple, Objective of Caves Formation,. CO2. Inform the Creation of Ajanta Caves, Ajanta Caves Sculpture And painting. CO3.Explain the. Creation of Ellora Caves, Cave architecture and Sculpture in Ellora.
DSC-1 , History of India (Up to 300 B.C.),	CO 1. Inform of Sources of Ancient India. CO 2.Explain the Social and Economic and Religious Life CO 3. Inform of Jainism, Buddhism
SEC-1 , Study in Museology	CO1 Explain the Definition of Museology and types of Museum CO2. Explain the Importance of Museum and Management of Collection CO3. Role of Curator and Conservation, Preservation
GE/OE-2 , History of Buddhisam	CO1. Explain the Literature and Archaeology Sources CO2. Explain the Life of Gautama Buddha CO3. Role of Philosophy of Buddhism
DSC-4History of India 300B.c to 650 A.D	CO1.To study the Various Dynasties in History Of India CO2.To Understand Rise and Expiation of Various Dynasties CO3.To put Forth Significance of Various Dynasties

VSC-1Study in Archaeology	CO1. To study the Basic Concept of Archaeology CO2.To Create Awareness about Archaeology CO3. To put Forth Impotence of Archaeology
GE/OE2 History of Jainism	CO1. To study the Sources of Jainism CO2. To Understand Teaching of Jainism CO3. To put Forth Major sect in Jainism
CC-3A History of Medieval India	CO1. Analys medieval historical sources of India. CO2.Understand the brief history of medieval India. CO3.Explain the Religious life of medieval India. CO4.Describe the society, economy and culture conditions under Mughal and Maratha
CC-3B History of colonial India	CO1.Explain the historical background of India 18th century. CO2. Describe the Judiciary, Press and Education. CO3. Understand the social reform movements. CO4.Explain the Resistance to the colonial rule.
CC-4B History of Europe	CO1.Briefly explains the political condition in Europe. CO2.Explain the Age of revolution. CO3.Explain the unification process and issues in Europe. CO4. Describe the World war.
CC-4A, History of modern India	CO1. Explain the revolts against colonial rule and growth of political awakening. CO2. Explain the steps in Indian national movement. CO3. Explain the anti-colonial rule movement CO4.Understnding of the constitutional development and partition
DSE-A3, History of south east Asia	CO1. Explain the Portuguese Spanish and Dutch: Colonialism CO2. Explain the British and French: Colonialism CO3. Understand Non Aligend Movement and cold war
SEC-1C, Issues of depressed Classes in India	CO1. Explain the Condition of women's in India CO2. Explain the Rise and growth of communalism CO3. Role of national minority commission
GE-1 History Of Sufism in India	CO1. Explain the Rise Islam in India CO2. Explain the Pir, Wali and Silsilas CO3. Role of Chisti
DSE-B1 Research Methodology and IPR	CO1. Explain the Def ,Nature, Scope and Types CO2. Explain the Step in Research CO3. Govt. Schemes in IPR
SEC-1D, Study of	CO1. Explain the Definition of **Archives**

Archives	CO2. Explain the Physical Forms of Archive Material CO3. Role of Archives in research
GE-2 Dr. B.R.Ambedkar and his Movement	CO1. Explain the Dr. Ambedkar Cast System CO2. Explain the Dr. Ambedkar Concept of Democracy CO3. Role of Dr. Ambedkar Mahad Chaudar Tank Satyagrah

Program Outcomes Program Specific Outcomes and Course outcomes

B.A. Psychology

Department of Psychology	After successful completion of three year degree program in Psychology a student should be able to
Programme Outcomes	• PO-1. Able to understand basic concepts of Psychology. • PO-2. Understand the impact of environment, society, heredity on persons Behaviour. • PO-3. Understand the human social behavior. • PO-4. Awareness of self and social well being. • PO-5. Think scientifically about surrounding human behavior. • PO-6. Understand human development. • PO-7. to write study tour report
Programme Specific Outcomes	• PSO -1. To get admission post graduation course in Psychology. • PSO-2. To interpretation of data and make project/research. • PSO-3. To write scientific case study report. • PSO-4. To use of basic psychological tests and experiments. • PSO-5. Identify and Think on the various psychological problems. • PSO-6. Make use of personality theories in daily practice. • PSO-7. Make Use of Industrial theories while preparing for professional interviews. • POS-7. Analyze and understand abnormal human behavior in practice
	COURSE OUTCOMES: B. A.PSYCHOLOGY
Course	**Outcomes After completion of these course students should be able to**
B.A.I Paper I SEM DSC 1 Introduction to Psychology DSC-4 II SEM Individual Differences	• CO.1.To able to understand basic principles of Psychology. • CO 2. To able to understand historical trends of Psychology to able to understand Major Concepts, different perspectives of Psychology. • CO 3. To able to understand an overview of the applications of Psychology. • CO 4. To able to understand Career opportunities in Psychology. • CO 5. To understand Roll of Biological base in human behavior. • CO 6. To understand Emotion, Motivation and Sensory Processes. • CO7. To Learn applications of various techniques of psychology.

B.A.I Paper I SEM GE-1 Personality Development, II SEME 2 Stress Management	• CO 1 .To create the awareness among the students of Social Psychology and it's various fields. • CO 2. To able to understand Social behavior. • CO 3. To understand Self Concept and How to develop it. • CO 4. To able to understand important role of Social relations in individual's life. • CO 5. To able to understand Attitudes, How prejudice are take place and its effect on behavior. • CO 6. To able to understand Aggression and how to control it. • CO 7. To able to understand the ways of communication and its applications. • CO 8. To able to understand the leadership and its characteristics. • CO 9. To learn various applications and techniques of Social Behavior.
B.A.IInd year Paper III CCPSY 3 Social Psychology	• CO. 1. Demonstrate knowledge of major scientific theories and models of personality and adjustment. • CO.2. Understand and apply how the scientific method is used in relevant psychology fields. • CO. 3. Apply relevant psychological concepts and theories to personal experiences and perceptions of others. • CO.4. Increase self-awareness and self-understanding in relation to personal, relational, and social/cultural life domains
B.A.IInd year Paper IV CCPSY 4 Psychological Testing and Statistics	• CO.1. Introduction to the field of psychological testing in general. • CO.2. Acquaintance with the nature and uses of psychological test • CO.3. Understanding the nature and other description of intelligence test, ability tests and personality tests
B.A.IIIrd Paper V PSY SEC 3C Abnormal Psychology	• CO.1.Student is expected to acquire knowledge of causes, symptoms and treatment of various psychological disorders. • CO.2. To understand the criteria of abnormal behavior.
B.A.IIIrd Paper VII PSYSEC 3D Counseling	• CO.1. Introduction to the field of counseling Psychology. • CO.2. Comprehending the applications of counseling Psychology in the fields of career, marriage, couple and family Counseling

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SHIVAJI ARTS COMMERCE AND SCIENCE COLLEGE KANNAD

DEPARTMENT OF SOCIOLOGY 2024-25

PROGRAM OUTCOMES, PROGRAM SPECIFIC OUTCOMES AND COURSE OUTCOMES B.A SOCIOLOGY

Dept of Sociology	After successful completion of three year degree program in Sociology our student is able to
Program outcomes	▪ To Develop the sociological perspective ▪ Use sociological theory to explain social problems and issues ▪ Create new knowledge ▪ Use sociological knowledge & theories for Social Development.
program specific outcomes	▪ Apply socio- scientific Knowledge to understand the Society ▪ He is taking initiative in solving social problem. ▪ He Is able to understand the origin and development Of the sociology as a discipline in general and development in India in particular and also able to understand the various approach, Principles, concepts, methods and history of sociology.
Course	Course outcomes B.A sociology
B.A I year(I Sem) paper IDSE 1 Introduction to sociology	1.Student will understand the major contribution and theories of Pioneer sociologist 2.Student will understand the period of Renaissance and significance in the development of social thought 3.Student will able to define sociology through a scientific lens
B.A I year(I Sem) paper II individual and society	Through this course, sociology students Various social concepts and its nature like socialization social structure stratification and agencies of socialization
B.A I year(I Sem) GE/OE 1 Social media and society	1.Student will understand the meaning and nature of social media 2.Student will able to identify and describe the function of social media platform recognise their role in information dissemination community building and entertainment
B.A I year(I Sem) SEC-1 Personality development	1.Develop skill and embranes change, handle setback and thrive in dynamic work environments 2.Build self confidence, overcome self doubt and be able to asset on self in professional settings
B.A I year(II Sem) DSE IV Applied Sociology	1.To introduce student to the concept scope and importance of applied sociology 2. To exam in the role of sociology in understanding the social problem and solving of it. 3.To understand the role of sociology in policy farming
B.A II year(II Sem)GE/OE 2 Sociology of cinema	1.To introduced student to the fundamental concept and theories of the sociology of cinema 2Tto examine the relationship between cinema and society

1,Family Counseling	2. student will analyse the changing nature of family
B.A II year(III Sem)Paper V, CC-1E Indian society	1 student are made familiar with the indian society 2. it's linkage and continuity with past and present
B.A II year(III Sem)Paper VI, SEC-1 A Cinematic Sociology	1.student are introduce the key idea with in a theory they understand the importance of cinemas impact on society 2.students explore their familiar path of seminar to connect to larger theoretical ground
B.A II year(III Sem)Paper VII,CC-1F Indian society: Issues and concerns	The course content will empower the students to deal with the current challenges and to serve as a change agents in government and non governmental organisations
B.A II year(IV Sem)Paper VIII,SEC-1B,Sociology of Mass Media	An appreciation of mediatized character of social existence and its history
B.A III year(V Sem) paper IX ISociological Tradition	Students have improved the understanding of historical, social economic and intellectual force in the rise of sociological theories, as well as they have developed the basic understanding of emergence of sociological thought and to know about Pioneer sociologist with their contribution to sociology
B.A III year(I Sem) paper X Introduction to Research Methodology	Were capable to apply research methodology of social science in life as well as procedure tool and technique of social research.
B.A III year(V Sem) paper IX DSE -1 /A1 Classical Sociological Tradition	1.Understanding the grand foundational themes of Sociology 2.Application of theories and concepts from classical sociological theories to develop 3.appreciation of the classical concepts and theories to develop awareness to the limits of current knowledge .
B.A III year(V Sem) paper IX DSE -1 /A2 Gander and sociology	1.An understanding of concepts such as sex and gender by problematizing commonsensicalnotions of gender 2.Raising key issues of power and subordination within the purview of and the need for and solutions resorted to as measures to initiate change through gender based movements. 3.understanding issues relating to gender both at national and global level.
B.A III year(V Sem) paper X SEC-1C Social Research Methods	1.Students are introduced to sociological research both from theoretical and methodological perspective 2.Student developical validity of the claims made by theory 3.Student will learn to identify ethical and practical issue in research
B.A III year(V Sem) XI ,GE-1 Population and society	1.Demonstrate a knowledge for key concept and different approaches to population. 2.Student recognise the relation between population and social group and process
B.A III year(VI Sem) paper XII DSE-1/B1 Indian Sociological Tradition	Ensure that students have conceptual clarity and can articulate the main Debates and argument with regard to sociology in India
B.A III year(VI Sem) paper XIII SEC-1D NGO management and social	1.Student should enrich their knowledge about NGO management 2.student enrich their knowledge about project management

development	dimension planning and its implementation
B.A III year(VI Sem) paper XIV GE-2 Sociology of work	1.understanding work in its social aspects such as gender work and unpaired work as a different from its Better know economic dimensions

Head of Dept.

