Vasantrao Naik Shikshan Prasarak Mandal's

<u>Vasantrao Naik Mahavidyalaya</u>

<u>Airport Road, Chhatrapati Sambhajinagar (MS)</u> <u>431003</u>



INTERNAL QUALITY ASSURANCE CELL (IQAC)- 2024-25

2.6 Student Performance and Learning Outcome

Programme Outcomes (PO's),

Program Specific Outcome (PSO's

and

Course Outcomes (CO's)

Coordinator IQAC Vasantrao Nalk Mahavidyalaya Chhatrapati Sambhajinagar-431003

PRINCIPAL Vasantrao Naik Mahavidyalaya Chhatrapati Sambhajinagar

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Department of English ,Vasantrao Naik Mahavidyalaya, Chh.Sambhajinagar. 2024-25

PROGRAM OUTCOMES: Three years B.A. programme

Inculcation of ethics, moral values and humanity among learners.

Learners will be motivated to create socio-cultural and literary traditions.

Awareness regarding important social issues will be generated among the learners.

Learners will develop intellectual, personal and professional abilities through effective communication skills; ensuring high standard of behavioural attitude through literary subjects and will help them become socially responsible citizens.

Learners will be sensitized towards the aesthetic, cultural and social aspects of life and literature.

Learners will be equipped with increased linguistic and employability skills.

PROGRAM SPECIFIC OUTCOMES: B.A.English

The undergraduate program in English aims to -

1. sensitize students to the aesthetic, cultural and social aspects of literature and help them acquire accuracy in oral and written communication by strengthening grammar rules and its appropriate usage.

- 2. provide students with extensive view of social, political, cultural and other aspects of society as reflected in Literature.
- 3. help students acquire command over English language ,linguistic structure , life and communication skills with a focus on vocational skills.
- 4. make them learn to appreciate creative art and literature.
- 5. develop students' abilities like creative thinking and writing.
- make them familiar with major genres of literature, its framework to understand linguistic, cultural and historical background of the texts and develop fundamental skills required for close reading and critical thinking of the text and context.

7. acquire in-depth knowledge of the religious, socio-intellectual and cultural thoughts through literature

8. create holistic approach towards education.

9. Develop knowledge competence in select thrust areas that would provide directions to the students in terms of research as well as career options.

10. Develop a sense of inquiry and capability among students for asking relevant/appropriate questions, problem solving, synthesizing and articulating.

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11. Create atmosphere of research and motivate students to undertake research in humanities

12. Encourage multidisciplinary research

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13. Provide job opportunities through skill-based courses

14. Understand and recognise value system, moral dimensions and self responsibility for nation and society.

B. A. First Year: English

Semester I English Paper I DSC-1 Course Title: English Poetry Credit: 04 (T-2+P-2) Hours/Periods: 60

Learning objectives:

The nature and function of English poetry

The use of poetic devices

Use of diction, language etc.

Creative and critical response of learners towards English poetry

Course Outcomes:

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

Meaning of Poetry, its types and forms

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

Major and minor British poets, texts and contexts.

Reflection of human values in English poetry

Undertake projects, research in English poetry

Write poetry on current situations.

English Paper II Generic Elective or Open Elective (GE/OE) - 01

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

Course Objectives:

Use of basic grammar in English language

Preparation for writing skills

Course Outcome:

By the end of course, the students will learn-

- * Basic grammar in English language.
- * Writing skills with the help of clause elements, phrases, clause types, sentences types.

* To prepare for various competitive examinations.



* To spot common errors, sentence improvement, build vocabulary, selecting proper words, subjection concord, ordering of words in sentences etc

English Paper III

Skill Enhancement Course (SEC-ENG-1)

SEC-ENG-1

Course Title: Metalinguistic Skills

Credit: 02 (T-1+P-1) Hours/Periods: 30

Course Outcomes:

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

acts of writing, the ability to think grammatically and to reflect on the effectiveness of language choices.

phonemic awareness, syntactic awareness, and lexical awareness.

conversational interaction and the role of metalinguistic skills.

the intended message of the speaker through metalinguistic skills.

Relation between language and culture

English Paper IV

Ability Enhancement Course (AEC-1)

ACE-1 Course Title: Communication Skills in English

Credit: 02 Hours/Periods: 30

Course Outcome:

At the end of course, students will learn -

communication skills, importance of all skills and use of effective communication skills.

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to speak at public places.

to prepare for job interview

manners, etiquettes, and maintain good relations with others

to show higher level of critical thinking and sharpen their accuracy in writing.

English Paper V Sem II

Course Title: DSC-4 Course Title: English Drama

Credit: 04 (T-2+P-2)

Hours/Periods: 60



Course Objectives

To introduce students to drama and its use in life

To understand life through English plays and theatre

Course Outcomes:

At the end of course, students will learn-

Meaning and elements of English drama

Various trends in English drama

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

To play various roles in drama/theatre

To write dramas

English Paper VI

Generic Electives/Open Elective:2 Course Title: GE/OE:2-ENG-02 Course Title: English for Competitive Examination

Credits: 02

Periods: 30

Course Outcome:

At the end of course, the students will learn -

- * The use of basic grammar in English language learning.
- * To prepare for various competitive examinations.

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

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

English Paper VII

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

Course Title: Translation in Practice

Credit: 02 Hours/Periods: 30

Course Outcomes

At the end of course, the students will learn-



Translation as an important branch of study and what is good translation,

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

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.

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

English Paper VIII Sem II

Ability Enhancement Course: Additional English

AEC-2: Additional English

Course Tide: Business English

Credit: 402

Hours/Period: 30

Course Objectives

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

Course Outcomes;

At the end of course, students will learn

* Business English

* Business Communication skills

Subject: Compulsory English

BA/BCom/BSc/BSW/BFA Second Year

Title of the Paper: A Course in Communicative English- III

Paper Code: CLE 3 Maximum Marks: 50

Aims and Objectives:

1. To take the linguistic skills of students at advanced level;

2. To enhance communicative competence level of students;

3. To groom the students as good communicators.

Expected Outcome: The students would emerge as good communicators.



Optional English Course Second Year of BA

Papers V & VI:

Paper Codes: OPE 5 & 6

Papers VII & VIII:

Paper Codes: OPE 7 & 8

Maximum Marks: 50

Sem III Paper V: Literature in English I

Aims and Objectives:

1. To make the students aware of literatures in English;

2. To make them aware of diverse cultures presented in literature;

3. To help the students develop their ability to compare different literary worlds.

Expected Outcome: The students would have developed awareness about different literatures written/translated in English.

Contents of the Course: Semester IV

Paper VII: Periods of British Literature

Maximum Marks: 50

Aims and Objectives:

1. To have the students enlightened on the development of British literature.

2. To prepare the students for clearing examinations regarding British literature.

Expected Outcome: The students would have developed understanding of British literature to a fair extent.

Contents of the Course: Semester IV

Paper VIII: Postcolonial Literature

Maximum Marks: 50

Aims and Objectives:

1. To introduce the students to post colonialism which dominates the current academic scenes of the world.

2. To make the students keep pace with current developments in literature and discourse.

Expected Outcome: The students would become familiar with the contemporary discourse and literature.

Subject: Additional English (SL)

BA/BCom/BSc/BSW/BFA Second Year



Title of the Paper: Additional English (SL) - III

Paper Code: SLE 3

Maximum Marks: 50

Aim of the Course: The course aims to produce good communicators of English.

Expected Outcome: The students would turn out to be good communicators after completing the given course.

B. A. III

Subject: English

Semester V

English Paper No. IX

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

Paper Code: OPE 9 Maximum Marks: 50

Aims and Objectives:

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

2. To enhance linguistic competence of students.

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

• The basics of English grammar

* Better Pronunciation Of the language.

English Paper No. X

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

Paper Code: OPE 10

Maximum Marks: 50

Aims and Objectives:

To develop critical and analytical ability of the students.

To produce connoisseurs of literature and life.

Expected Outcome: The students would become connoisseurs of literature and life.

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English Paper No. XI

Title of the Paper: Research Project - Theory (Paper XI)



Paper Code: OPE 11

Maximum Marks: 50

Aims and Objectives:

To develop research aptitude of students.

To groom the students as good researchers.

Expected Outcome: The students would come out as good researchers

English Paper No. XII-A

Generic Elective Paper: Eclectic Literature-I

Paper Code: OPE 12-A

Maximum Marks: 50

Aims and Objectives:

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

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

Expected Outcome: The students would develop awareness about literature and cultures of different countries of the world.

English Paper No. XII-B

Generic Elective Paper: Indian English Literature-I

Paper Code: OPE 12-B

Maximum Marks: 50

Aims and Objectives:

To take students' awareness of Indian literature at a higher level.

To produce pan-Indian point of view among the students.

Expected Outcome: The students would have furthered their interest in Indian literature.

English Paper No. XII-C

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

Paper Code: OPE 12-C

Maximum Marks: 50

.Aims and Objectives:

To introduce the students to basics of linguistics.