SHIVAJI ARTS, COMMERCE AND SCIENCE COLLEGE KANNAD, DIST-CHHATRAPATI SAMBHAJINAGAR

AFFILIATED TO

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, CHHATRAPATI SAMBHAJINAGAR

Course Outcome (COs)

Programme Outcome (POs)

Programme Specific Outcome (PSOs)

[B.A I, II and III Year Public Administration Curriculum]

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DEPARTMENT OF PUBLIC ADMINISTRATION

(Academic Year -2024-25)

Course Structure

B. A.I, II and III Year Public Administration Curriculum

(Semester Pattern; **Academic year 2024-25**)

SEMESTER- I (As per NEP-2020, effective from 2024-25):

SEMESTER- I (As per NEP-2020, effective from 2024-25):
DSC-1 — Introduction to Public Administration (Theory & Practical) (M1 Core/ Major / Mandatory)
GE/OE- Theories and principles of management and administration [Generic/open Elective] : (Theory)
SEC[Skill Enhancement Course (any one)]:
SEC-1- : Administrative Leadership and Communication Skills(Theory & Practical)

SEMESTER II
DSC-4 – Indian Administration (Theory & Practical) (M1 Core/ Major / Mandatory)
GE/OE-2 -A-Management and Record Management [Generic/open Elective]:
VSC [Vocational Skill Course(Any One)]:
VSC-1 : Office Administration & Record Management (Theory)

SEMESTER III: (CBCS Pattern; With effective from 2023-24);
DSC-1: CC-1A – Public Personnel administration
DSC-1: CC- 1B- Management of NGOs

SEMESTER IV:
DSC-1: CC-1C – Public Finance administration
DSC-1: CC- 1C- Secretarial practice

SEMESTER V: (CBCS Pattern; With effective from 2024-25);
DSC- Local Self Government
SEC- Training of Community Resource Persons
GE- Principal of Public Administration

SEMESTER-VI
DSC- Administrative Thinkers
SEC- E-Governance
GE- Indian Administration

Course outcomes (COs)

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

Programme	Name of Course	Course Outcome
B.A.I **MAJOR(M1) DSC**	**SEMESTER I :** **DSC-I: Introduction to Public Administration**	CO1: 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.
GE/OE (any one)	GE/OE (any one) Theories and principles of management and administration	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.
SEC	SEC-1 : Administrative Leadership and Communication Skills	CO1: 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

MAJOR(M1) DSC	**SEMESTER II (As per NEP-2020, effective from 2024-25): DSC-4** – 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: Analyses case studies related to judiciary review and judiciary activism, and develop inform opinions on this topics based on the theoretical background and practical work.
GE/OE (any one)	GE/OE (any one) 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 organization, decision making etc. given by the thinkers CO 5: Acquire knowledge about the behavior theories
VSC	VSC-1 : Office Administration & 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.
B.A.II DSC	SEMESTER-III (CBCS Pattern; With effective from 2023-24); **1.DSC-1: CC-1A – Public Personnel administration**	CO 1: Conceptual Clarity of Public Personnel administration, Its issues, Career System and other terms covering various aspects of personnel administration. CO 2: Detailed understanding of Public Personnel System of India CO 3: Critical understanding of issues like Employee associations.

	2.DSC-1: CC-1B- Management of NGOs	CO 1: Comprehending the theoretical conceptualization of NGOs and Public sector CO 2: Critically understanding the National Policy on Voluntary Sector and Government – NGOs Interface CO 3: Knowledge of public and private funding and national and foreign financial contributions to NGOs CO 4: Understanding Capacity building, ethical and accountability concerns CO 5: Acquiring the necessary skills student to plan and execute projects CO 6: Acquiring the skills for case study analysis
DSC	SEMESTER-IV DSC-1: CC-1C – Public Finance administration DSC-1: CC-1C – Public Finance administration	CO 1: Conceptual Clarity of Public Personnel administration , Its issues, Career System and other terms covering various aspects of personnel administration. CO 2: Detailed understanding of Public Personnel System of India CO 3: Critical understanding of issues like Employee associations.
	DSC-1: CC-1C- Secretarial practice	CO 1: Developing an understanding of basic concepts of office management. CO 2: Acquiring quality skills and competencies in office management, official correspondence and time management CO 3: Acquiring quality skills and competencies in official correspondence and time management
B.A.III DSC	**SEMESTER-V (CBCS Pattern; With effective from 2024-25)**	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.

	DSC- Local Self Government	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.
SEC	**SEC- Training of Community Resource Persons**	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.
GE	**GE- Principal 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.
DSC	SEMESTER-VI 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.

SEC	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.
GE	GE- 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.

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 analyses and you let the functioning of the Government and public sector organizations.

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 organizations.

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 organization, international organizations, and the private sector, where and understanding of Public Administration principle is essential.

Program learning outcomes of B.A. (Hons.) public administration: -

The students who complete 3/4 years undergraduate program in public administration an honors 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, behavioral and social competencies.

POs 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 specialization (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.

POs 2. Personal and behavior 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.

POs 3. Social competence

i. Enhance the skill to collaborate, corporate and realize 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 organization 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.

HEAD
Department of Public Administration
Shivaji College ,Kannad.

Department of Public Administration
Shivaji Arts, Commerce & Science
College Kannad, Dist.Aurangabad

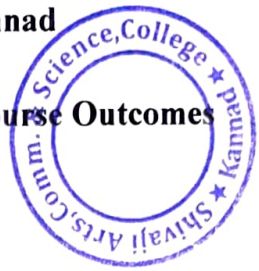
Shivaji Arts commerce and Science college Kannad

Faculty of Commerce

Programs Outcomes, Programs Specific Outcomes and Course Outcomes

Programs Outcomes: B. Com (Commerce)

Academic Year 2024/2025



B.Com (Three Years Regular Program)	After successful completion of three years degree program in commerce (B. Com.) student should be able to:
Program Outcome	1. This program could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, Warehousing etc., well trained professionals to meet the requirements. 2. After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company. 3. Capability of the students to make decisions at personal & professional level will increase after completion of this course. 4. Students can independently start up their own Business. 5. Students can get thorough knowledge of finance and commerce. 6. The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.
Program Specific Outcome	1. The students can get the knowledge, skills and attitudes during the end of the B.com degree course. 2. By goodness of the preparation they can turn into a Manager, Accountant , Management Accountant, cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government employments and so on., 3. Students will prove themselves in different professional exams like C.A. C S, CMA, MPSC, UPSC. As well as other courses. 4. The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving in day to day business activities. 5. Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer. 6. Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator. As well as other financial supporting services. 7. Students will learn relevant Advanced accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business. 8. Students will be able to do their higher education and can make research in the field of finance and commerce.

Course Outcomes- (B. Com. First year): Semester-I

Course Outcomes	After completion of these courses students should be able to:
Financial Accounting-I-DSC-1	1. To enable the students to learn principles and concepts of Accountancy. 2. Students are enabled with the Knowledge in the practical applications of accounting. 3. To enable the students to learn the basic concepts of Partnership Accounting, and allied aspects of accounting. 4. The student will get thorough knowledge on the accounting practice prevailing in partnership firms and other allied aspects. 5. To find out the technical expertise in maintaining the books of accounts. 6. To encourage the students about maintaining the books of accounts for further reference.
Principal of Management –I-DSC-2	1. To acquaint student with fundamental of business management 2. To introduce students principal and theories of management 3. To develop understanding about function of management and their importance
Entrepreneurship Development-I-DSC-3	1. To make the students aware about the Business and Business Environment. 2. To develop entrepreneurial awareness among students. 3. To motivate students to make their mind set for thinking entrepreneurship as career.
Basic of entrepreneurship O/E .G/E-I	1. To select business idea. 2. To prepare project report . 3. To register unit.
Office Automation Tools SEC-I	1. To give basic hands on knowledge of word processing using MS Word. 2. To give basic hands on knowledge of spreadsheet using Excel word. 3. To make student familiar with Email account.

Course Outcomes- (B. Com. First year): Semester-II

Course Outcomes	After completion of these courses students should be able to:
Financial Accounting-II-DSC-4	1. To enable the students to learn principles and concepts of Accountancy. 2. Students are enabled with the Knowledge in the practical applications of accounting. 3. To enable the students to learn the basic concepts of Partnership Accounting, and allied aspects of accounting. 4. The student will get thorough knowledge on the accounting practice prevailing in partnership firms and other allied aspects. 5. To find out the technical expertise in maintaining the books of accounts. 6. To encourage the students about maintaining the books of accounts for further reference.

Principal of Management –II-DSC-5	4. To acquaint student with fundamental of business management 5. To introduce students principal and theories of management 6. To develop understanding about function of management and their importance
Entrepreneurship Development-II-DSC-6	1. To make the students aware about the Business and Business Environment. 2. To develop entrepreneurial awareness among students. 3. To motivate students to make their mind set for thinking entrepreneurship as career.
Basic of Marketing O/E .G/E-I	1.Student understand fundamental concept of marketing 2.Student gets a job opportunities due to knowledge of marketing management 3.to make student aware market opportunities
Business Documentation VSC-I	1. To make student familiar with business document . 2. To train student with advanced MS Word 3. 3.To make ready student to professional document .

Course Outcomes- (B. Com. Second year): Semester-III

Course Outcomes	After completion of these courses students should be able to:
Corporate Accounting-I	1. This course aims to enlighten the students on the accounting procedures followed by the Companies. 2. Student's skills about accounting standards will be developed. 3. To make aware the students about the valuation of shares. 4. To impart knowledge about holding company accounts, amalgamation, absorption and reconstruction of company.
IT applications in Business-I	1. To make students familiar with computer environment 2. To make students familiar with operating systems. 3. To make students aware of accounting packages like tally. 4. To develop skill among students in applications of internet in commerce education 5. To educate students with the networking and different languages of computer.
Cost Accounting-I	1. To keep the students conversant with the ever – enlarging frontiers of Cost Accounting knowledge. 2. Students can get knowledge of different methods and techniques of cost accounting. 3. To impart Knowledge about the concepts and principles application of Overheads.
Goods & Service Tax (GST)-I	1. Familiarizes the students with the basic GST principles and techniques of preparing and presenting the accounts. 2. Provides the underlying framework and concepts of GST accounting in the context of how accounting fits into overall business environment of contemporary Business and Economy.
Indian Economy	1. To familiarize the students with the basic concept of Macro Economics and its application.

	2. To aware students about Gross National Product (GNP), Net National Product (NNP) ,Income at Factor cost or National Income at Factor Prices ,Per Capita Income , Personal Income (PI) ,Disposable Income etc. 3. To Study the relationship among broad aggregates. 4. To apply economic reasoning to solve the problems of the economy.

Course Outcomes- (B. Com. Second year): Semester-IV

Course Outcomes	After completion of these courses students should be able to:
Corporate Accounting-II	1. This course aims to enlighten the students on the accounting procedures followed by the Companies. 2. Student's skills about accounting standards will be developed. 3. To make aware the students about the valuation of shares. 4. To impart knowledge about holding company accounts, amalgamation, absorption and reconstruction of company
IT applications in Business-II	1. To make students familiar with computer environment & operating systems 2. To introduce students with accounting packages like tally. 3. To develop skill and knowledge among students in applications of internet in education of commerce.
Cost Accounting-II	4. To understand Basic Cost concepts, Elements of cost and cost sheet. 5. Providing knowledge about difference between financial accounting and cost accounting. 6. Ascertainment of Material and Labor Cost. 7. Student's Capability to apply theoretical knowledge in practical situation will be increased.
Goods & Service Tax (GST)-II	1. Familiarizes students to understand the GST structure in our country. 2. Provides practical knowledge which will be beneficial to the students in their life time.
Business Environment	1. To make the students aware about the Business and Business Environment. 2. To develop entrepreneurial awareness among students. 3. To motivate students to make their mind set for thinking entrepreneurship as career.

Course Outcomes- (B. Com. Third year): Semester-V

Course Outcomes	After completion of these courses students should be able to:
Advanced Financial Accounting-I	1. To provide the knowledge of various accounting concepts 2. To impart the knowledge about accounting methods, procedures and techniques. 3. To acquaint students with practical approach to accounts writing by using software package and by learning various accounts
Management Accounting-I	1. Imparts conceptual knowledge of various accounting concepts, conventions and policies.

	2. Inculcates knowledge about accounting methods, practices and techniques particularly pertaining to joint stock companies.
Computerized Accounting-I	1. To learn the different system concepts used in Computerized Accounting. 2. To understand the different types applications and Software of Computerized Accounting. 3. To be acquainted with the facts about financial Statements.
Business Regulatory Framework-I	1. The student will well verse in basic provisions regarding legal frame work governing the business world. 2. To know the students with the basic concepts, terms & provisions of Mercantile and Business Laws. 3. To develop the awareness among the students regarding these laws affecting trade business, and commerce.
Auditing	1. Students will be versed in the fundamental concepts of Auditing and different aspects of tax. 2. Students can understand Income Tax system properly, and can get the knowledge of different tax provisions.
Rural Development & Agriculture Business	1. To enable students to understand students to a new approach to the study of theRural Development & Agriculture Business in Indian Economy. 2. To help the students in analyzing the present status of the Agriculture & its Business in Indian Economy. 3. To rendering the process of integration of the Indian Economy with other economics of the world with the focus on Rural Development & Agriculture Business.