To inculcate importance of linguistics in the students.

To introduce the students to research in language and literature

To generate research interest among the students

Expected Outcome: The students would emerge as researchers in language and literature

B. A. III

Subject: English Semester VI

English Paper No. XIII

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

Paper Code: OPE 13

Maximum Marks: 50

Aims and Objectives:

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

2. To enhance linguistic competence of students.

Course Outcome: At the end of the course, students will learn o To basics of English language

* Better Pronunciation

Grammar of English language

English Paper No. XIV

Title of the Paper: Literary Theory and Criticism-II (Paper XIV)

Paper Code: OPE 14

Maximum Marks: 50

Aims and Objectives:

To develop critical and analytical ability of the students.

To produce connoisseurs of literature and life.

Expected Outcome: The students would become connoisseurs of literature and life.

English Paper No. XV

Title of the Paper: Research Project - Practice (Paper XV)

Paper Code: OPE 15



Maximum Marks: 50

Aims and Objectives:

To develop research aptitude of students.

To groom the students as good researchers.

Expected Outcome: The students would come out as good researchers.

English Paper No. XVI-A

Generic Elective Paper: Eclectic Literature-II

(Paper XVI-A)

Paper Code: OPE 16-A

Maximum Marks: 50

Aims and Objectives:

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

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

Expected Outcome: The students would develop awareness about literature and cultures of different countries of the world

English Paper No. XVI-B

Generic Elective Paper: Indian English Literature-II

(Paper XVI-B)

Paper Code: OPE 16-B

Maximum Marks: 50

Aims and Objectives:

To take students' awareness of Indian literature at a higher level.

To produce pan-Indian point of view among the students.

Expected Outcome: The students would have furthered their interest in Indian literature.

English Paper No. XVI-C

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

Paper Code: OPE 16-C

Maximum Marks: 50

Aims and Objectives:



To introduce the students to basics of linguistics.

To inculcate importance of linguistics in the students.

To introduce the students to research in language and literature

To generate research interest among the students

Expected Outcome: The students would emerge as researchers in language and literature.

K.n. malagan

संतराव नाईक महाविद्यालय , छ संभाजीनगर

हिंदी विभाग 2024 - 2025

Programme Outcome/ Programme Specific Outcome / Course Outcome

Programme Outcome :

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Chbetrapati

- 1. साहित्य का अस्वादन कराना
- 2. अभिरुचि का परिसंस्कर कराना
- 3. मूल्यों की स्थापना कराना
- 4. वर्तमान की व्याख्या करने में सक्षम बनाना
- 5. रोजगार की क्षमता का विकास करना
- 6. समानता की भावना का विकास करना
- 7. सुयोग्य नागरिक का निर्माण कराना
- 8. साहित्य सृजन क्षमता का विकास कराना
- 9. सामाजिक समस्याओं की समझ निर्माण कराना

Programme Specific Outcome :

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

Course Outcome :



Sem - हिंदी कथा साहित्य Major 1 DSC-1

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

Sem - हिन्दी सिनेमा और साहित्य Generc / Oe -1

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

Sem - संभाषण कला Skll Enhancement Course - SEC 1

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

Sem - हिन्दी नाट्य साहित्य DSC - 4

- 1. छात्रों को हिंदी नाटक विधा का सम्यक का ज्ञान प्राप्त होगा
- 2. छात्रों में भावनाओं, संचार कौशल और रचनात्मक अभिव्यक्ति का निर्माण होगा
- 3. नाट्य विधा के अध्ययन से छात्रों में लेखन और सम्यक दृष्टि का विवेक उत्पन्न होगा
- 4. नाटक की गतिविधियों से छात्रों में बोलने, सुनने और समझने के कौशल में सुधार होगा
- 5. छात्रों में नाट्य लेखन की क्षमता का निर्माण होगा
- 6. छात्रों में नाटक या रंगमंच के प्रति अभिरुचि निर्माण होगी

Sem - हिंदी की राष्ट्रीय काव्यधाराGENERC / Oe -2

- 1. राष्ट्रीय स्वाभिमान और देश प्रेम को जागृत होगा
- 2. छात्र स्वाधीनता आंदोलन के इतिहास को समझेंगे
- 3. छात्र स्वाधीनता आंदोलन में साहित्य के योगदान को समझेंगे
- 4. छात्रों में राष्ट्रीय एकता का भाव निर्माण होगा
- 5. छात्रों में देशभक्ति और देश के प्रति स्वाभिमान का भाव निर्माण होगा
- 6. राष्ट्रीय काव्यधारा की अवधारणा एवं स्वरूप का अध्ययन होगा
- 7. भारतीय साहित्यकारों के राष्ट्रीय आंदोलन का अध्ययन होगा

Sem - रचनात्क लेखन कौशल Vocatonal Skll Course VSC 01

- इस पाठ्यक्रम के अध्ययन -अध्यापन तथा प्रायोगिक कार्य के पश्चात छात्रों में सृजनात्मक चिंतन लेखन भावभिव्यक्ति और प्रस्तुतीकरण कौशल का विकास होगा
- 2. छात्रों में अपने परिवेश तथा समाज के प्रति संवेदनशीलता का विकास होगा

Sem - व्यक्तित्व विकास और जीवन कौशल AEC 2

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

Sem - SI हिंदी सामान्य हिंदी भाग Paper 3

- 1. साहित्य संवेदना एवं अस्वादन क्षमता का विकास होगा
- 2. गद्य साहित्य के पठन पाठन की अभिरुचि विकसित होगी
- 3. छात्रों में व्यक्तिगत सामाजिक तथा राष्ट्रीय मूल्यों के प्रति जागृति निर्मिति होगी
- 4. भाषा के स्वरूप और अवधारणा की समझ आएगी
- 5. हिंदी के प्रयोजनपरक आयामों का परिचय होगा
- 6. छात्रों में भाषिक कौशल विकसित होंगे
- 7. प्रयोजनमूलक भाषा का अध्ययन एवं प्रयोग क्षमता का विकास होगा
- 8. अनुवाद प्रक्रिया का अध्ययन होगा

Sem - हिंदी साहित्य का इतिहास : आधुनिक काल Paper 05

- 1. जीवन मूल्यो के प्रती आस्था निर्माण होगी
- 2. हिंदी साहित्य की समृद्ध परंपरा से परिचय होगा
- 3. साहित्य आस्वादन अभिरुचि का परिसंस्कार कराना
- 4. हिंदी साहित्य की लेखन परंपरा से परिचय होगा
- 5. नैतिक मूल्यों के संस्कार होंगे
- 6. भारतीय साहित्य परंपरा में हिंदी साहित्य के योगदान से अवगत होंगे



Sem - नाटक साहित्य Paper Paper 06

- Chhatrapati Sambhajingar
- 1. हिंदी नाट्य साहित्य की विविध धाराओं ,परंपराओं से छात्र अवगत होंगे
- 2. रंगमंच की अवधारणा तथा भारतीय नाट्य परंपरा का सैद्धांतिक ज्ञान छात्रों को होगा
- 3. नाटक, मंचन तथा अभिनय अभिरुचि की वृद्धि होगी
- 4. नवधुनतान रंग कर्म तथा दृश्य माध्यमों की प्रयोगधर्मिता का ज्ञान छात्रों को होगा
- 5. छात्रों में नाटक कौशल की अभिवृद्धि होगी
- 6. नाटक आस्वादन कला का विकास होगा
- 7. जीवन मूल्यो की स्थापना होगी

Sem - V SI हिंदी सामान्य हिंदी भाग Paper 04

- 1. साहित्य संवेदना एवं अस्वादन क्षमता का विकास होगा
- 2. गद्य साहित्य के पठन पाठन की अभिरुचि विकसित होगी
- 3. छात्रों में व्यक्तिगत सामाजिक तथा राष्ट्रीय मूल्यों के प्रति जागृति निर्मिति होगी
- 4. हिंदी के प्रयोजनपरक भाषा आयामों (समाचार पत्र , रेडियो , दूरदर्शन म सिनेमा) का परिचय होगा
- 5. इंटरनेट में हिंदी के प्रयोग का ज्ञान होगा
- 6. अनुवाद प्रक्रिया का अध्ययन होगा

Sem - V कथेत्तर गद्य साहित्य Paper 07

- 1. साहित्य अस्वादन अभिरुचि का परिसंस्कर कराना
- 2. जीवन मूल्यों की स्थापना कराना
- 3. हिंदी कथेत्तर गद्य संवेदना की परंपरा से परिचय कराना
- 4. हिंदी यात्रा साहित्य से परिचय कराना
- 5. हिंदी आत्मकथा साहित्य से परिचय कराना
- 6. आधुनिक हिंदी की विविध काव्य धाराओं से परिचय कराना
- 7. काव्य सृजन की क्षमता का विकास कराना
- 8. काव्यास्वादन क्षमता का विकास कराना