Course Outcomes- (B. Com. Third year): Semester-VI

Course Outcomes	After completion of these courses students should be able to:
Advanced Financial Accounting-II	1. To provide the knowledge of various accounting concepts 2. To impart the knowledge about accounting methods, procedures and techniques. 3. To acquaint students with practical approach to accounts writing by using software package and by learning various accounts
Management Accounting-II	1. Enables students to know the concept of capital budgeting with reference to time value of money. 2. Enables understanding of the functions, advantages, limitations of management accounting.
Computerized Accounting-II	1. To learn the different system concepts used in Computerized Accounting. 2. To understand the different types applications of Tally ERP.9 3. To be acquainted with the facts about Processing of GST in Tally.
Direct Tax	1. Students can understand Income Tax system properly, and can get the

	knowledge of different tax provisions. 2. To give knowledge about preparation of Audit report, Submission of Income Tax Return, Advance Tax, and Tax deducted at Source, Tax Collection Authorities under the Income Tax Act, 1961.
Business Regulatory Framework-II	1. The student will well verse in basic provisions regarding legal frame work Company act and its provisions. 2. To know the students with the basic concepts, terms & provisions of Memorandum and Business Laws. 3. To develop the awareness among the students regarding these laws affecting Industry, trade, business, and commerce.
Advertising & Salesmanship	1. This course enables the students, the practical knowledge and the tactics Salesmanship in the marketing. 2. To study and critically analyze the basic concepts and trends in Advertising Marketing. 3. To aware of the recent changes in the field of marketing.

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DEPARTMENT OF PHYSICS

SHIVAJI ARTS, COMMERCE AND SCIENCE COLLEGE KANNAD, DIST-CHH.SAMBHAJINAGAR

2024-25

AFFILIATED TO

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,CHH.SAMBHAJINAGAR

B.Sc.I,II and III Year Physics Curriculum

Course Outcome (Cos)

Programme Outcome (POs)

Programme Specific Outcome(PSOs)

DEPARTMENT OF PHYSICS
SHIVAJI ARTS, COMMERCE AND SCIENCE COLLEGE KANNAD, DIST-CHH.SAMBHAJINAGAR

2024-25

AFFILIATED TO
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B.Sc.I,II and III Year Physics Curriculum

(Semester Pattern)

Course Structure

SEMESTER I :

DSC-1 Mechanics and Properties of Matter

DSC-2 - Practical Based on DSC-1

GE/OE- Everyday Physics

SEC-1 Basic Instrumentation Skill

SEC-2 Practical Baed on SEC-1

SEMESTER II :

DSC-3 Optics
DSC-4 Practical based on DSC-3
VSC-1 Electrical Measurements
VSC-2 Practical based on VSC-1

SEMESTER III :

Phy-311 Statistical Physics and Relativity

Phy-312 Modern and Nuclear Physics

Phy-321 Lab course3 based on Phy-311
Phy-322 Lab course4 based on Phy-312

Sec-313 SEC-1B Sensors and Instrumental Physics

SEMESTER IV :

Phy411-Semiconductor and digital Electronics

Phy412-Condensed Matter Physics

Phy-421-Lab course 5 based on Phy411
Phy-422-Lab course 6 based on Phy412

SEC-413 2C Renewable Energy

SEMESTER V :

Phy511-Classical Quantum mechanics

Phy512- Electrodynamics

Phy521-Lab course 7 based on Phy511

Phy522-Lab course 8 based on Phy512

SEC-513 SEC-1A Soil Physics

SEMESTER VI :

Phy611-Atomic Molecular Physics and LASER

Phy612- Optical Fibre and Communication

Phy621-Lab course9 based on Phy611

Phy622-Lab course10 based on Phy612

SEC613-SEC2 C Basics of Space science

Course Outcome(COs):

Following are the course outcome of Physics Course

Programme	Name of Course	Course Outcome
B.Sc.I	**SEMESTER I :** DSC-1 Mechanics and Properties of Matter	**CO1:** To study law of gravitation and its verification **CO2:** To study law of elasticity and derive its physical constants. **CO3:** To study determination of surface tension by Jaeger's method. **CO4:** To study Bernoulli's theorem and understand its practical applications
	SEMESTER II : DSC-3 Optics	**CO1:** To study different laws of optics. **CO2:** To study different types of lenses and its applications. **CO3:** To study Michelson Interferometer and determine wavelength of light. **CO4:** To study different types of diffraction
B.Sc.II	**SEMESTER III :** **PHY 311 -** Statistical Physics and Relativity	**CO1:** To show an analytical ability to solve problems relevant to statistical mechanics. **CO2:** To explain the procedures for deriving the relation between different thermodynamic parameters. **CO3:** Can apply the methods of statistical physics in other fields and physics related fields. **CO4:** To demonstrate knowledge and broad understanding of special relativity.
	PHY 312 - Modern and Nuclear Physics	**CO1:** Able to explain the factors influencing photoelectric effect,explain the experimental setup and apply it for applications. **CO2:** Understand the fundamentals of laser, laser system,their characteristics and diversified applications including industry, medicine and defence. **CO3:** Use this knowledge for applications of laser in specific fields of their interest. **CO4:** Demonstrate the ability to critically evaluate the results in nuclear and particle physics **CO5:** Identify the strengths and limitations of various nuclear models..
	SEMESTER IV : **PHY 411 –** Semiconductor and digital Electronics	**CO1:** Able to understand basic semiconductor devices. **CO2:** Able to understand various transistor biasing techniques and detail study of single step amplifier. **CO3:** To understand how amplifier can be

		converted into oscillator. **CO4:** To understand importance of OPAMP and its various circuits. **CO5:** To understand number systems,logic gates and Boolean algebra.
	PHY 412 - Condensed matter Physics	**CO1:** Able to expose themselves to basic concept in condensed matter physics. **CO2:** To recognize common crystal structure. **CO3:** To explain different types of bonds and bonding in solids. **CO4:** To describe electrical conduction in crystals. **CO5:** To explain thermal properties of solids,the detailed study of Hall effect.
B.Sc.III	**SEMESTER V :** Phy511-Classical and Quantum mechanics	**CO1:** To study different laws of classical mechanics. **CO2:** To study origin of quantum theory. **CO3:** To study wave particle duality and its applications. **CO4:** To study Schrodinger's wave equation and its applications.
	Phy512- Electrodynamics	**CO1:** To study laws of electrostatics. **CO2:** To study Faraday's laws of electrodynamics. **CO3:** To study different properties of electromagnetic waves. **CO4:** To study interaction of electromagnetic waves with matter.
	Phy611-Atomic and Molecular Physics	**CO1:** To study different atomic models. **CO2:** To study vector atom model. **CO3:** To study molecular spectra **CO4:** To study Raman's effect.
	Phy612- Optical Fibre and Communication	**CO1:** To realize the siginficane of optical fiber communication **CO2:** To desigin the optical system **CO3:** To understand the construction and working of optical fiber cable **CO4:** To develop the knowledge of fiber fabrication **CO4:** To identify and understand the needs of OFC

Programme Outcomes (POs)

1. Make use of different laws of physics to solve the physical problems.

2. Apply the formula for solving physics problems.

3. Conduct experiments in physics and verify laws and interpret them.

4. Make use of the modern tools to learn the physics.

5.To disseminate the physics effectively.

6.. Demonstrate the knowledge in physics by performing the physics projects effectively.

Programme Specific Outcomes (PSOs):

After completion of course students are able to have a specific outcome which is listed as below.

1: To understand law of gravitation and its verification
2: To clarify law of elasticity and derive its physical constants.
3: To understand the study of surface tension and its properties
4: To know Bernoulli's theorem and understand its practical applications and determine surface tension by Jaeger's method.
5: To understand different methods heat flow.
6: To understand conductivities of different metals.
7: To understand different laws of optics.
8: To know different types of lenses and its applications.
9: To understand Michelson Interferometer and determine wavelength of light.
10: To understand different laws of diffraction.
11: To know different of laws of Electrostatics.
12: To verify different laws of Magnetostatics
13: To verify different types of growth and decay of current.
14: To understand statistical, classical statistics.
15: To know quantum statistics.
16: To know theory of relativity.
17: To understand photoelectric effect and application of photoelectric cell.
18: To understand X rays spectra and its characteristics.
19: To know nuclear forces and models.
20: To know different particle accelerator and detector.
21: To understand functions of different types of electronics components.
22: To verify transistor biasing and amplifiers.
23: To verify working of oscillators
24: 33: To know types of crystal structures.
25: To know types of bonding and band theory of solids.
26: To understand thermal properties of solids.
27: To understand free electron theory of metals.

37: To know different laws of classical mechanics.
38: To know origin of quantum theory.
39: To understand wave particle duality and its applications.
40: To understand Schrodinger's wave equation and its applications.
41: To know laws of electrostatics.
42: To understand Faraday's laws of electrodynamics.
43: To understand different properties of electromagnetic waves.
44: To know interaction of electromagnetic waves with matter.
45: To know different atomic models.
46: To understand vector atom model.
47: To understand molecular spectra and Raman's effect.
48:To understand optical fiber cables and its applications.
52:To know fabrication of fiber cable.

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Course Outcome (COs)

Programme Outcome (POs)

Programme Specific Outcome (PSOs)

[B.Sc. I, II and III Year Chemistry Curriculum]

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DEPARTMENT OF CHEMISTRY

Course Structure

B.Sc. I, II and III Year Chemistry Curriculum

(Semester Pattern; Academic year 2024-25)

SEMESTER I (As per NEP-2020, effective from 2024-25):

DSC-1 –Fundamental of Chemistry-1 (M1 Core/ Major / Mandatory)
DSC-2 – Lab course -1
GE/OE-1[Generic/open Elective(Any One)] :
1.Herbal chemistry-I
2. Food Safety, Adulteration and Detection-I

SEC[Skill Enhancement Course (any one)]:
SEC-1-A. :Water analysis and treatments -1(Theory)
SEC-1-B : Stoichiometry -1(Theory)

SEC-2 : Practical based on SEC-1
A; Water analysis and treatments -1(Practical)
B. Stoichiometry -1(Practical)

SEMESTER II (As per NEP-2020, effective from 2024-25):

DSC-3 –Fundamental of Chemistry- 2(M1 Core/ Major / Mandatory)
DSC-4 – Lab course **-2**
GE/OE-2[Generic/open Elective(Any One)]:
1. Herbal chemistry-II
2. Food Safety, Adulteration, and Detection-II

VSC [Vocational Skill Course(Any One)]:
VSC-1: A. Cosmetics and perfumery -1(Theory)
B. Soap and Detergents -1(Theory)
VSC-2 : Practical based on VSC-1
A. Cosmetics and perfumery -1(practical)
B. Soap and Detergents -1(practical)

SEMESTER III: (CBCS Pattern; With effective from 2023-24)
CHE-311 -Organic Chemistry (V)
CHE-312 - Physical Chemistry (VI)
CHE-321 -Lab course 3(Physical Chemistry-V)
CHE-322 -Lab course 4 (Organic Chemistry-VI)
SEC-313 Theory [Skill Enhancement Course (any one)]:
SEC-1: A. Lab safety and lab Practices
SEC-I B : Water analysis

SEMESTER IV:

CHE-411 -Inorganic Chemistry(VII)
CHE-412 -Applied Chemistry (VIII)
CHE-421 -Lab course 4(Inorganic Chemistry-VII)
CHE-422 -Lab course 5(Applied Chemistry (VIII)
SEC-413 Theory|Skill Enhancement Course(any one)|:
SEC-2 -A. Pharmaceutical chemistry
SEC-2- B. Industrial fermentation and alcohol Technology

SEMESTER V: (CBCGS pattern; with effective from 2024-25)

CHE-511 -Organic Chemistry (IX)
CHE-512 –Physical Chemistry (X)
CHE-521 -Organic Chemistry (lab course-7)
CHE-522 –Physical Chemistry (lab course-8)
SEC-513Theory |Skill Enhancement Course(any one)|:
SEC-3: A. Cosmetics-I
SEC-3 B : Jam,Jelly, Sauce and Ketchups

SEMESTER VI:

CHE-611 –Inorganic Chemistry (XI)
CHE-612 –Applied Chemistry (XII)
CHE-621 –Inorganic Chemistry (Lab course-9)
CHE-622 –Applied Chemistry (Lab course -10)
SEC-613 Theory |Skill Enhancement Course (any one)|:
SEC-4: A. Industrial waste water treatment
SEC-4 B : Purification and separation Techniques

Course outcomes (COs)

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

Programme	Name of Course	Course Outcome
B.Sc.I MAJOR(M1) DSC	**SEMESTER I : DSC-I: fundamentals of chemistry-I**	**CO1:** Write the electronic configurations of the elements **CO2:** Understand the changes in periodic properties in modern periodic table **CO3:**Understand the different types of electron displacement in a molecule **CO4:**Differentiate between inductive, elcctromeric, resonance, and mesomeric effects. **CO5:**Understand the methods of formation, structure and properties of the intermediate. **CO6:** Understand the basic concepts and different laws of thermodynamics and thermochemistry **CO7:** The concept of chemical equilibrium
	DSC-2 Lab Course -1	**CO1:** To consistently follow established SOPs for various chemical experiments. **CO2:** To prepare solution of desired concentration.. **CO3:** To maintain accurate and thorough records of experimental data, and analyze results to draw meaningful conclusions. **CO4:**To apply critical thinking skills to identify and address challenges that may arise during experiments, show casing the ability to troubleshoot and optimize procedures. **CO5**:To gain insights into how chemical labpractices are applied in professional research or industrial sellings, preparing them for future careers in diverse scientific and industrial fields. **CO6:**Students will demonstrate ethical conduct in all aspects of laboratory work, emphasizing integrity responsibility, and professionalism.
SEC	SEC-1-A Water treatment and analysis(Theory)	**CO1:** Resources and properties of water **CO2:** Understand the different pollutants

	SEC-2-A Water treatment and Analysis(Practical) SEC-2A: Stiochiometry (T) SEC-2A: Stiochiometry (P)	**CO3:** Understand treatment of domestic and industrial water **CO4:** Understand the sources of water **CO5:** To carry out experiments for determination of water quality parameters. **CO1:**understand theoretical aspects and working principles of chemistry lab wares **CO2**:prepare all standards solutions, buffer solutions, indicators common laboratory reagents. **CO3**: perform the some basic experiments. **CO4:** develop skills in common laboratory techniques.
GE/OE (any one)	**GE/OE (any one)** **a**) Herbal chemistry-I b)Food Safety, Adulteration and Detection-I	**CO1:** acquainted with importance of herbal drugs. **CO2::**know the different sources of herbal medicine and their preparation **C03**:acquire the knowledge of organic farming **C04:**know about the Indian system of dnigs ayurveda, Unani, siddha and homeopathy **COS5**: know health benefits and role of nutraceuticals. CO1: recognize difference between adulterated and unadulterated food. CO2. encourage society to use healthy food. CO3. evaluate the economic and health impact of food adulteration. CO4. propose innovative solutions for food safety and security. CO5. develop educational materials to raise food safety awareness
	SEMESTER II (As per NEP-2020, effective from 2024-25): DSC-3 – Fundamental of Chemistry- 2(M1 Core/ Major / Mandatory	**CO1:** Identify the types of bonds **CO2:** Predict the shape and geometry and bond angle in a molecule **CO3:** Under Stand the factors affecting ionic bond formation **CO4:** Identify types of isomerism **CO5**: Apply the rules of nomenclature of stereoisomers **CO6 :** Rate of reactions and factors affecting it **CO7**: Solve the numerical on order reactions
	DSC-4 – Lab course **-2**	**CO1:**Acquire skills in common techniques for the Volumetric estimations of inorganic compound **CO2:**Acquire skills in common techniques for preparation and purification of organic compounds. **CO3**: Assess the effectiveness of purification techniques **CO4**:Develop precision in measuring and recording physical

		constants **CO5**:Analyze the relationship between melting/boiling points and purity. **CO6:**Develop skills in recording and reporting experimental procedures and results **CO7;**Handle differentapparatus like eudiometer viscometer, stalagmometer for detem1ining physical properties
	GE/OE-2[Generic/open Elective(Any One)]: **1. Herbal chemistry-II** **2. Dairy chemistry**	**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 **CO1**: knowing importance of the subject from the point of rural economy. **CO2:** Knowing the composition of milk, its food & nutritive value **CO3**: understanding the Microbiology of the milk **CO4**: understanding various preservation and adulterants, various milk proteins and their role for the human body. **CO5:** knowing various milk products, their composition, manufacture and uses.
	VSC [Vocational Skill Course(Any One)]: VSC-1: A. Cosmetics and perfumery - 1(Theory) A. Cosmetics and perfumery - 1(practical) B. Soap and Detergents - 1(Theory) VSC-2 : Practical based on VSC-1 B. Soap and Detergents - 1(practical)	**1. Cosmetics and perfumery -1(Theory and practical)** CO1: Classify the perfumes CO2.Understand the constituent of perfumes CO3. Preparation of perfumes CO4. Constitutes of cosmetics CO5. Method of preparing cosmetics CO6. Prepare essence **Soap and Detergents -1[Theory and practical |** **CO1**:Can gain the information about soaps, detergents and shampoos. **CO2:** Can acquire knowledge of basic concepts and techniques of soap and detergent industry. **C03:**Get hands on training of analysis of soaps and detergents. **C04:** Aware about environmental aspects of detergents. **CO5**:Development Skill for detergent, liquid soap and laundry soap making

B.Sc.II	**SEMESTER III :CHE-311 -** Organic Chemistry	**CO1:** To study the aldehydes and ketones. **CO2:** To study the carboxylic acids. **CO3:** To study the amines. **CO4:** To study the heterocyclic compounds.
	CHE-312 - Physical Chemistry	**CO1:** To study the surface chemistry. **CO2:** To study the phase equilibrium. **CO3:** To study the quantum chemistry **CO4:** To study the photochemistry. **CO5:** To study colorometric and conductometric applications.
	CHE-321 - Practical Lab course III Physical Chemistry	**CO1:** To study the pH metric titration **CO2:** To study the conductometric titration. **CO3:** To study the colorimetric investigation. **CO4:** To study the potentiometric titration.
	CHE-322 Organic Chemistry Practical Lab course IV	**CO1:** To study the organic qualitative analysis. **CO2:** To study the organic preparations **CO3:** To study the organic estimations. CO4: To understand separation techniques.
	SEC-313 Theory [Skill Enhancement Course (any one)]: SEC-1: A. Lab safety and lab Practices SEC-I B : Water analysis	**SEC-1: A. Lab safety and lab practices** **CO1:** To know safety measures **CO2:** To create awareness about hazardous nature of chemicals **CO3:** scope and imp of lab safety **CO4**: can be avoided accidents. **SEC-I B : Water analysis** **CO1:** scope and imp of purity of water and parameters. **CO2:** To create awareness about pollution of water. **CO3:** To know safety measures **CO4**: to know chemistry of water. **CO5:**.To understand purification methods of water.
	SEMESTER IV : CHE-411 – Inorganic Chemistry	**CO1:** To study the coordination compounds. **CO2:** To learn about VBT. **CO3:** To study of CFT. **CO4:** To study oxidation and reduction. **CO5:** To study volumetric analysis.
	CHE-412 – Applied Chemistry	**CO1:** To infrared spectroscopy. **CO2:** To study raman spectroscopy. **CO3:** To the dyes and pigments. **CO4:** To study molecular weight of polymers. **CO5:** To study the cosmetics.
	CHE-421 - Practical Lab Course-IV	**CO1:** To study the chromatographic separations. **CO2:** To study the synthesis of coordination compounds. **CO3:** To study the gravimetric estimations.

	Inorganic Chemistry	
	CHE-422 - Practical Lab Course-V Applied Chemistry	**CO1:** To study the estimations of organic compounds. **CO2:** To study the hardness of water. **CO3:** To study the removal of organic compounds by adsorption on activated charcoal.
	SEC-413 **Theory|Skill Enhancement Course(any one)|:** SEC-2 -A. Pharmaceutical chemistry SEC-2- B. Industrial fermentation and alcohol Technology	**SEC-2 -A. Pharmaceutical chemistry** **CO1:** To study drug design , development and discovery. **CO2:** To study fermentation techniques for drugs preparations. **CO3:** To study synthesis and properties of drugs. **CO4:** To study retro synthesis approach. **SEC-2- B. Industrial fermentation and alcohol Technology** **CO1:** To study industrial fermentation. **CO2:** To study alcohol technology. **CO3:** To study distillation and alcometry
B.Sc.III	**SEMESTER V : (CBCGS pattern; with effective from 202425)** **CHE-511 -** Organic Chemistry (IX)	**CO1:** To study rearrangement reactions. **CO2:** To study important reagents in chemistry **CO3:** To study synthesis and properties of carbohydrates. amino acids and proteins. **CO4:** To study retrosynthesis analysis .
	CHE-512 – Physical Chemistry (X)	**CO1:** To study electrochemical cells. **CO2:** To colligative property of dilute solutions **CO3:** To study synthesis of nano materials **CO4:** To understands the electrophoresis **CO5:** To study ideal and real solutions
	CHE-521 - Organic Chemistry (lab course-7)	**CO1:** Green chemistry prepations **CO2:** interpretation of IR and NMR spectra **CO3:** organic estimations **CO4:** To study organic preparations
	CHE-522 – Physical Chemistry (lab course-8)	**CO1:** To study refractrometry **CO2** To study spectrophotometry and colorometry **CO3:** To study viscosity expts **CO4:** To study colligatives properties **CO5:** To study turbidometry expts
	SEC-513Theory **|Skill Enhancement Course(any one)|:**	**SEC-3: A. Cosmetics-I** **CO1:** To study Classification of cosmetic and cosmeceutical products

	SEC-3: A. Cosmetics-I SEC-3 B : Jam,Jelly, Sauce and Ketchups	**CO2** To study cosmetics excipients **CO3:** To study **structures of** skin hair, and oral cavity and cosmetics pdts. **CO4:** To study formulation of skin care products. **CO5:** To study hair care products . **SEC-3 B : Jam,Jelly, Sauce and Ketchups** **CO1:** To study food safety education and training **CO2** To study Jam jelly pdts **CO3:** To study ketchups and different sauces **CO4:** To study different preservatives of jam jelly ,ketchup and sauces
	SEMESTER VI: **CHE-611 –** Inorganic Chemistry (XI)	**CO1:** To study synthesis and structure of metal carbonyls , Organo metallic compounds **CO2:** To study inorganic solids and ionic liquids **CO3:** To study classification , importance of catalysis and heterogeneous catalysis . **CO4:** To study chemistry of zeolites **: CO5:** To study metals and semiconductors **CO6:** To study inorganic reaction mechanism
	CHE-612 –Applied Chemistry (XII)	**CO1:** To study parameters of instrumental analysis ; **CO2:** To learn about principle, working and application of nanomaterial analysis. **CO3:** To study Mass, NMR, HPLC and Gas chromatography.
	CHE-621 – Inorganic Chemistry (Lab course-9) **CHE-622 –**Applied Chemistry (Lab course -10)	**CO1:** To study inorganic estimations by using titrametry, gravimetry, iodometry and flamephotometry techniques **CO2:** To prepare silver and zinc oxide nano materials **CO3:** synthesis of complex compounds **CO1:** Analysis/ estimation of inorganic materials of industrial importances **CO2:** To study and learn different organic extractions techniques **CO3:** To study and learn column chromatography techniques . **CO4:** To learn project report writing skills
	SEC-613 Theory |Skill Enhancement Course (any one)]: **SEC-4: A.**	**CO1:** waste water treatments , importance and methods . **CO2:** To study primary , secondary and tertiary waste water treatments

	Industrial waste water treatment **SEC-4 B** : Purification and separation Techniques	**CO1:** To study and learn Principles, efficiency and techniques involved in Filtration. **CO2:** To study and learn Principles, and techniques of Distillation, **CO3**: To study and learn Principles, and techniques of Fractional distillation **CO4:** To study and learn Principles, and techniques Steam distillation **CO5:** To study and learn Principles, and techniques of Vacuum distillation **CO6**: To study and learn Principles, and techniques of Solvent extraction.

Programme 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.

P02.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.

P03. Ethics: Apply ability to develop sustainable practical solutions for science subject related problems within positive professional and ethical boundaries.

P04.Individual and team work : Function effectively as a leader and as well as team member in diverse/ multidisciplinary environments.

POs-5. Demonstrate, solve and an understanding of major concepts in all disciplines of Chemistry.

POs-6. Solve the problem and also think methodically, independently and draw a logical conclusion.

POs-7. Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of chemical reactions.

POs-8. Create an awareness of the impact of chemistry on the environment, society and development outside the scientific community.

POs--9. Inculcate the scientific temperament in the students and outside the scientific community.