Sem - V एकांकी साहित्य Paper 08

- 1. छात्र हिंदी एकांकी साहित्य की विविध धाराओं से अवगत होंगे
- 2. छात्रों को रंगमंच की अवधारणा तथा भारतीय नाट्य परंपरा का ज्ञान होगा
- 3. छात्रों को दृश्य माध्यमों की प्रयोगधर्मिता का ज्ञान होगा
- 4. छात्र वैश्वीकरण के दौर में दृश्य माध्यमों की प्रमुख भूमिका से अवगत होंगे

Sem - V साहित्याशास्त्र - DSC - 1 Paper 09

- 1. साहित्य चिंतन का अध्ययन होगा
- 2. साहित्यालोचन क्षमता का विकास होगा
- 3. शब्द शक्ति से परिचय होगा
- 4. आलोचना के भेदो से परिचय होगा
- 5. साहित्य के सिद्धान्तो से परिचय होगा

Sem - V हिंदी भाषा और लिपि DSC - 2 Paper 10

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

Sem - V प्रादेशिक आत्मकथा साहित्य GE - 1 Paper 12

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

Sem - V साहित्याशास्त्र - DSC - 3 Paper 13

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

Sem - V प्रयोजनमुलक हिंदी DSC - 4 Paper 14

- 1. प्रयोजनमूलक भाषा का अध्ययन एवं प्रयोग क्षमता का विकास कराना
- 2. प्रयोजनमूलक हिंदी के अधुनातन आयामो से परिचय कराना
- 3. मानक हिंदी का ज्ञान प्राप्त होगा
- 4. भाषा कौशल का विकास कराना
- 5. अनुवाद क्षमता का विकास होगा

Sem - V हिंदी व्यंग्य साहित्य GE - 2 Paper 16

- 1. हिंदी व्यंग्य से छात्रों की परिचय होगा
- 2. हिंदी व्यंग्य के प्रति छात्रों में पठन-पाठन की अभिरुचि विकसित होगी
- 3. हिंदी के व्यंग रचनाकारों की जानकारी प्राप्त होगी
- 4. छात्र हिंदी व्यंग साहित्य के योगदान से परिचित होगे

डॉ. सुनीता राठोड



हिंदी विभगाध्यक्ष डॉ. बालाजी काशीनाथ जोकरे



Sambhaile

वसंतराव नाईक महाविद्यालय, औरंगाबाद मराठी विभाग शै.वर्ष २०२४-२५ (मराठी भाषा व वाड,मय अभ्यासाचे उद्देश)

- प्रोग्राम आऊटकम - प्रोग्राम स्पेसिफिक आऊटकम - कोर्स आऊटकम

(- PROGRAM OUTCOME- PROGRAM SPECIFIC OUTCOM -COURSE OUTCOME)

प्रोग्राम आऊटकम: बी.ए.मराठी (PROGRAM OUTCOME: B A.MARATHI)

- * वास्तवाची जाणीव करून देत जगण्याचे भान निर्माण करून देणे.
- * रोजगार व व्यवसायाची क्षमता विकसित करणे .
- * सामाजिक समस्यांची जाणीव व समज निर्माण करणे .
- * मानवी मूल्यांची, नैतिक मुल्यांची जपवणूक करणे.
- * स्वातंत्र्य- समता -बंधुता -एकतेची जाण निर्माण करून देत आदर्श नागरिक घडविणे .
- * साहित्यिक, सामाजिक, सांस्कृतिक वारसा निर्माण करण्यास प्रोत्साहन देणे .
- * साहित्यातील सामाजिक मूल्यांचे आकलन करून देत आदर्शाचे पालन करणे .
- * भाषा ,साहित्य, संशोधन, समीक्षण इत्यादीविषया संबंधी दृष्टिकोन निर्माण करून नवनिर्मितीला चालना देणे.
- * भाषा कौशल्याचा विकास करणे व वाचन संस्कृती वृद्धिंगत करणे .
- * विविध स्पर्धा परीक्षांसाठी प्रोत्साहन देणे व सक्षम बनवणे .
- -प्रोग्राम स्पेसिफिक आऊटकम (Program Specific Outcome

* मराठी भाषेचे ज्ञान व प्रभुत्व प्राप्ती करून देणे .

- * भाषिक आविष्काराच्या विविध पद्धतीचे आकलन करून देणे .
- * संशोधनात्मक रष्टीचा विकास .
- * साहित्य सृजन क्षमता विकसित करणे .
- * मराठी भाषा आणि साहित्याचा प्रसार प्रचार घडवणे .
- * निर्दोष लेखन कौशल्य प्राप्ती
- * व्यावसायिक कौशल्य प्राप्ती.



* सामाजिक संवेदनशीलता व मूल्य वृद्धी .

*सृजनात्मक लेखनाचे बहुआयामी पैलू ज्ञात करून देणे.

*महाराष्ट्रीयन समाज संस्कृती व भाषिक संस्कृतीचे आकलन करून देणे.

*विविध स्पर्धा परीक्षेसाठी ज्ञान व कौशल्य प्राप्ती करून देणे.

*पायाभूत भाषिक कौशल्याचा विकास घडवणे.

*मराठवाडा भाषिक साहित्यिक सामाजिक धार्मिक संस्कृतिक आदींचे आकलन करून देणे.

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

कोर्स आऊटकम: बी.ए.मराठी (COURSE OUTCOME: B A.MARATHI)

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

कोर्स- साहित्य प्रकाराचा अभ्यास - आधुनिक कविता

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

१) मराठी आधुनिक कवितेचे स्वरूप समजावून देणे

2) आधुनिक कवितेच्या प्रकारांचे आकलन होण्यास मदत करणे .

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

4) निवडक आधुनिक कवितेतील जाणीवा समजावून देणे.

कोर्स-कोड- GENERIE/OE MAR कोर्स -बी.एस्सी.बी.कॉम प्रथम NEP कोर्स-- सौंदर्यमूल्य व भाषिक कौशल्य : भाग एक

सत्र 1 पेपर क्रमांक 1 श्रेयांक 2

१) निवडक कलाकृतीचा अभ्यास करण्यास मदत करणे

2) निवडक कलाकृतीच्या माध्यमातून सौंदर्यमूल्य उलगडून दाखवणे

3) भाषिक कौशल्याच्या रृष्टीने क्षमता विकसित करण्यास मदत करणे

4) वक्तृत्वाच्या माध्यमातून रोजगार निर्मिती या अनुषंगाने मार्गदर्शन करणे

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

कोर्स-. समाज माध्यमावरील लेखन



सत्र 1 पेपर क्रमांक 1 श्रेयंक 2 (अध्यापन 1 प्रात्यक्षिक 2)

१) विविध समाज माध्यमांचा परिचय करून देणे

समाज माध्यमावरील लेखन तंत्र व कौशल्य आत्मसात करण्यास मदत करणे.

3) समाज माध्यमांवरील लेखन व त्यातून रोजगार निर्मिती विषयाचे ज्ञान कौशल्य विकसित करण्यास मदत करणे.

4) व्यावहारिक ज्ञान तंत्रज्ञानाचा व्यवहारातील उपयोग समजावणे .

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

कोर्स-- मराठवाड्यातील संत आणि संत साहित्य

सत्र १ पेपर क्रमांक १ श्रेयंक २

1) मराठवाड्याचे सामाजिक सांस्कृतिक धार्मिक राजकीय पार्श्वभूमी समजावून सांगणे.

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

3) मराठवाड्यातील स्त्री संत यांचा परिचय व त्यांच्या साहित्याचा परिचय करून देणे

4) मराठवाड्यातील संत साहित्याचे योगदान समजावणे.

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

कोर्स-_ साहित्यप्रकाराचा अभ्यास : कथा

सत्र 2 पेपर क्रमांक 2 श्रेयंक -4(अध्यापन 2 प्रात्यक्षिक 2)

1) कथेचे स्वरूप व घटक समजून देणे

2) कथेच्या विविध प्रकारांचे आकलन करून देण्यास मदत करणे

3) कथेचे असे सूत्र व भाषा यातील विविध घटकांचा उलगडा करून देणे

4) कथेच्या कथानकाची जडणघडण घटना प्रसंगाच्या आधारे समजून सांगणे

५) कथेतील जाणीव समजावून घेण्यास मदत करणे

कोर्स-कोड- Generic/OE कोर्स -बी.ए.प्रथम NEP



कोर्स-- सौंदर्य मूल्य व भाषिक कौशल्य भाग दोन

सत्र 2 पेपर क्रमांक 2 श्रेयंक 2

१) निवडकलाकृतीचा अभ्यास करण्यास मदत करणे.

2) निवडक कलाकृतीच्या माध्यमातून सौंदर्यमूल्य उलगडून दाखवणे .

3) साहित्य कलाकृतीतील जीवनमूल्य आत्मसात करण्यास मदत करणे .

4) जाहिरातीचे तंत्र व कौशल्य आत्मसात करण्यास मदत करणे .

5) रोजगार अभिमुकतेच्या दृष्टिकोनातून जाहिरात लेखनाचे महत्त्व स्पष्ट करणे .

6)व्यावहारिक ज्ञान तंत्रज्ञानाचा व्यवहारातील उपयोग समजावणे .

कोर्स-कोड- vsc-1 कोर्स -बी. ए.प्रथम NEP कोर्स-- चित्रपट परीक्षण

सत्र 2 पेपर क्रमांक 1 श्रेयांक -2 1) चित्रपटाचे वाड्मयीन मूल्य लक्षात आणून देणे 2) चित्रपटाचे नाट्यमूल्य व चित्रपट मूल्य यावर प्रकाश टकणे 3) चित्रपट परीक्षणाचे तंत्र व कौशल्य अवगत होण्यास मदत करणे. 4) प्राप्त कौशल्याच्या आधारे विद्यार्थ्यांना रोजगाराभिमुख बनविणे.

कोर्स- कोड- AEC-1 कोर्स-बी.ए.प्रथम NEP कोर्स-. जाहिरात लेखन व रोजगारसंधी

सत्र २ पेपर क्रमांक १ श्रेयांक -२

1) जाहिरातीचे स्वरूप लक्षात आणून देणे

2) जाहिरातीचे तंत्र समजून घेण्यास मदत करणे

3) जाहिरातीचे विविध प्रकार समजावून सांगणे

4₎ जाहिरात लेखन कौशल्य आत्मसात करून रोजगार मिळविण्यास उद्युक्त करणे

कोर्स-कोड- AECC-3/AECC-4 कोर्स -बी.ए./बी.एस्सी./बी.कॉम CBCS

mbha

-कोर्स-भारतीय भाषा मराठी : भाग - 3 - 4

सत्र ३-४ पेपर क्रमांक ३/४

1) निवडक गद्यपद्याचा वांड्मयीन परिचय करून देणे.

2) विद्यार्थ्यांची रसास्वाद क्षमता वाढीस लावणे.

3) विवेक वाद व वैज्ञानिक रष्टिकोनचा विकास करणे.

4) लेखनातील विविध प्रवृत्ती व प्रकृती समजावून देणे.

5) सजनात्मक लेखन करण्यास प्रवृत्त करणे

कोर्स-कोड- CC-2C-5MAR/CC-2C-6MAR कोर्स -बी.ए.CBCS -कोर्स- मध्ययुगीन मराठी वाङ्मयाचा इतिहास (आरंभ ते –1599)

साहित्य प्रकार : कादंबरी

सत्र 3 पेपर क्रमांक 5/6

1)वाङ्मयीन इतिहासाचा सर्वांगीण अभ्यास करणे .

2) मराठी वाङ्मयाचा प्रारंभ काल समजून घेणे.

3) मध्ययुगातील प्रारंगाची कविता व गद्य वाङ्मय लक्षात आणून देणे

4) मध्ययुगीन सामाजिक राजकीय परिस्थिती व लेखनामागील प्रेरणा समजून घेणे

5) <mark>कादंबरी वाङ्मय प्रकाराचे स्वरूप घटक लक्षात आणून दे</mark>णे

6) कादंबरीचे प्रकार आशय सूत्र भाषा विविध घटकांचा उलगडा करून देणे

7) कथानकाची जडणघडण घटना प्रसंग व कादंबरीतील जाणीव समजावून सांगणे.

कोर्स- कोड- CC-2D-7 MAR /CC-2D-8 MAR कोर्स -बी.ए. CBCS कोर्स-- मध्ययुगीन मराठी वाङ्मयाचा इतिहास (1600-1818)

साहित्य प्रकार : नाटक

सत्र ४ पेपर क्रमांक ७/८

1) **मराठी वाङ्मयाचा शिवकाल पेशवे काल व** त्यातील साहित्य समजावून देणे.

2) मध्ययुगातील महत्त्वाचे पंत व तंत प्रवाह प्रकृतीसह लक्षात आणून देणे.

3) शिवकाल पेशवेकल सामाजिक राजकीय परिस्थिती व लेखनामागील प्रेरणा समजून घेणे.

4) नाटकाचे स्वरूप घटक व विविध प्रकार उलगडून दाखविणे



5) नाटकातील संवादाचे महत्त्व व नाट्य जाणीवा समजावून सांगणे.

6) नाटकाचे संहिता व प्रयोग मूल्य यातील सूक्ष्मता उलगडून दाखविणे.

कोर्स- कोड- MAR 109/MAR110) कोर्स - बी.ए.CBSC कोर्स-- साहित्यविचार (श्रेयांक-3)/ भाषाविज्ञान (श्रेयांक-3)

सत्र ५ पेपर क्रमांक ९/१०

१)भारतीय साहित्य विचारांचा परिचय करून देणे .

2)साहित्य समीक्षणात्मक दृष्टिकोन विकसित करणे .

3)आधुनिक भाषाविज्ञानाचा परिचय करून देणे .

4)भाषा निर्मितीसिद्धांत -वापर- विकासाचा परिचय व अभ्यास करणे .

कोर्स- कोड- MAR 111/MAR112 कोर्स - बी.ए.CBSC

कोर्स-- मध्ययुगीन मराठी वाङ्मयाचा इतिहास (प्रारंभ -१६००)/ प्रकल्प कार्य भाग -१

सत्र ५ पेपर क्रमांक 11/12

1)यादवकालीन सामाजिक ,सांस्कृतिक ,धार्मिक स्थिती गतीचा परिचय देणे .

2)ग्रंथनिर्मितीच्या प्रेरणा- परिणाम समजावणे, ग्रंथकार व ग्रंथ विशेष यांचे आकलन करून देणे.

3)संशोधनात्मक तसेच समीक्षणात्मक दृष्टीचा विकास करणे .

4)भाषा ,साहित्य ,साहित्येतिहास, साहित्यशास्त्र ,भाषाविज्ञान इत्यादी विषयांचे आकलन व भाषिक लेखन कौशल्य विकसित करणे .

कोर्स-कोड- MAR 113/MAR114 कोर्स - बी.ए.CBSC

कोर्स-_ पाश्चात्य साहित्यविचार / मराठी व्याकरण व बोलीभाषा

सत्र ६ पेपर क्रमांक 13/14

1) पाश्चात्य साहित्य विचारवंतांचा परिचय देणे .

2)साहित्याचे प्रयोजन ,निर्मिती प्रक्रिया, साहित्यातील विविध वादांचा परिचय करून देणे व समीक्षणात्मक लेखनाचा रृष्टिकोन विकसित करणे .

3)शास्त्रीय मराठी व्याकरणाचा परिचय व अभ्यास करणे.

4)शब्दसंग्रहाचा परिचय, व्याकरणातील मूलभूत संकल्पनांचा अभ्यास करणे .



५)वाङ्मयीन -वैचारिक लेखनाचे कौशल्य विकसित करणे .

कोर्स-कोड- MAR 115/MAR116 कोर्स - बी.ए.

कोर्स-_ मध्ययुगीन मराठी वाङ्मयाचा इतिहास (१६०१-१८१८) / प्रकल्प कार्य भाग-२

सत्र ६ पेपर क्रमांक १५/१६

1)शिवकालीन -पेशवेकालीन सामाजिक, सांस्कृतिक धार्मिक स्थितीचा आढावा घेणे ,

ग्रंथनिर्मितीच्या प्रेरणा व परिणामांचा अभ्यास करणे .

2)तत्कालीन ग्रंथ- ग्रंथकार -ग्रंथविशेषांचे आकलन करून घेणे .

3)संशोधनात्मक, समीक्षात्मक लेखनाचा दृष्टिकोन -कौशल्य विकसित करणे .

4)भाषा- साहित्य- साहित्येतिहास- साहित्यशास्त्र -भाषाविज्ञान इत्यादी विषयांचे आकलन व लेखन कौशल्ये वाढविणे.

(Do Saojay Shinde) HOD, Marthi Dept.



B.A. (PUBLIC ADMINISTRATION)

Program educational objectives (PEOs)

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

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

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

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

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

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

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

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

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

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

PO 1. Academic competence

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

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

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

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

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

PO 2. Personal and behaviour Competence

i. Lead to development and self regulation skills.



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

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

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

PO 3. Social competence

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

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

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

Program-specific outcomes (PSOs)

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

PSO 1: Gain deep knowledge of the subject

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

PSO2 - Critical Thinking

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

PSO 3- Intellectual skills

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

PSO-4 Communication Skill

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

PSO5- Gain Employable skill

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



FIRST YEAR

Course Outcomes

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

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

CO 2: Learn about the basics of organization.

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

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

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

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

- CO 1: Understand the various management theories
- CO 2: Understand the various administrative theories
- CO 3: Familiarize with the concept of management and administration
- CO 4: Gain knowledge of principles of management
- CO 5: Gain knowledge of principles of administration.