Programme Specific Outcomes (PSOs):

After completion of course students are able to have a specific outcome which is listed as below.

PS0-1. Gain the knowledge of Chemistry through theory and practical' s.

PS0-2. Explain nomenclature, stereochemistry, structures, reactivity, NMR, PMR spectroscopy and mechanism of the chemical reactions.

PS0-3. Identify chemical formulae and solve numerical problems

PS0-5. Know structure-activity relationship.

PS0-6. Understand good laboratory practices and safety.

PS0-7. Make aware and handle the instruments/equipments.

PS0-8. Understood Heterocyclic compounds, Photochemistry, Aromaticity, kinetics and Catalysis, radioactivity.

PSO9;Corecompetency:The chemistry graduates will know the fundamental concepts of chemistry and applied chemistry. These fundamental concepts would reflect the latest w1derstandingofthefield,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-versed in speaking and communicating their idea/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:ChemistryGraduatesare 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 sociocultural, economic and educational levels. Psychological skills may

include feedback loops, self-compassion, self-reflection, goal- setting interpersonal relationships, and emotional management.

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

PSO6; Analytical reasoning: Chemistry Graduates acquire consulate 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 a scientific experiment through statistical hypothesis testing and other a prior reasoning including logical deduction.

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

PSO9;Digital Literacy: Chemistry Graduates are expected to be digitally literate for them to enrol and increase the competency via e-learning resources such as MOOC and other digital tools for lifelong learning. chemistry Graduates should be able data fabrication and fake news by applying rational and analytical reasoning.

PSOl0;Moral and ethical awareness: Chemistry Graduates will be responsible citizen of India and be aware of moral and ethical baseline of the country and the world. They are expected to define the ethical virtues good enough to distinguish what construes as illegal and crime in Indian constitution. Emphasis be given on academic and research including fair Benefit Sharing, Plagiarism, Scientific Misconduct and so on.

PSOll; 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, how to become charismatic inspiring leader and so on.

Shivaji Arts, Comm, Sci. (Sr.) College Kannad
Dept. Of Chemistry
Aurangabad

Dept of Chemistry
HEAD
Department of Chemistry
Shivaji College kannad,

DEPARTMENT OF CHEMISTRY

SHIVAJI ARTS, COMMERCE AND SCIENCE COLLEGE KANNAD,
DIST-AURANGABAD

AFFILIATED TO

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY
AURANGABAD

M.Sc. I & II Year Chemistry Curriculum

(2024-2025)

Course Outcome (Cos)

Programme Outcome (POs)

Programme Specific Outcome (PSOs)

M.Sc.I,& II Year Chemistry Curriculum

(Semester Pattern)

Course Structure

SEMESTER I:

CHET/MJ/500 -Analytical Chemistry
CHET/MJ/501 -Inorganic Chemistry
CHET/MJ/502 –Organic Chemistry
CHET/MJ/503 –Physical Chemistry
CHEL/MJ/504 - Inorganic Chemistry Lab course
CHEL/MJ/505 - Organic Chemistry Lab course
CHEL/MJ/506 - Physical Chemistry Lab course
CHETE/SE/509 - Organic Chemistry
CHETE/SE/511 –Drug chemistry
CHE/RM- Research methology

SEMESTER II:

CHET/MJ/550 -Analytical Chemistry
CHET/MJ/551 -Inorganic Chemistry
CHET/MJ/552 –Organic Chemistry
CHET/MJ/553 –Physical Chemistry
CHEL/MJ/554 - Inorganic Chemistry Lab course
CHEL/MJ/555 - Organic Chemistry Lab course
CHEL/MJ/556 - Physical Chemistry Lab course
CHETE/SE/559 - Organic Chemistry
CHETE/SE/561 -Drug chemistry
CHE FP-563 – Field project

SEMESTER III:

OCHET-600- Organic Spectroscopy
OCHET-601- Organic Synthesis
OCHET-602- Pericyclic reaction & Free Radicals
OCHET-603- Org Chem Lab course
OCHET-604- Org Chem Lab course
OCHET-605-Org PhotoChem &Green Chem
OCHET-606-Synthetic Organic Chem

OCHE-RP-649-Research Project-1

SEMESTER IV:

OCHET-650- Retrosynthetic Approach
OCHET-651-Natural product and Asymmetric Synthesis
OCHET-652-Heterocyclic chem
OCHEL-653- Org Chem Lab Course
OCHET-656- Polymer Chemistry
OCHET-657- Advanced Spectroscopy
OCHERP-699- Research Project-II

Programme	Name of Course	Course Outcome
M.Sc.I **SEMESTER I**	**CHET/MJ/500** Analytical Chemistry	**CO1:** Understand why analytical measurement need to be made **CO2:** Understand the imp of producing reliable results **CO3:** define what is meant by quantity **CO4:** understand the important of sampling and able to identify different types of samples **CO5:** To understand the basic separation techniques via crystallization ,sublimation distillation ,extraction **CO6;** understand the theory of liq-liq extraction **CO7;** understand the theory of solid-phase extraction **CO8:** To understand the basic chromatography technique for separation of constitute mix **CO9:** Understand the rate and plate
	CHET/MJ/501 Inorganic Chemistry	**CO1** To understand the stability constant of metal complex stepwise and overall formation constant **CO2:** To describe the factors affecting for stability of metal complexes. **CO3** To identify and describe techniques for determination of formation constant of metal complexes **CO4:** To analyses the structural and stereoisomerism of metal complexes and their classifications **CO5:** To understand the mechanism min metal complexes

	CO6: To understand acid and base hydrolysis of metal complex and their mechanism. **CO7:** To understand the role of trans effect in the synthesis of platinum complex **CO8:** To distinguish between the inner and outer sphere mechanism of electron transfer reaction of metal complexes. **CO9:** To memories the function of essential and trace elements in biological systems. **CO10:** To describe the structure and function of metall porphyrins, Hemoglobin, cytochrome and hemocyanine. **CO11:** To understand the electron transfer ,respiration and photo synthesis of biological system **CO12:** To know the diseases causedby deficiencies of Fe, Zn, Cu and Mn ions in biological system and remedies to them.
CHET/MJ/502 Organic Chemistry	**CO1:** Understand and the chemical and molecular processes inorganic chemical reactions. **CO2:** Study the concept of Alternant and non-alter nan hydrocarbons. **CO3:** Study the energy level so fn-molecular orbitals. **CO4:** Explain the concept of aromaticity **CO5:** Know the types of mechanism inorganic reactions **CO6:** Understand the correlation between the the rmodynamic and kinetic parameters **CO7:** Study the different intermediates involved inorganic chemical reactions **CO8:** Learn the various types of aliphatic nucleophilic substitution reactions
CHET/MJ/503 –Physical Chemistry	**CO1:** To understand the fundamental principles of chemical kinetics. **CO2:** To learn different theories of chemical kinetics. **CO3:** To understand concept of fast and slow reactions based on their rate constant and Reaction rates. **CO4:** To understands chemical thermodynamics. **CO5** To apply critical thinking and problem solving skills to solve problem related to **CO6:** To understand the basic concept of micelles

	CHEL/MJ/504 - Inorganic Chemistry Lab course	**CO1:** To understand the difference between qualitative and quantitative analysis **CO2:** To understand the concept of qualitative and quantitative chemical analysis and their chemical reactions and constituents **CO3:** To understand the design and development of experimental setup and procedure for volumetric and gravimetric analysis of chemical compound **CO4:** identify constituent so chemicals qualitatively and quantitively **CO5:**To understand importance of accuracy and precision in measurement of chemical analysis **CO6:** To apply grasped know led get solve chemical analysis related issues of stake holder **CO7:**To understand importance of laboratorys kills precaution,accuracy and precision **CO8:**To separate and identify acidic & basic radicals from chemical sample **CO9:**To apply the grasped knowledge in chemical analysis of un known sample
	CHEL/MJ/505 - Organic Chemistry Lab course	**CO1** Understand the separation and purification techniques **CO2** Understand various step involved in identification of for organic compounds **CO3** Understand the handling of equipment required for the analysis of organic compounds **CO4** Understand the stichometry of the reaction **CO5** To check the purity of compound using TLC **CO6** To check the Melting point
	CHEL/MJ/506 - Physical Chemistry Lab course	**CO1** analyses ample by various instrumental techniques **CO2** To handling of electronic equipment **CO3** To understand laboratory skills ,precaution, accuracy and precision **CO4** To design experimental procedure for analysis important chemical &samples **CO5** To understand the physical properties of chemicals **CO6** To distinguish accuracy of results in instrumental and non-instrumental methods
	CHETE/SE/509 - Organic	**CO1** Understand the concept of Stereochemistry **CO2** Know the stereochemical notations **CO3** Know the difference between stereospecific and

	Chemistry	stereoselective reactions **CO4** Study the stereochemistry of some Chiral molecules like Biphenyl sallenes and Spiranes **CO5** Acquire the knowledge of various method so fre solution **CO6** Understand stereochemistry of the compounds containing Nitrogen Sulphur and phosphorous **CO7** Know about enantiomeric and diastereomeric excess
	CHETE/SE/511 –Drug chemistry	**CO1** understand about oxidation reactions inorganic chemistry using different reagents. **CO2** know about oxidative cleavage of carbon-carbon double bond using different reagents **CO3** know about catalytic reduction ,reduction using hydrideion transfer reagents and soon **CO4** predict the product by the action of different oxidizing and reducing agents
	CHE/RM- Research methology	**CO1**. Understand the basic concepts of research methodology **CO2** know recent trend in chemical research **CO3** Acquire the fundamental knowledge of various characterization techniques **CO4** apply of characterization techniques viz.; XRDSEM,TEM. UV, TR. NMR and Mass spectrometry in research
SEMESTER II	**CHET/MJ/550** -Analytical Chemistry	**CO1**. To understand basic principle of different chromatographic Techniques for separation of constituents of mixtures **CO2** To understand the instrumentation, working procedure and application as well as limitations of TLC **CO3** To understand the or instrumentation working procedure a application as well as limitations of liquid- liquid partition chromatography **CO4** To understand theory ,instrumentation ,working procedure and application as well as Imitations of column chromatography **CO5** To understand theory instrumentation ,working procedure and application as well as limitations of gel permeation chromatography **CO6** To understand theory ,instrumentation, working procedure and application as well as limitations of ion exchange chromatography **CO7** To understand theory ,instrumentation ,working procedure and application as weII as limitations of high performance liquid chromatography **CO8** To understand theory ,instrumentation ,working procedure and application as well as limitations of gas chromatography **CO9** To be able to select a particular chromatographic technique

		for separation of the constituents from a mixture. **CO10** To be aware of the various problems associated with different chromatographic techniques.
	CHET/MJ/551 -Inorganic Chemistry	**CO1** To define and classify metal carbonyls **CO2** To design procedure to synthesize mononuclear and bimtclear metal carbonyl **CO3** To understand the properties and structure metal carbonyl **CO4** To apply the concept of effective atomic number for prediction of stability of metal carbonyls **CO5** To synthesize the nitrosyl halides and their properties **CO6** To understand the structure and properties and application of sodiumnitroprusside **CO7** To apply the knowledge of EAN and 18 electron rules metal nitrosyl compound of transition elements **CO8** To understand the d orbital splitting in different environment **CO9** To understand factor affecting crystal field splitting energy **CO10** To describe John Teller distortion and CFSE for high and low spin complexes
	CHET/MJ/552 –Organic Chemistry	**CO1** Understand various reactions involve in addition to C-C and C-O double bond **CO2** Acquire the stereochemical aspects in addition reaction **CO3** Demonstrate apply the concept involvedine limination reaction **CO4** Understand mechanism of various named reactions
	CHET/MJ/553 –Physical Chemistry	**CO1** To understand the fundamental principles of quantum mechanics **CO2** To solve the Schrodinger equations calculate wave function and energy levels **CO3** To understand the postulates of quantum mechanics **CO4** To understand the Huckel Molecular Theory of conjugated system and its applications
	CHEL/MJ/554 - Inorganic Chemistry Lab course	**CO1** To design experimental procedure for synthesis of meta complexes, calculation of conversion factors and characterization of synthesized coordination complexes compounds **CO2** To understand which skills are required in chemical laboratory **CO3** To understand which skills are required in chemical laboratory **CO4** To understand importance of accuracy and precision in chemical analysis **CO5** To design the experimental procedure for separation and estimation of metals from mixture solution **CO6** To estimate the amount of constituents of chemicals by volumetric and gravimetric methods