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

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

CO 2: Understand the style of administrative leadership

CO3: Familiarize with theories of leadership

CO4:. Develop communication skills

CO5: Able to face interview in corporate and public

Paper No. PUB-4 : DSC Indian Administration

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

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

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

CO 4: Comprehend the roles and responsibilities of constitutional agencies

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

Paper No. PUB -5: G.E.- Management And Administrative Thinkers

CO 1: Gain knowledge about various administrative thinkers.

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



CO 3: Understand concept of scientific management

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

CO 5: Acquire knowledge about the behaviour theories

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

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

CO 2: Gain the knowledge about office layout

CO 3: Understand the various office procedures

CO 4: Acquire skill of record management

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

BASY

Paper No. PUB -7 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.

Paper No. PUB -8 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

Paper No. PUB -9 Public Financial 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.

Paper No. PUB -10 Secretarial Pratice

CO 1: Developing an undrstanding of basic concepts of office management.

CO 2: Acqiring quality skills and competencies in office management, official corrrespondence and time management

CO 3: Acqiring quality skills and competencies in official corrrespondence and time management



BATY

Paper No. PUB -11: DSC- Local Self Government in India

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

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

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

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

CO 5: Understanding new trends in local self government.

Paper No. PUB -12: SEC- Training Of Community Resource Persons Learning Outcomes

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

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

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

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

Paper No. PUB -13 : G.E.- Principles Of Public Administration

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

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

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

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

Paper No. PUB -14 : DSC- Administrative Thinkers

CO 1: Gain the knowledge about various administrative thinkers.

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

CO 3: Understand concept of scientific management.

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

Paper No. PUB -15 : SEC- E -Governance

CO 1: Gain theoretical understanding about the concept, hairy and models of egovernance

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



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

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

Paper No. PUB -16: G.E. - Indian Administration

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

CO 2: Understand the system of Indian Administration and governors

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

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

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

Dr. Hanuman M. Wankar Head, Dept. of Public Administration Vasantrao Naik Mahavidyalaya, Aurangabad


Vasantrao Naik Shikshan Prasarak Mandal's Vasantrao Naik Mahavidyalaya, Chhatrapati Sambhajinagar **Department of Sociology.** M

Programme Outcomes (POs):



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

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

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

Programme Specific Outcomes (PSO's)

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

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

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

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

FIRST SEMESTER- I

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

Course Outcomes (COs):



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

Semester: I

Class: BAFY

Number & Title of the Paper: GE/OE-1 Social Media and Society

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

Semester: I

Class: BAFY

(Choose any one from Pool /Basket)

Number & Title of the Paper: SEC-1: Personality Development

Course Outcomes (COs):

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

SECOND SEMESTER -II

Semester: II Class: BAFY

Number & Title of the Paper: DSC4-Applied Sociology

Course Outcomes (COs):



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

Semester: II

Class: BAFY

(Choose any one from Pool /Basket)

Number & Title of the Paper: GE/OE-2 Sociology of Cinema

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

Semester: II

Class: BAFY

Number & Title of the Paper: VSC-1: Family Counseling

Course Outcomes (COs):

1) Students will understand the Characteristics of Family.

2) Students will analyze the Changing Nature of Family.

3) Students will able to Identify and Address Issues and Problems in Family.

4) Students will able to explore the Significance and Role of Family Counseling.

THIRD SEMESTER- III.

Semester: III

Class: BASY

Number & Title of the Paper: Indian Society (CC-1E) Paper No-V

> Course Outcomes (COs):

1. They are made familiar with the Indian society

2. It's linkage and community with past and present

3. To provide comprehensive understanding of Indian society

Semester: III

Class: BASY

Number & Title of the Paper: Cinematic Sociology (SEC- 1A) Paper No-VI

Course Outcomes (COs):

1. Students are introduced the key ideas within a theory they understand the importance of cinemas impact on society.

2. Students will invest ticket question to the family analysis of sociological issues will consider both narrative and documentary film and use them to engage in a sociological exploration of Identity integration is equality and institutions.

3. Student explore the familiar path of cinema to contact to larger theoretical grounds

FOURTH SEMESTER- IV.

Semester: IV

Class: BASY

Number & Title of the Paper: Indian society: issues and concerns (CC-1 F) Paper No-VII

Course Outcomes (COs):

1. The course content will empower the students to deal with the current challenges and to serve as change agents in governmental and non-governmental organizations.

Semester: IV

Class: BASY

Number & Title of the Paper: Sociology of mass media Paper No. VIII

Course Outcomes (COs):

1.An appreciation of mediatized character ab social existence and its history.

2. An acquaintance with concepts and various theoretical stands in sociology of media.

3. An understanding of social political and culture processes that underpin the operation of our media mediatized ecosystem and their effects.



FIFTH SEMESTER – V.

Semester: V

Class: BATY



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

Course Outcomes (COs):

1. Understanding the grand foundational themes of sociology.

2. Application of theories and concepts from classical sociological theories to develop Intellectual openness and curiosity.

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

Semester: V

Class: BATY

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

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

Semester: V

Class: BATY

Number & Title of the Paper: Population & Society. Paper No. XI (GE)

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

SIXTH SEMESTER- VI.

Semester: VI

Class: BATY

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

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

Semester: VI

Class: BATY

Number & Title of the Paper: Gender & Society. Paper No. XIII (SEC)

- Course Outcomes (COs):
- 1. An understanding of concepts such as sex and gender by problematizing commonsensical notions of gender.
- 2. Raising key issues of power and subordination within the purview of gender 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 a national and global level.

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

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



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Dr.Devraj Kondiba Darade Department of Sociology

B.A. (POLITICAL SCIENCE)



Program Outcome

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

Program specific outcomes

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

Course Outcomes

Paper . DSC - Pol -01 - INTRODUCTION TO POLITICAL SCIENCE

Students will know about the meaning of state, Government, sovereigns, Citizenship and lights.

- 2. Students will learn theories of origin of state.
- 3. Students will understand types of government and organs of government.
- 4. Students should aware about types of rights and duties of citizen.

Paper. GE. -01. Basic of state And Government.

- Students will learn state, origin and development
- Students will understand types of government and organs of government.
- To understand and study Difference state and government.
- To know of constituents of state

PAPER. SEC -I -HUMAN RIGHTS

To understand of human rights

To study of Universal Deceleration of human rights-1948

To know constitution & human rights

To understand and study violation of human rights in India



Paper No. DSC - Pol- 04 Government and politics in Maharashtra

- Will able to, learn on completion of course students.
- To know historical and political Background of Maharashtra State.
- To know state reorganization commission.
- To study of Akola pact
- · To study of sanyukt Maharashtra movement and sanyukt Maharashtra samiti
- To understand and study the movements in Maharashtra.
- To understand the socio cultural
- · To study of organs executive , legislature , judiciary -high courts .
- To study of political parties in Maharashtra

PAPER .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.

PAPER . VSC -I -VSC-1 : Election Management

1. This Course will make students able to

2. Acquire skills of election management.

3. Assist political parties or candidates to manage its electorate.

4. Provide Professional solutions to run election campaign to political party or any independent candidate.

BASY -2024-2025

Paper No.CC-3A Government and politics in Maharashtra.

- To study historical and political background of Maharashtra
- To know governor and chief minster.
- To study legislative assembly and legislative council.
- To understand high court structure and power, function

Paper No.CC -3B .Theories International Relations

- To Study Scope Of International Relation.
- To study approaches of international relations.



- To understand the concepts of National interest and national power.
- To understand concepts of Balance of Power
- · To understand concept of Collective Security

Paper No.Pol.CC-4A: Government and politics in Maharashtra.

- To study Panchyat Raj system.
- To know Ideology and Programme of Political Parties.

Paper No.Pol.CC-4B:Theories of International Relations

- To study the concept of Deterrence
- To understand arms Race, Arms Control, and Disarmament
- · To study Major issues in international Politics.
- To understand international Justice
- · To study international and regional Organizations

BATY -2024-2025

Paper No. DSE -A1- Indian Political Thinkers

- To study thoughts of Raja Ram Mohan Roy
- To know the thoughts of Dayanand Sarasvati.
- To know the thoughts of Maharshi Ghose
- To understand the views of swami Vivekananda
- To understand the views of Lokmanya Tilak
- To study views of Mahatma Gandhi

Paper No. DSE-A2 : Western Political Thinkers

- To study views of Plato
- To knows thoughts of Aristotle
- · To understand thoughts of Machiavelli
- To study views of Hegel
- To study views of Thomas Hobbes
- To know thoughts of John Locke
- To study views of Jean Jacques Rousseau

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DSE-A3- Indian Constitution and social justice

To study social justice and Indian Constitution .

To Understand social justice And Human Rights

To study social justice Legislations .

SEC- 1C - Indian Federal System

To study Indian Federal System To study Center & - State Relation To Understand Coordination in Indian Federation.

GE-1 - Political Party System In India .

To study Party System In India To study National Political Parties To study Regional Political Parties. To Understand Political Parties And Anti-Defection Law.

Paper No. DSE-B1 - Indian Political Thinkers

- To understand the importance of Dr. Babasaheb Ambedkar's thoughts
- To know thoughts of Jawaharlal Nehru.
- To criticize views of M.N. Roy.
- To study thoughts of Jai Prakash Narayan.

Paper No. DSE-B2 -Western Political Thinkers

- · To know importance of Karl Marx thoughts.
- To study views of Harold Laski.
- To know thoughts Fredrich Nietzsche
- To understand thoughts of Jeremy Bentham
- · To analyze views of John Stuart

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Paper No. DSE-B3 . Political Ideologies

- * To understand The Concept of Ideologies
- * To understand Liberalism
- * To introduce socialism.
- * To study communism.
- * To study feminism
- * To study environmentalism
- * To Study of Nationalism

PAPER NO. SEC-1D - Indian Judicial system

To Understand Justice and Law

To Understand Nature of judiciary

To study Structure and functions of Indian judiciary

PAPER NO .GE-2 Local Self Government

To Study Local Self Government In India To Study Panchayat Raj In India To Study Urban Local Self Government

Department of Political Science Vasantrao Naik Mahavidyalaya Aurangabad.

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Vasantrao Naik Mahavidyalaya, Chhatrapati Sambhajinagar Department of Economics Academic Year: 2024-25



Program outcomes (PO)

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

• Understanding Economic Principles:

- Students will gain a solid foundation in core economic theories, including microeconomics and macroeconomics.
- They will be able to understand and apply fundamental economic concepts like supply and demand, market structures, and national income accounting.

• Analytical and Critical Thinking Skills:

- Students will develop the ability to analyse economic data and events critically.
- o They will learn to evaluate economic policies and their potential impacts.
- They will be able to construct and evaluate economic arguments.

• Quantitative Skills:

- Students will acquire skills in using mathematical and statistical tools to analyse economic problems.
- They will be able to interpret and analyse economic data and use it to draw conclusions.

Communication Skills:

- Students will be able to effectively communicate economic ideas and analyses, both orally and in writing.
- They will be able to present economic data and arguments clearly and concisely.
- Understanding of Real-World Economic Issues:
 - Students will gain an understanding of current economic issues and challenges facing individuals, businesses, and governments.

hey will be able to apply economic principles to analyse real-world problems.

• Employability and Further Studies:

Chhatrapati Sambhajinga

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The program will prepare students for careers in various fields, including business, finance, government, and research.

 It will also provide a strong foundation for further studies in economics or related fields.

Program Specific Outcomes (PSO)

- Microeconomic Analysis:
 - Understanding consumer and producer behaviour.
 - Analysing market structures and competition.
 - Evaluating the efficiency of markets.
- Macroeconomic Analysis:
 - Understanding national income, inflation, and unemployment.
 - Analysing the role of monetary and fiscal policy.
 - Understanding economic growth and development.
- Data collections and analysis:
 - Using statistical software to analyse economic data.
 - Conducting regression analysis and hypothesis testing.
 - Applying mathematical models to economic problems.
- Understanding of the Indian Economy (in relevant programs):
 - Analysing the structure and performance of the Indian economy.
 - Understanding key policy issues facing India.
 - Understanding the challenges of the Indian economy.
- Analysis of International trade theories and Balance of Payment
 - Understanding the theories of international trade.
 - Knowing the concepts of International Economics.
 - Understand the fluctuations of the Balance of payment.
- Understanding economics Social Welfare:



Students will be able to define and analyse the concept of social welfare and its various interpretations.

- They will understand the complexities of measuring and comparing individual and social well-being.
- Applying Welfare Criteria:
 - Students will be able to apply welfare criteria, such as Pareto efficiency and Kaldor-Hick's efficiency, to evaluate economic policies and outcomes.
 - They will be able to analyse the trade-offs between efficiency and equity.
- Analysing Market Failures:
 - Students will be able to identify and analyse market failures, such as externalities and public goods, that lead to inefficiencies in resource allocation.
 - They will understand how government interventions, such as taxes, subsidies, and regulations, can address these market failures.
- Evaluating Public Policy:
 - Students will be able to use welfare economics principles to evaluate the impacts of public policies on social welfare.
 - They will be able to conduct cost-benefit analyses and assess the distributional effects of policies.
- Ethical Considerations:
 - Students will develop an understanding of the ethical considerations involved in welfare economics, including issues of fairness, justice, and individual rights.
 - They will be able to understand the role of value judgements in welfare economics.

Course Outcomes (CO)



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

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	• Students will be able to practical skills.
Paper No. VII Public Finance	 Upon completion of the course student would be able to: Understand the source of finance both public and private. Understand the possible burden, and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system. Role of the government in the economy about the public expenditure. Understand the needs of public borrowing from all possible sources to meet necessary public expenditure/investment. Also be alerted to find sources for repayment.
Paper No. VII Financial Institutions and Market	 Upon completion of the course student would be able to: Understand knowledge of modern financial system. The recent trends and developments in banking system. Understand the role of Reserve bank of India in Indian financial system and currency provide the knowledge of various financial and non-financial institutions.
Paper No. VII Indian Economy	 Upon completion of the course student would be able to: Develop ideas of the basic characteristics of Indian economy, its potential on natural resources. Understand the importance, cause and impact of population growth and its distribution, translate and relate them with economic development. Student will get to know about nature of poverty and unemployment as major problems facing India by Indian economy and aware about the situation of these problems. Grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failures and achievements of the various plans and economic reforms taken be the government. Also, the students will know about the nature and objectives of Niti Aayog.
Paper No. VIII Data Collections and Analysis	 Students who successfully completed this course will be able to explain kay research concepts and issues. This course will be able to read comprehend and explain research in their academic discipline.
Paper No. IX International Economics	Completion of the study of International Economics Students should be able to: Identify the basic difference between domestic and international trade. Understand the various international trade theories. Understand the concepts of tariffs and Quotas. Understand the importance of maintaining equilibrium in the balance of payment.
Paper No. X Agriculture Economics	After Completion of this course, Students should be able to: To understand the role and importance of Agriculture in economic development. To aware the student about technological Changes in Agriculture.

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et miller in the second s	Student should be aware about the role of finance (NABARD) in development of Agriculture. Student Should be Understanding about Agriculture price policy.						
Paper No. XIAfter Completion of this course, Students should be able to:Indian StockKnow the functioning of Indian Stock MarkerMarketUnderstand the structure and functions of Indian Stock MarketUnderstand the SEBI and its Functions.Knowledge about future and option trading							
Paper No. XII Introduction to Elementary Economics	 After Completion of this course, Students should be able to: Students aware about the concepts of Microeconomics. Understand the concepts of Macro Economics. Student Aware about the knowledge about Indian Economy. Students get the information regarding money and banking. 						
Paper No. XIII Industrial Economics	 After Completion of this course, Students should be able to; Understand the importance of Industries in economic development of Economy. Students aware about the theories of industrial location. Understand the types of industries. Students aware about the industrial policy after 1901. 						
Paper No. XIV Insurance Market and Its Products	 After completion of this course students should be able to understand the meaning, nature and importance of insurance. The course enables functions of the insurance companies and their agents. Students are able to evaluate the Indian insurance framework. Students are able to understand the legal aspects of Insurance. 						
Paper No. X Indian Economy	 After the completion of this course students should be able to: The Course equips students to understanding the structure of Indian Economy and its problems. Students enables to analyse income and inflation. Students sensitized to the various issues faced by Indian Agricultural and industrial sector. Students are able to evaluate the role of International Institutions and Organizations. 						

Dr. Varsha shinde. Dr. Vanita K. Bankar Kadam R.B Sinde 2

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B.A. (HISTORY)



Program Outcomes (PO) :-

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

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

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

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

PO5 - Student Identify and critique basic historical concepts.

Programme Specific Outcomes (PSO) :-

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

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

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

PSO4 - Serve as conservator and tourist guide in historical monuments.

PSO5 - NGO and social welfare organizations also employ B.A. History graduates.

PSO6 - Writer/subject matter Expert.

Course Outcomes (CO) :- (History)

Semester - I



Course No.- 1 DSC -2 : Ancient History (Up to 300 AD)

CO1 - To study the sources of ancient Indian history.
CO2 - The familiarize student about Indus Valley Civilization.
CO3 - To sensitize student above stone.

Course No.- 3 GE/ OE - 1 : History of Buddhism CO1 - To study sources of Buddhism in India. CO2 - To understand Gautam Buddha's life and philosophy of Buddhism.

CO3 - To sensitize about impact of Buddhism.

Course No. - 6 SEC - 1 : Study of Museology

CO1 - To study the basic concept of Museology.CO2 - To create awareness about MuseologyCO3 - To put forth importance of Museology.

Semester - II

Course No. - 1 DSC - 4 : History of India (300 BC 650AD)

CO1 - To study various dynasty in history of India. CO2 - To understand rise and expansion of various dynasty's.

CO3 - To put forth the significance of various dynasties.