		CO7 apply grasped knowledge for finding purity of chemicals
	CHEL/MJ/555 - Organic Chemistry Lab course	**CO1** To Perform/demonstrate the techniques involved in organic binary mixture separation specially solid- liquid mixture. **CO2** To perform distillation techniques for purification of organic compounds. **CO3** To use/ apply the technique of separation, crystallization derivatization and function Group detection. **CO4** To use the methods for the preparation of useful compounds using named reaction
	CHEL/MJ/556 - Physical Chemistry Lab course	**CO1**. On completion of this course ,the students will be able: **CO2** To analyses sample by various instrumental techniques **CO3** To handling of electronic equipment **CO4** To understand laboratory skills ,precaution, accuracy and precision **CO5** To design experimental procedure for analysis important chemicals &samples **CO6** To understand the physical properties of chemicals **CO7** To distinguish accuracy of results in instrumental and non-instrumental methods
	CHETE/SE/559 - Organic Chemistry	**CO1**. Understand aromatic electrophilic substitution reactions **CO2** Acquire the knowledge of directing nature of functional groups **CO3** .Know directing nature of attacking electrophiles on various aromatics **CO4** Understand requirement for aromatic nucleophilic substitution reactions **CO5** .Describe the basic concepts in molecular rearrangement **CO6** .Acquire the knowledge of migratory aptitude
	CHETE/SE/561 –Drug chemistry	**CO1** *To* provide details about Drugs ,their characterization and classification **CO2** To know about sources of drug, historical development and other parameters such as Lead discovery lead development Pharmacological /Microbiological/Biochemical evaluation; Clinical trials; and Pharmacokinetic **CO3**To provide the information about dosage forms, drug toxicity and it's prevention
	CHE FP-563 – Field project	on completion of this course the student will be able ; get experience learning while field work

M.Sc.II **SEMESTER III:**	**OCHET-600-** Organic Spectroscopy	CO 1. To Study H^1 NMR Spectroscopy. Chemical Shift, deshielding Structural Correlation for protons bonded to carbon and other nuclei **C02**. To understand C^{13} Nuclear Magnetic Resonance Spectroscopy **CO3**. Study of mass spectrometry. Instrumentation, various methods of Ionization. Different detectors, rules of fragmentation and differet functional group. **C04**. To solve problems based on UV,IR, NMR, ^1H, ^{13}C and Mass Spectroscopy. **COS5**.To study Mossbauer Spectroscopy. Principles, Factors affecting Numerical. **C06**. To Study Electron Spin Resonance Spectroscopy. Instrumentation and Applications.
	OCHET-601- Organic Synthesis	**CO 1.**To study oxidation of alcohols to aldehydes, ketones or acids Organic **C02**.To study reduction reactions by different reagents Synthesis **C03**. To study the use of organic Reagents **C04**. To understand reaction intermediate **COS**. To study formation of carbon carbon bonds via Organometallic reagents uses.
	OCHET-602- Pericyclic reaction & Free Radicals	**C0-1**. Learn Pericylic reaction Electro cyclic Cycloaddition and Line Photochemistry Reaction analysis by correlation diagram FMO approach and ATS concept. **C02**. Study of Sigmatropic reactions **C03**. To study addition to c-c multiple bond **CO4**Learn about free radical and its reactions
	OCHET-603- Org Chem Lab course	To analysis of ternary mixture Separation and analysis
	OCHET-604- Org Chem Lab course **OCHET-605-** Org PhotoChem &Green Chem	**CO 1.** Preparation of organic compounds two stages, then purifications and TLC **C0-2.** Different separation techniques **CO 1.**To understand Photochemistry of (n π^*) and (π, π^*) transtions **CO1**.To understand basic concept of Bioorganic chemistry **C02**. To study of enzymes, structure, use, Mechanism **C03**. Learn about co Enzymes, Structure, Uses N

		C04. To study of Supramolecular Chemistry and Biomimetic Chemistry. **COS.** To understand Asymmetric Synthesis.
	OCHET-606- Synthetic Organic Chem	**CO1**-understand the types of reaction and rearrangement **CO2**. Predict the application of named reaction and rearrangement in O.S **CO3**. Allow utilized the concept of C-C single bond and multiple bonds **CO4**. Understand the concept of multicomponent reaction and their utlity.
	OCHE-RP-649- Research Project-I	**CO 1.** To carry out project work. **C02** To study how to write Literature survey. aim, Scope of the project experimental details, Result and discussions.
SEMESTER IV	**OCHET-650-** Retrosynthetic Approach	**CO 1**. To understand reterosynthesis, analysis and designing. **C02** To study disconnection approach. **C03**.Lear about protecting groups. **C04** To study C-C one and two groups Disconnections. **COS**.To study ring synthesis3,4,,5 &6 member rings. **C06**. To study complex molecules synthesis.
	OCHET-651- Natural product and Asymmetric Synthesis	**CO 1**. To Study Terpenoids & Carotenoids :classification isolation **C02** To study of structures determination of alkaloids. **C03**. To understand strueture determination of Steroids **C04**.Lear about synthesis and structure determination of Anthocyanin's and Flavones. **CO5**. To study building blocks and Construction Mechanism of Terpenoids. Alkaloids
	OCHET-652- Heterocyclic chem	**CO 1**. To study different types of rearrangements. **C02**.Learn about various name reactions. **C03**. To study Nomenclature of all types of heterocycles. **C04**. To study general synthesis routes based on name reactions Chemistry **COS**. To analyses of spectra of Four, five, six and fused member heterocycles
	OCHEL-653- Org Chem Lab Course	**CO1.** Understand the principle involved in separation and purification techniques. **CO2.** Analyse the functional group in oganic molecules **CO3.**Obtaine practical experience in the separation and identification of individual comp.in the ternary mix **CO4.**Develop the knowledge and skill in organic synthesis useful in industrial application.

OCHE T-456 Polymer Chemistry	CO1 Understand the basic concept of polymer [illegible] CO2 Learn the determination of [illegible] and properties [illegible] CO3 Learn about the polymer processing and [illegible] techniques CO4 Explore synthesis and application of [illegible] and conducting polymer
OCHE T-457 Advanced Spectroscopy	CO1 Analyse the concept of NMR spectroscopy [illegible] structure of molecule CO2 Apply the principles of [illegible] spectroscopy to identify the structure of organic molecule CO3 Discuss the [illegible] their applications CO4 Solve the structure of organic compound using spectral data
OCHE RP-458 Research Project-II	CO1 To [illegible] research project [illegible] CO2 To study [illegible] experiments [illegible]

Programme Outcomes: M.Sc. Organic Chemistry

Department of Chemistry Programme Outcomes

After successful completion of two year degree program Chemistry students should be able to:

PO-1 Apply chromatography for qualitative and quantitative analysis
PO-2 Determine structure of molecules by using UV, IR and NMR
PO-3 Improve the skill of students in organic research area
PO-4 Synthesis of natural products and drugs by using organic [illegible]
PO-5 Study of biochemistry [illegible]
PO-6 Understand the [illegible] of different compounds
PO-7 [illegible] mechanisms and [illegible] the final product
PO-8 Study of medicinal chemistry for [illegible] compound

Programme Specific Outcomes

PSO-1 : [illegible] techniques and apply different chromatography [illegible]

PSO-2 : [illegible] and Systematic [illegible]

PSO-3 : [illegible] and modelling of molecules [illegible] and predict the [illegible]

PSO-4 : [illegible] Electrophilic [illegible]

PSO-5 : [illegible] and its uses

PSO-6 : [illegible] by spectral methods

PSO-7 : [illegible] using different organic reagents

PSO-8 : [illegible] and enzyme and coenzyme chemistry

PSO-9 : [illegible] and photochemical reactions

PSO-10 : [illegible]

PSO-11 : [illegible] and safety

PSO-12 : [illegible] Prepare organic compound by multistep [illegible]

PSO-13 : [illegible]

PSO-14 : [illegible]

Head Dept. of Chemistry

Department of Mathematics

Shivaji Arts, Commerce and Science College Kannad, Dist Chhatrapati Sambhajinager

2024-2025

Affilated to

Dr. Babasaheb Ambedkar Marathawada University Chhatrapatti Sambhajinagar

B.Sc. I, II and III Year Mathematics Curriculum

Course Outcome (Cos)

Programme Outcome (Pos)

Programme Specific Outcome(PSOs)

Department of Mathematics

Programme and Course Outcomes (2021-22)

Programme Outcomes:

By the end of B. Sc. (Mathematics) programme, a student will be able

PO1: To interpret and analyze every perception in the life.

PO2: To construct Mathematical Modeling from real world problems

PO3: To use Mathematics in other disciplines.

PO4: To recognize what constitutes mathematical thinking, including the ability to produce and judge the validity of rigorous mathematical arguments.

PO5: To develop scientific temper in students.

PO6: To achieve professional skills to ensure productive career

PO7: To acquire basic practical skills and technical knowledge along with domain knowledge of different subject in science stream.

PO8: Be prepared for life-long learning.

PO9: Develop effective communication skills.

PO9: To independently expand mathematical expertise when needed.

PO10: To acquire subject knowledge required for higher education and eligible for job opportunities.

Programme Specific Outcomes:

PSO1: Be Familiar with different areas of Mathematics.

PSO2: Construct modeling using mathematical tools.

PSO3: Develop the skills necessary to formulate and understand proofs and to provide justification.

PSO4: Able to solve problems using a broad range of significant mathematical techniques.

PSO5: Think critically and communicate clearly mathematical concepts and solutions to real-world problems.

PSO6: Develop creativity in the quest for novel or elegant solutions

PSO7: Develop an understanding of precise language of Mathematics and able to integrate mathematical arguments with their critical thinking skills.

Course Outcomes:

Programme and Semester	Name of the Courses	Course Outcomes
		After the completion of the following courses, students will be able
B. Sc. I (Semester-I)	Calculus (DSC-I)	CO1: Find derivative of hyperbola, inverse hyperbolic functions and nth derivatives of given functions.
		CO2: Find the Maclaurin,s series expansion of the functions
		CO3: Find the partial derivatives of functions
		CO4: determine areas of plane regions, length of curves and volume of solid of revolution
B. Sc. I (Semester-I)	Lab Course (Based on DSC-I)	CO1: learn the derivatives of the functions of one variable
		CO2: To learn the partial derivatives of the function
		CO3: To learn applications of definite integral for quadrature, rectification and volume of solid of revolution
B. Sc. I (Semester-I)	Combinatorial Mathematics (SEC-IA)	CO1: Understanding of permutation and combinations
		CO2: learn the circular permutations
		CO3: learn the division of different things divided into groups
		CO4: learn pigeonhole principle and inclusion-exclusion principle.
B. Sc. I (Semester-I)	Combinatorial Mathematics (Based on SEC-IA)	CO1: Apply permutation and combinations
		CO2: Find the number of circular permutations
		CO3 Find the number of ways of selection out of given things
		CO4: Apply pigeonhole principle and inclusion-exclusion principle.
B. Sc. I (Semester-I)	GE/OE: Business Mathematics-I	CO1: Apply Knowledge of ratios and proportions
		CO2: Apply currency and discounts to business
		CO3: Identify the functions and linear functions
		CO4: Apply the identified functions to cost and profit
B. Sc. I (Semester-II)	Differential Equations(DSC-3)	CO1:Learn the first order linear differential equations
		CO2: Identify and solve the exact differential equations
		CO3:Learn the general and short method of solution
		CO4:Leaen linear homogeneous differential equations
B. Sc. I	Lab Course (Based on	CO1:Learn the first order linear differential equations

(Semester-II)	DSC-3)	CO2: Identify and solve the exact differential equations
		CO3:Learn the general and short method of solution
		CO4:Learn linear homogeneous differential equations
B. Sc. I (Semester-II)	Financial Accounting (VSC-1A)	CO1: Understanding of accounting and financial terminology
		CO2: Learn the financial transactions
		CO3: Use the financial statements to assess a company's performance
B. Sc. I (Semester-II)	Lab Course (Based on VSC-1A)	CO1: Understanding of accounting and financial terminology
		CO2: Learn the financial transactions
		CO3: Use the financial statements to assess a company's performance
B. Sc. I (Semester-II)	GE/OE: Matrices	CO1:Learn the fundamental of matrices
		CO2: Determine the determinant of square matrix and minors of matrix
		CO3:Perform the operation on matrices and study its properties
		CO4: Identify the rank of matrix and solve the system of equation
B. Sc. II (Semester-III)	Differential Equations (MAT-301)	CO1: Determine solution of first order linear differential equation
		CO2: Determine solution of exact differential equation
		CO3: Determine solution of linear equation with constant coefficient using general and short method
		CO4: Determine solution of linear homogeneous differential equation
B. Sc. II (Semester-III)	Laplace and Fourier transform (MAT-302)	CO1: Determine Laplace transform for various functions and understand the properties of Laplace transform.
		CO2: Determine inverse Laplace transform properties of inverse Laplace transform and solve the problems using convolution theorem.
		CO3: Determine Fourier Transform and understand the properties of Fourier transform, Fpurier sine and cosine transforms
		CO4: Apply Laplace transform to find solutions of differential equations
B. Sc. II (Semester-III)	Mechanics-I (MAT-303)	CO1:To define force

		CO2: To prove and understand law of parallelogram of forces.
		CO3: To determine magnitude and direction of resultant of two forces.
		CO4: To solve examples on Triangle law of forces.
		CO5: To understand forces acting on a rigid body.
		CO6: To understand centre of gravity and solve examples.
B. Sc. II (Semester-IV)	Partial Differential Equations (MAT-401)	CO1: Solve Lagrange's Equation
		CO2: Find different types of solution like complete integral, Singular integral and general integral
		CO3: Determine the solution of the partial differential equations using Charpit's method
		CO4: Describe Monge's Method, Method of transformation
B. Sc. II (Semester-IV)	Numerical Analysis (MAT-402)	CO1: Describe Finite Differences and apply Newton's Formulae for Interpolation
		CO2: Explain and apply Lagrange's and Newton divided difference formula for interpolation
		CO3: Apply Gauss interpolation formulae, Stirling's and Bessel's Formulae for interpolation.
		CO4: Apply numerical differentiation and numerical quadrature formulae
B. Sc. II (Semester-IV)	Mechanics-II (MAT-403)	CO1: To define and understand the concepts of particle, velocity and acceleration.
		CO2: To find the expressions for velocity and acceleration in terms of vector derivatives.
		CO3: To solve examples on tangential and normal components of acceleration.
		CO3: To understand Newton's Laws of Motion.
		CO4: To explain difference between Kinetic Energy and Potential Energy.
		CO5: To understand Motion of Projectile and Motion in Resisting medium.
		CO6: To find differential equation of the path of particle moving under a central force directed towards zero.
B. Sc. III (Semester-V)	Real Analysis-I (MAT-501)	CO1: To define the real numbers, least upper and lower bounds.
		CO2: To describe fundamental properties of the real numbers that lead to the formal development of real analysis.
		CO3: To demonstrate an understanding of limits and how they are used in sequences, series, differentiation

		and integration.
		CO4: To define functions between sets; equivalent sets; finite, countable and uncountable sets. Recognize convergent, divergent, bounded, Cauchy and monotone sequences.
		CO5: To Calculate the limit superior, limit inferior, and the limit of a sequence.
		CO6: To Recognize alternating, convergent, conditionally and absolutely convergent series.
B. Sc. III (Semester-V)	Abstract Algebra-I (MAT-502)	CO1: To present the relationships between abstract algebraic structures with familiar numbers systems such as the integers and real numbers.
		CO2: To define and understand a group, order of a finite group and order of an element.
		CO3: To understand normal subgroups, cyclic subgroups and solve examples.
		CO4: To solve examples on rings, ideals and quotient rings
		CO5: To understand the concept of polynomial rings.
		CO1: To Present concepts and properties of various algebraic structures.
B. Sc. III (Semester-V)	Ordinary Differential Equation-I (MAT-504)	CO1: To define complex numbers, functions, polynomials.
		CO2: To solve examples on complex numbers.
		CO3: To compute roots of polynomials using theorem.
		CO4:To solve system of linear equations
		CO5: To find solutions of linear equation of first order by using theorems.
		CO6: To identify the solutions are either linearly dependent or independent and prove formula for the Wronskian.
B. Sc. III (Semester-VI)	Real Analysis-II (MAT-601)	CO1: To define a function on a metric space is discontinuous, continuous, or uniformly continuous.
		CO1: To solve examples on a metric space is discontinuous, continuous, or uniformly continuous.
		CO2: To understand subsets of a metric space are open, closed, connected, bounded, totally bounded and compact.
		CO3: To define Riemann Integral and find upper sum and lower sum.
		CO4: To prove Fundamental Theorem of Calculus.

		CO5: To solve examples by applying theorems.
B. Sc. III (Semester-VI)	Abstract Algebra-II (MAT-602)	CO1: To define vector spaces and subspaces.
		CO2: To understand properties of vector spaces and subspaces.
		CO3: To solve examples on Linear Independence and Bases.
		CO3: To understand concept of Dual Spaces.
		CO4:To solve examples on Inner Product Spaces
		CO5: To understand and prove Schwarz inequality.
		CO6: To define R-module.
B. Sc. III (Semester-VI)	Ordinary Differential Equation-II (MAT-604)	CO1: To understand concept of Existence and Uniqueness Theorem.
		CO2: To identify homogeneous and non-homogeneous equations and solve it.
		CO3: To identify applications of ordinary differential equations.
		CO4: To discuss what is meant by Initial-Value-Problems.
		CO5: To describe what is meant by solutions of ordinary differential equations.
		CO6: To recognize ordinary differential equations concepts that is encountered in the real world.
		CO7: To Analyze real world scenarios to recognize ordinary differential equations are appropriate.

Department of Mathematics

Shivaji Atrs, Commernce and Science College

Kannad

Head
Dept. of Mathematics
Shivaji College Kannad
Dist.Aurangabad

DEPARTMENT OF BOTANY

SHIVAJI ARTS, COMMERCE AND SCIENCE COLLEGE KANNAD DISTRICT AURANGABAD.

AFFILIATED TO

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,AURANGABAD

M. Sc. I & II Year Botany Curriculum

(Year 2024-25)

Programme Outcome (POs)

Course Outcome (Cos)

Programme Specific Outcomes (PSOs)

DEPARTMENT OF BOTANY

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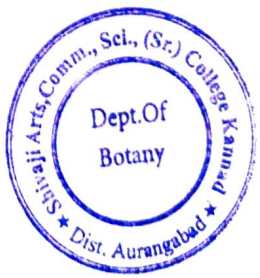
M. Sc. I & II Year Botany New Curriculum

Programme Outcome (POs):

Following are the programme outcome of the M.Sc. Botany course

- **PO1.Effective communication skill:** Students can successfully transfer the scientific knowledge and develop their effective communication skill.
- **PO2. Environmental awareness and sustainability:** To insist significance of conservation and clean and safe environment and sustainable development.
- **PO3. Interaction with society:** During field study or botanical tour an effective interaction with society.
- **PO4. Ethics:** To encarporate biological and environmental ethics.
- **PO5. Critical thinking:** Application of knowledge of botany to develop scientific approach.
- **PO6. Lifelong learning:** The study will help directed and cope with growing competition for higher education and self employment.



Course Outcome (Cos):

Following are the Course outcome of the Botany course.

- **CO1.** Student can understand the plant diseases, causal organisms, host pathogen relationship and control measures of plant diseases.
- **CO2.** Understanding use of fungicide and also use of chemical, physical and biological controlling of diseases.
- **CO3.** Student can understand and collect few species from different location to identify morphologically during collection of plant material at the time of local visits.
- **CO4.** Student will acquire the information from local vaidus on medicinal plants and their uses etc.

Programme Specific Outcomes (PSOs):

After completion of course students are able to have a specific outcome which is listed as below

- **PSO1.** To inculcate strong fundamentals on classical and modern aspects of botany.
- **PSO2.** To create awareness and platform for higher educational studies in botany.
- **PSO3.** Facilitate students to take up successful career in botany.
- **PSO4.** To educate students around the Kannad Tahesil about plant sciences.
- **PSO5.** To built up life skill education in botany.

HEAD
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Dist. Aurangabad

Shivaji Arts,Comm., Sci., (Sr.) College Kannad
Dept.Of Botany
Dist. Aurangabad

DEPARTMENT OF BOTANY

SHIVAJI ARTS, COMMERCE AND SCIENCE COLLEGE KANNAD DISTRICT AURANGABAD.

AFFILIATED TO

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD

B. Sc. I, II- & III-Year Botany Curriculum

(Year 2024-25)

Course Outcome (Cos)

Programme Outcome (POs)

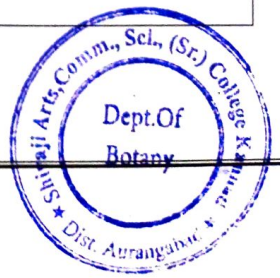
Programme Specific Outcomes (PSOs)

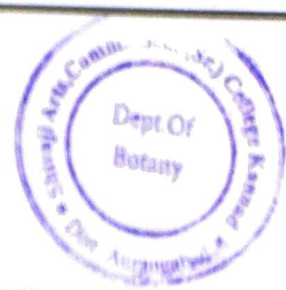
DEPARTMENT OF BOTANY

Course Structure
Shivaji Arts, Commerce & Science college Kannad Dist. Chhatrapati Sambhajinagar

STRUCTURE OF SYLLABUS (2024-2025)

Pattern Type	Class	Semester	Course code	Title of papers
1) NEP -20	B.Sc.I	SEM-I	DSC-1 (Major)	Morphology of Angiosperms
			SEC-1	Fungal disease of crop plants & their management
			DSC-2 Practical	Lab Course based on DSC-1
			SEC practical	Lab course based on SEC-1
			GE/OE	Seed production & preservation Technology
			ACE-1 (Eng)	Common Subjects
			CC-1	Common Subjects
			IKS	Common Subjects
		SEM-II	DSC-3 (Major)	Cryptogamic Botany-I
			VSC-1	Biofertilizer Technique
			VSC -2 Practical	Lab Course based on VSC-1
			GE/OE	Pomology
			ACE-2 (Eng)	Common Subjects
			CC-2	Common Subjects
			IKS	Common Subjects
2) CBCS-22	B.Sc.II	SEM-III	BOT-311	Taxonomy of Angiosperms (P-V)
			BOT-312	Plant Physiology (P-VI)
			BOT-321 Practical	Lab Course Based on BOT-311
			BOT-322 Practical	Lab Course Based on BOT-312
			BOT-313 SEC-A	Mushroom Cultivation
		SEM-IV	BOT-411	Gymno. & Utilization of plants (P-VII)
			BOT-412	Plant Ecology (P-VIII)
			BOT-422 Practical	Lab Course Based on BOT-411
			BOT-423 Practical	Lab Course Based on BOT-412
			BOT-413 SEC-E	Medicinal Botany
3) CBCS-22	B.Sc.III	SEM-V	BOT-511	Cell Biology & Molecular Biol. (P-IX)
			BOT-512(C) optional	Mycology & Plant Pathology (P-X)
			BOT-521 Practical	Lab Course Based on BOT-511
			BOT-522 Practical	Lab Course Based on BOT-512
			BOT-513 SEC-F	Ethnobotany
		SEM-VI	BOT-611	Genetics & Evolution (P-XI)
			BOT-612(C) optional	Microbiology & Disease manage.(P-XII)
			BOT-621 Practical	Lab Course Based on BOT-611
			BOT-622 Practical	Lab Course Based on BOT-612
			BOT-613 SEC-G	Horticulture





Course Outcome (Cos):

Following are the Course outcome of the Botany course.

Programme	Name of Course B.Sc. Botany	Course Outcome Botany
B.Sc.I (NEP)	**SEMESTER – I DSC-1** Morphology of Angiosperms (Theory P-I)	CO1. To describe morphological peculiarities of vegetative organs of angiosperms. CO2. To describe morphological peculiarities of reproductive organs of angiosperms. CO3. To know the diagnostic features of plant species. CO4. To understand the whole structure of plant body CO5. To understand the various groups of plants.
	SEMESTER – II DSC-3 Diversity of Cryptogams – I (Theory P-II)	CO1. To identifies Bryophytes and Pteridophytes plants on the basis of morphology and Adaptations. CO2. To understand concept of reproduction in Cryptogams. CO3. Clear the difference between Bryophytes and Pteridophyte plants. CO4. To know about Gymnosperm plants. CO5. To understand the developmental stages of cryptogrammic plants like bryophyte and Pteridophytes.
	SEMESTER – III **BOT-311** Taxonomy of Angiosperms (Theory P-V)	CO1. To understand the terminology of taxonomy and Angiosperms. CO2. To understand taxonomic positions of plants. System of plants. CO3. To understand botanical terms of flower, Calyx, corolla, androecium and Gynoecium. CO4. To study of different types of flower like Unisexual, bisexual etc. CO5. To clarify difference between floral formula and floral diagram CO6. To Study of complete and Incomplete flower. CO7. To understand the description of flowering Plants form habitat to pollination.
B.Sc.II(CBCS)	**BOT-312** Plant Physiology (Theory P-VI)	CO1. To understand the concept of photosynthesis And synthesis of chlorophyll pigment. CO2. Student can learn and understand physiological Process of plants. CO3. Students can understand the PSI and PSII System. CO4. Students can understand the Calvin Cycle.