Course No. - 4 GE/OE - 2 : History of Jainism

CO1 - To study the sources of Jainism.CO2 - To understand techniques of Jainism.CO3 - To put forth major sects in Jainism.

Course No. 1

VSC -1 : Study of Archaeology

CO1 - To study the basic concept of archaeology

CO2 - To create awareness about archaeology CO3 - To put forth importance of archaeology.

Semester -III

History - 05 CC - 3A : History of Medieval India (AD 1526 - 1757)

CO1 - Medieval culture with a view understands the student.
 CO2 - Student introduced nature of medieval Indian society economy, state formations and the main religious currents of the time.
 CO3 - History of Mughal India, History is very important for UPSC exam.

CO4 - Students enable to understand the medieval political, Economical, Social and Agriculture History.



History - 06 CC - 4B : History of Colonial India (AD 1757 - 1857)

CO1 - To develop the knowledge to trace the British Colonial expansion in the political context of 18th century of India CO2 - Understand the social, economic and cultural condition of colonial India.

CO3 - To understand the reasons lead to moments against British Empire.

Semester - IV

History - 07 SEC - 2A : History of Modern India (AD 1858 – 1947)

CO1 - Understand the chronology of India's Independence struggle and sacrifices of the Indian Independence struggle. CO2 - Understand the social, economical, culture and political backgrounds of modern India. History - 08 CC - 4A : History of Europe



CO1 - To acknowledge the distinction caused by entire nationalism.

CO2 - To develop the knowledge of European history, literature, culture, languages cultural competency.

Semester - V

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

CO1 - To Analyse the emergence of modern China and its impact on world policy.

CO2 - To Interpret the complexity and diversity of events.

CO3 - To impact students the knowledge of major historical developments from the 19 to early 20th century in China.

CO4 - Understand the important events and themes of China's modern history.

DSC -2 DSE-2 A3 Issues of Depressed Classes in India

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

Co3 - Understanding of women's issues including various approaches in women's history.

DSC-3 DSE -3 A1

Field Visit Historical Places in Chh.Sambhajinagar

CO1 - Enhancing learning by allowing students to apply theoretical knowledge of historical places in Chh. Sambhajinagar



CO2 - Encouraging teamwork communication and collaboration among students.

CO3 - To provide opportunities for research, data collection and analysis.

Semester - VI

DSC - 1 DSE -1 B1 History of the Rajput

CO1 - To understand Rajput's origin and history
 CO2 - To understanding Rajput's political and military strategies, administration, art and architecture of Rajput era.

DSC-1 DSE – 1 B2 Research Methodology and Intellectual Property rights

CO1 - To develop an appropriate Framework for research studies.

CO2 - To develop an understanding of various methods, research design and techniques.

CO3 - To analyse research related information and research ethics.

DSC-2 DSE -1 B2 Dr.Babasaheb Ambedkar and His Movement

CO1 - To understand the knowledge about work of Dr. B. R.Ambedkar.CO2 - Ideological contribution of the Dr. B.R. Ambedkar and various movements.

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

DSC-3 DSE – 3 B1 Field visit in Chh.sambhajinagar and Jalna district

CO1 - To develop historical and cultural understanding.CO2 - To develop the environmental and geography awareness.

CO3 - To develop Research and analytical skill.

CO4 - To develop the knowledge of historical sites like Ajanta and Ellora caves, bibika -Maqbara etc, in Chhatrapati Sambhaji Nagar and Jalna district

CO5 - Understanding architectural and cultural significance in Chhatrapati Sambhaji Nagar and Jalna district.

Reference:

- 1) Syllabus of BAM University www.bamu.ac.in
- 2) www.rayat.edu-society
- 3) www.shivajiuniversity.com
- 4) www.nmu.jalgaonuniversity (bahinabai chaudhari.com

Chhatrapati Sambhajinga Port Amil Jamkaz) HOD History Pept.



V.N.S.P. Mandal's

Vasantrao Naik Mahavidyalaya, Chhatrapati Sambhajinagar

Department of Physical Education

At the end of any course completed by the student is described in brief what the student has achieved in his entire course. The significance and learning relates to skills, knowledge and behavior that students acquire in their curriculum through the course. The students through their knowledge develop skill of analytical thinking, problem solving and writing skill to get different kinds of jobs.

Vasantrao Naik Mahavidyalaya, Chhatrapati Sambhajinagar, college is affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. It follows the curriculum and syllabus framed by the University. The department of Physical Education Comes under the Arts faculty and the Head will give appropriate outcomes of the course. And it is defined by considering the syllabus covered in each semester of a degree course. Four to five course outcomes may be specified for each semester base in its weights.



Sr.No	Cours e	Semester and paper code	Credit	Marks	Course Outcome	Skill development related to employment
01	Β. Α.	I Sem Paper 101 Philosophical , Sociological foundation and History of Physical education	6	50	To gain the knowledge of physical education. To understand the historical perspectives of physical education. To understand the different types of Indian Philosophy. To understand the historical development in ancient and modern Olympic games. To understand recent trends in physical education.	The course focuses on the concept and basic development of physical education. The content of the course is significant for job oriented examination for Physical education students
02	B. A.	II Sem Paper-II 102 Principles and Recent development of Physical Education	6	50	To acquire the knowledge of principles of Physical education. To understand the social values and social welfare of the society. To understand Psychological, Biological and Physiological characteristics of Student. To understand the development of Physical education at primary, secondary, degree and university levels. To understand the role of various association and sports bodies.	Basic knowledge of principles of physical education and role of bodies run by government The content of the course is significant for job oriented examination for Physical education students.

Table 1: - Course outcomes, Programme B. A. Ist year (Physical Education)



Table 1: - Course outcomes, Programme B. A. Ist year (Physical Education)

Sr.No	Course	Semester and paper code	Credit	Marks	Course Outcome	Skill development related to employment
03	B. A.	I Sem Paper-III 103 Practical	12	100	To understand the rules and regulation of the game. To understand the fundamental skill of the game. To understand the officiating and referee/ umpire/ scorer of the games. To understand the basic requirement of the playing area. To understand the National and International organization of the games. To understand the preparation of record books.	The course focuses on the concept and basic development games and sports of physical education. The content of the course is significant for job oriented examination for Physical education students



Table 2: - Course outcomes, Programme B. A. IInd year (Physical Education)

Sr.No	Course	Semester and paper code	Credit	Marks	Course Outcome	Skill development related to employment
01	В. А.	III Sem Paper - IV 201 Health education and recreation in Physical education and sports (Theory)	6	50	To understand the concept and importance and principles of health education. To understand the medical problems and its rehabilitation. To understand the value, knowledge and skills required to preserve community health and well- being. To identify the role of peers, community and media in health promotion and protection. To understand the need, scope, and types of recreation. To understand the planning of programme of recreation.	The course focuses on the basic knowledge of Health Education and Recreation of physical education. The content of the course is significant for job oriented examination for Physical education students
02	В. А.	IV Sem Paper- V 202 Officiating ,coaching and Training Methods in Physical Education and Sports (Theory)	6	50	To understand the importance and meaning of officiating. To understand the qualities and duties of Officials. To understand the importance, qualities and duties of coach. To understand the fundamental and advanced skills. To understand the factors influencing training programme. To develop Methods of training for all of fitness component. To understand the types of training method used in sports and games	Basic knowledge of principles of Coaching and Officiating in physical education The content of the course is significant for job oriented examination for Physical education students as a coach, Referee, Trainer and for NET and SET.



Table 2 : - Course outcomes, Programme B. A. IInd year (Physical Education)

Sr.No	Course	Semester and paper code	Credit	Marks	Course Outcome	Skill development related to employment
03	B. A.	III &IV Sem Paper-VI 203 Practical	12	100	To understand the rules and regulation of the game. To understand the fundamental skill of the game. To understand the officiating and referee/ umpire/ scorer of the games. To understand the basic requirement of the playing area. To understand the National and International organization of the games. To understand the preparation of record books.	The course focuses on the concept and basic development games and sports of physical education. The content of the course is significant for job oriented examination for Physical education students



Table No 3 : - Outcomes, Programme B. A. IIIrd year (Physical Education)

Sr.No	Course	Semester and paper code	Credit	Marks	Course Outcome	Skill development related to employment
01	В. А.	V Sem 301 Paper- VII History of Physical Education in Ancient India. (Theory) Subsidiary	4	50	To understand the basic Knowledge of Physical Education. To understand the Physical education in Vedic Period. To understand the Physical education in Early Hindu Period. To understand the Physical education in Aryan Period.	The course focuses on the basic knowledge of physical education of Different periods of Ancient Period. The content of the course is significant for job oriented examination for Physical education students
02	B. A.	V Sem 301 Paper - VII History of Physical Education in Modern India. (Theory) Subsidiary			To understand the Physical Activities in Buddhism and Jainism. To understand the status of Physical education in Mughal period. To understand the Physical Education in independence and After independence. To understand Modern Olympic, Asian Games and various sports bodies working in India. To understand the recreation management in games and sports.	Basic knowledge of Modern , Asian games, physical education The content of the course is significant for job oriented examination for Physical education students as a coach, Referee, Trainer and for NET and SET.