		Krebs cycle, HSK cycle, CAM pathway, Hills Reaction, Glycolysis etc. CO5. To understand the theories of plant movement.
	SEMESTER – IV **BOT-411** Gymnosperms and Utilization of plants (Theory P-VII)	CO1.To understand the concept of Gymnosperms. CO2. To understand systematic positions of plants. Naked of plants. CO3. To understand botanical terms of flower, And utilization of plants. CO4.To study of different types medicinal properties of plants CO5. Students can understand the phylogeny and Evolution of gymnosperms. CO6. To understand medicinal properties plants and Their utilization on curing some diseases.. CO7. Student can avail the opportunity to understand The economic importance of gymnosperms..
	BOT-412 Plant Ecology (Theory P-VIII)	CO1.To understands the concept of ecology. CO2. Students will understand and explain life of earth, environmental consequences CO3. To understand the Structure of populations, Ecological communities and different Ecosystems. .CO4.To study of different types ecological Adaptations of pants. CO5. To clarify difference ecosystem and ecology. CO6. Student can understand the ecological Pyramids, environmental parameters. CO7. To know about hydrophytes, xerophytes, Epiphytes halophytes etc. CO8. To understand the water cycle, biogeochemical cycles, eutrophication etc.
	SEMESTER – V **BOT-511** Cell Biology and Molecular Biology (Theory P-IX)	CO1.To understand about the cell organelles and Their role. CO2. Student can learn organization of different plant cell like bacterial cell, prokaryotes and Eukaryotes etc. CO3. To understand concept of cell biology and Molecular biology. CO4.To study of Nucleic acid and its structure. CO5. Students can understand the difference between DNA and RNA CO6. To understand the role of RNA in protein

		Synthesis. CO7. To understand the basics of amino acids and Polypeptide chain. CO8. To understand the process of cell division like Mitosis and Meiosis.
B.Sc.III (CBCS)	**BOT-512** (C)Plant Pathology (Theory P-X)	CO1.To understand plant diseases. CO2. To understand control measures and remedy for Crop plants. CO3. To inculcate and know the host pathogen Relationship. CO4.To knows about insecticides, pesticides, Herbicides and weedicides. CO5. Students can understand the sporic Development of plants. CO6. To understand medicinal properties plants and Their utilization on curing some diseases. CO7. To understand and resolve the diseases of crop plants
	SEMESTER – VI **BOT-611** Genetics and Evolution (Theory P-XI)	CO1.To understand the concept of genetics and biotechnology. CO2. To understand Mendels dihybrid cross and ratios. CO3. To understand monohybrid cross and its ratio. CO4.To understand about supplementary and Complementary ratio. CO5. Students can understand sex linked inheritance and determinations. CO6. To understand chromosomal theory. CO7. To understand techniques of biotechnology like PCR,Gene mapping, gene cloning ,genetic Engineering etc.
	BOT-612 (C)Microbiology and Disease Management (Theory P-XII)	CO1.To understand plant diseases and its Management. CO2. To understand control measures and remedy for Diseased plants. CO3. To inculcate and know the host pathogen Relationship. CO4.To knows about microspores leads to disease Cycle. CO5. Students can understand the factors causing diseases.

Programme Outcome (POs):

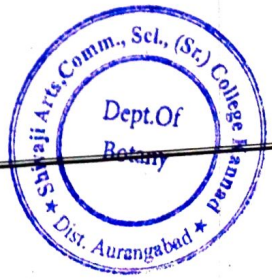
Following are the programme outcome of the Botany course

1. To identify taxonomic position of plants, methods of nomenclature system and systems of classification of plants
2. Information of medicinal plants and their utilization for solving health problems, disorders and diseases management of human beings.
3. To identify host-pathogen relationship of plant, symptoms, control measures and resolved the problem of crop and plant diseases.
4. To know and estimate phytochemical contents of plants
5. To obtain research oriented knowledge of plants and analyzed the data for further predictions.
6. To acquire information about conservation of rare and endangered, threatened plants for to maintain ecological balance.
7. Maintain biodiversity and create awareness about environmental issues and its importance for society and understand social responsibilities.
8. To understand scientific concepts and ideas about plants, ecosystem, ecology, morphology of higher vascular plants and their economic importance.
9. To understand the role of plant ecosystem and functioning at global level.
10. Evaluation of plant diseases cused by different causal organisms and plant diversity

Programme Specific Outcomes (PSOs):

After completion of course students are able to have a specific outcome which is listed as below

1. To understand the useful and harmful activities of every plants present in nature.
2. To understand the disease symptoms of plants, etiology and control measures plant diseases caused by viruses, bacteria and fungi etc.
3. To know the medicinal properties, economic importance of plants.
4. To obtain information of plant diversity and its conservation.
5. To understand different types tissues associated with plants.
6. To know the anatomical structure of monocotyledonous and dicotyledonous plants.
7. To understand concept of plant physiology, ecology, embryology, and plant science.
8. To understand developmental stages of double fertilization concept of an angiosperms.
9. To understand normal and abnormal secondary growth and development of woody plants.
10. Demonstration of different ecological factors like biotic and abiotic.
11. To understand concept of ecological adaptations, an ecosystem and it's functioning.
12. To understand identification of plants by using different key aspects like morphology, anatomy, embryology, cytogenetic, biochemistry etc.
13. To understand conceptual approaches of plant taxonomy, systematics, phylogeny, palynology, origin and evolution of an angiosperms.
14. To understand identification of plant diseases by using different parameters.
15. To know rules of ICBN (Indian Code of Botanical Nomenclature)and technique of Herbarium preparation and its importance.
16. To learn scope and importance of cell biology, molecular biology, genetics and biotechnology.
17. To understand the growth regulators of plants to develop the farming, crop improvement and agronomy.



18. To know about exploitation of hybrid variety and process of hybridization.
19. To understand the rate of transpiration, photosynthesis, photorespiration among plants.
20. To know the scope and importance of plant physiology and plant pathology.
21. Students will able to access primary literature to identify relevant work for particular topic and evaluate scientific content of the work.
22. Students are able to identify, classify and describe the plants and also compare the characteristics of Algae, fungi, Bryophyte, Pteridophyte, Angiosperms, gymnosperms etc.
23. Accurate interpretation of collected plant material and use of taxonomical information to evaluate the taxonomic positions.
24. Evaluation of ideas regarding microorganisms, plant diseases, spores identification etc so as to recognize the broad classification and phylogenetic level of formulations.
25. Students will able to demonstrate experimental techniques and methods of analysis in the area of life sciences.
26. Students will able to explore the ideas and drawing upon knowledge of flower development, physiological adaptations, development, reproductions, growth, plant movement and different mode of life cycles and different forms of plants related to diversity.
27. Students will able to explain life of earth, environmental consequences, structure of populations, ecological communities, and different ecosystems.
28. To access information and inculcate data of plant resources.
29. To formulate flora and fauna of local areas.
30. To explore the ideas of agriculture and forestry.

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Dept.Of
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Shivaji Art's Commerce & Science College Kannad

Department of Political Science

Academic Year - 2024-2025

Programme Outcomes, Prgramme Specific Outcomes an Course outcome B.A. Political Science

Department of Political Science	After successful completion of three year degree program in political Science a student should be able to
Programme Outcomes	• Understand basic concepts of political Science • Awareness about political Science activity • Solve political Science issue with the help of statistical data. • Understand development process. • Ability to analyze current events from a political science perspective. • Ability to understand various social issues and political science problems.
Prgramme Specific Outcomes	• Get in-depth knowledge of fundamental political science theories. • Apply theories of political science to the real political science phenomena with statistical support. • Create awareness about sustainable development. • Implement research methodology in research design data analysis, planning and interpretation • It can help to improve living standards and make society a better place.
Course	COURSE OUTCOME B.A. POLITICAL SCIENCE

Sem-I	Outcomes After completion of these course students should be able to
B.A.I Year DSC Pol.-01 Introduction to political Science	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 - Basic of 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-1 : Human Rights	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.
Sem-II	
DSC-Pol-2: Indian Constitution and Government	At the end of the course, students will be • Aware of the making, sources and features of the Indian constitution. • Known about structure and functioning of Indian Government • Acquainted of dynamics in Indian politics • Able to understand and to analyze party politics, federal system, elections and democratic values.
GE/OE-2 : Introduction to Foreign Policy	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 - Pol. Election Management	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.
Sem-III	
Pol.CC-3A: Government and Political in Maharashtra	On the completion of the course students will be able to understand the social, political system in India and also

	understand the function of India importance of Govt. Indian politics.
Pol.CC-3B: Theories of International Relations.	On completion of the course students would be able to understand the theories of development and conflict issue for development and underdevelopment.
Sem-IV	
Pol.CC-4A: Government and Political in Maharashtra	Ideology and programme of political parties knowledge to the students and Panchayat Raj System information students.
Pol.CC-4B: Theories of International Relations.	Deterrence : Meaning and Nature Arms Race, Arms Control and Disarmament Major Issues in International Politics International Justice International and Regional Organizations students study.
Sem-V	
Indian Political Thinkers DSE-A1	Students will demonstrate comprehensive knowledge of prominent thinkers and their conceptual frameworks. • Students will apply these conceptual frameworks to analyze contemporary situations effectively. • Students will identify and evaluate the significant contributors to Indian political thought, elucidating their roles in shaping India's reform movements. • Students will articulate the core concepts in Indian political thought with clarity and precision. • Students will exhibit proficiency in applying abstract theoretical constructions to real-world problems, utilizing the insights of political theorists to address contemporary social issues.
SEC-IC Indian Federal System	Understand the theoretical underpinnings of federal government and the concept of federalism,

	contextualized within the Indian scenario. • Analyze the distinctiveness of the Indian Union in its federal structure, considering historical, political, and constitutional dimensions. • Examine the delineation of powers between the Central and State governments in the Indian Union, elucidating the mechanisms of distribution and allocation. • Identify and evaluate the sources of conflict between the Center and the States, discerning the socio-political and constitutional factors at play. • 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	Grasp the indispensable role of political parties in sustaining democracy, comprehending their organizational intricacies, functions, and diverse typologies. • Establish connections between the principles of democracy and their manifestations in everyday life, discerning the pivotal role of political parties in national development. • Be familiar with the array of political and social institutions integral to a democratic framework, enhancing their understanding of the broader democratic ecosystem. • Analyze the factors contributing to the escalating phenomenon of defection within the Indian party system, critically evaluating its implications for democratic stability and governance.
Sem-VI	
DSE-B1 : Indian Political Thinkers	Upon completion of this course, students will be able to: • Understand significant Indian political thinkers and

	their works. • Apply these conceptual frames to analyze and interpret contemporary political phenomena and social challenges. • Identify and evaluate the contributions of prominent political thinkers and elucidating the relevance of their ideas.
SEC-ID : Indian Judicial System	Upon completion of this course, students will be able to: • Analyze fundamental concepts of justice and law, discerning their theoretical underpinnings and practical applications within the Indian context. • Study the structure and functioning of the unified judiciary under the Union Government of India, including the Supreme Court and the High Courts. • Evaluate the principles of judicial independence and impartiality, examining their significance in upholding the integrity and credibility of the Indian judiciary. • 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. • 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	Upon completion of this course, students will be able to: • Demonstrate a comprehensive understanding of the concept and process of democratic decentralization, elucidating its significance in fostering participatory democracy and empowering local communities. • Analyze the provisions and implications of the 73rd and 74th constitutional amendments, critically evaluating

	their impact on strengthening local self-governance structures. • 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. • Evaluate the challenges and opportunities inherent in local governance systems in India, identifying strategies for enhancing their effectiveness and accountability. • Synthesize theoretical insights and empirical evidence to propose informed recommendations for advancing democratic decentralization and strengthening local self-government institutions in India.

For

Dr.R.K. Pawar
Head and Dept. Political Science

Principal