Table No 3 : - Outcomes, Programme B. A. IIIrd year (Physical Education)

Sr.No	Cours	Semester and	Credit	Marks	Course Outcome	Skill development
	e	paper code				related to
						employment
01	B. A.	V Sem	4	50	To understand the basic	The course focuses
		302			Knowledge Psychology of	on the basic
		Paper- VIII			sports in Physical	knowledge of Sports
		Sports			Education. To understand	Psychology and
		Psychology			the Management in	Management in
		and			Physical education and	physical education.
		Management			sports. To understand	The content of the
		in Physical			teaching in Physical	course is significant
		education			education. To understand	for job oriented
		(Theory)			the facilities and	examination for
		Main			Equipments.	Physical education
						students
02	B. A.	VI Sem	4	50	To understand	Basic knowledge of
		303			Organization,	Organization,
		Paper -IX			Administration &	Administration, &
		Organization,			supervision. To understand	Supervision. The
		Administratio			Organizing & Conducting	content of the
		n &			Tournaments. To	course is significant
12		Supervision in			understand Intramural &	for job oriented
		Physical			extra murals Programme.	examination for
		Education			To understand Youth	Physical education
		Youth			welfare & Youth Services.	students as a coach,
		Welfare &			×	Referee, Trainer.
		Youth				
		Services				
		(Theory)				
		Subsidiary				



Table No 3 : - Outcomes, Programme B. A. IIIrd year (Physical Education)

Sr.No	Course	Semester and paper code	Credit	Marks	Course Outcome	Skill development related to employment
03	B. A.	VI Sem 304 Paper- X Anatomy, Physiology& Kinesiology of Physical Education (Theory) Main	4	50	To understand the basic Knowledge Anatomy, Physiology,& Kinesiology of in Physical Education. To understand the system of body.	The course focuses on the basic knowledge Anatomy, Physiology& Kinesiology of physical education. The content of the course is significant for job oriented for Physical education students

03B. A.V&VI Sem Paper-XI & XII 305,306 Practical12+ 12100To understand the rules and regulation of the game. To understand the fundamental skill of the game. To understand the officiating and referee/ umpire/ scorer of the games. To understand the basic requirement of the playing area. To understand the National and International organization of the games. To understand the preparation of record books.The course focuses on the concept and basic development games and sports of physical education. The content of the course is significant for job oriented examination for Physical education students	Sr.No	Course	Semester and paper code	Credit	Marks	Course Outcome	Skill development related to employment
	03	B. A.	V&VI Sem Paper-XI & XII 305,306 Practical	12+ 12	100	To understand the rules and regulation of the game. To understand the fundamental skill of the game. To understand the officiating and referee/ umpire/ scorer of the games. To understand the basic requirement of the playing area. To understand the National and International organization of the games. To understand the preparation of record books.	The course focuses on the concept and basic development games and sports of physical education. The content of the course is significant for job oriented examination for Physical education students



Programmes Outcomes of B. A. Physical Education

- 1. Students will develop physical, Mental, Social and Emotional status through Physical Education and sports.
- 2. Students will develop practical and Theoretical skills in Physical Education and sports.
- 3. Students will acquire technical and sound knowledge and understanding fundamentals of Physical Education.
 - 4. Students will acquire a job efficiently in the Field of Physical Education Etc.

Teaching Learning Strategies: - The class will be taught by using Lectures and demonstration, seminars, classroom discussion, Videos, charts and Presentations method.

Virtual Instructional Platforms such as online lectures are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Courses may also integrate DVD videos as part of training process. Students may examine current topics in the field through the use of e-textbooks and e-physical education journals. Students can complete some portion of the education at approved testing sites for the practical components wherever necessary.

Initiating Brain based learning : - A stress free environment will be created where students will be reoriented in understanding of the brain as organ which could be developed through various mental and physical exercises, like muscle developed through weight training and meditation through yoga. Creative thinking for new ideas and innovations will be encouraged or break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

Activities: - Lecture / Project Work / Term Papers / Assignments / Presentations / Study .

Assessment: - Classroom Test, Project Work, Assignment, Presentations.

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Dr. Satyajit Pagare Head, Department of Physical Education

Department of Commerce PO



Program Out Comes (PO)

Upon completion of B. Com Degree program, the graduates will be able to,

- 1) Understand the role of business and its implications on society.
- Understand the conceptual knowledge of accounting and acquire skills maintaining accounts.
- 3) Acquire entrepreneurial, legal and managerial skills.
- 4) Identify the avenues of marketing and banking both traditional and modern.
- 5) Develop the skills and techniques of communication to be successful in business and personal life.
- 6) Improve competency to make them eligible and employable in the job market.
- Recognize different value systems and ethics, understand the moral directions and accept responsibility.

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Programme Specific Outcomes (PSOs)



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

PSO1 Financial Reporting and Analysis: Graduates will demonstrate proficiency in preparing, analyzing, and interpreting financial statements in accordance with accounting standards and regulations, enabling them to provide accurate and reliable financial information for decision-making.

PSO2 Managerial Accounting and Cost Management: Graduates will apply managerial accounting techniques to analyze costs, budgets, and performance metrics, enabling them to support strategic decision-making and optimize resource allocation within organizations.

PSO3 Taxation and Compliance: Graduates will possess a comprehensive understanding of tax laws and regulations, enabling them to prepare tax returns, advise on tax planning strategies, and ensure compliance with tax obligations for individuals and businesses.

PSO4 Auditing and Assurance Services: Graduates will understand the principles and practices of auditing, internal controls, and assurance services, enabling them to conduct audits, assess risks, and provide assurance on the reliability and integrity of financial information.

PS05 Financial Management and Investment Analysis: Graduates will analyze financial markets, evaluate investment opportunities, and make informed decisions regarding capitul structure, capital budgeting, forancing, dividends and risk management to maximize shareholder value and wealth creation,

PSO6 Financial Markets and Institutions: Graduates will demonstrate knowledge of financial markets, instruments, and institutions, including banking, securities, and derivatives markets, enabling them to analyze market trends, evaluate investment options, and manage financial assets.

PS07 Ethics and Professional Standards: Graduates will adhere to ethical principles and professional standards in their practice of accounting and finance, demonstrating integrity, objectivity, and professional skepticism in their decision-making and conduct.

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



Professor & Head Dept. of Commerce Vesentreo Neik Mahavidyalaya Cahasrapati Semishajinegar
Department of Commerce COS

Course Outcome (COS)

Course Name: Financial Accounting-I

1. To prepare and analyses the financial statements.

2. Acquire the basic concept of accounting terms.

3. Record the different financial activities & Practices

Course: Entrepreneurship Development program

1: To Create Awareness Amongst students about Entrepreneurship.

2: To Understand Theories while applying in the Business.

3: To know about Foundation of Entrepreneurship and its theories.

4: To identify the type of entrepreneur and the steps involved in an entrepreneurial Venture.

Course: Principals of Management

1) Demonstrate understanding of the role of managers in modern business organizations

2) Absorb various management concepts, principles and theories

3) Examine the managerial functions having in impact on the business effectiveness

Course: Business Organization:

- 1) Discuss nature and the scope of business and classify the business activities.
- 2) Identify the meaning of the sole partnership one person company, private company and Joint Stock Company.





- 3) Justify the functions, principles and types of the organization.
- Compose internal consistence of the business organization and management personal.
- 5) Summarize the qualities powers responsibilities of Chairman and Chief executive officer.
- 6) Paraphrase e-commerce and e-business banking.

Course: Corporate Accounting:

- 1) Understand the procedures for the issue of shares.
- 2) Prepare final statement of Companies.
- 3) Calculate purchase consideration in case of amalgamation, absorption and reconstruction.
- 4) Ascertain profit or loss prior to incorporation by applying various methods.
- 5) Identify the methods of valuation of Goodwill and shares.

Course: Business and Industrial economics:

- 1) Understand the nature and scope of the business economics and their responsibilities.
- Describe the law of the demand and Griffins paradox and methods of demands for costing.
 - Evaluate the concept of production, function and law of variable properties and ISO quant curves.
 - 4) Design the theory of the population and then criticize it.
 - 5) Describe law of the supply and its criticism and evaluate concept of cost.
 - 6) Write down the theory of the revenue.

Course: Business Mathematics & Statistics:

1) Write the measures, scope, function and limitation of statistics.

- 2) Calculate mean, median and mode and geometric mean.
- 3) Evaluate mean deviation, standard deviation and quartile deviation.
- 4) Solve Sequence, Karl Pearsons and co-efficient of co-relation.
- 5) Calculate ratio &proportion, percentage, simple and compound interest and profit or loss.

Course: Income Tax

- 1) Understanding the concept of Income tax.
- 2) Solve a numerical under the head of Income from salary.
- 3) Solve a numerical under the head of Income from preparing.
- 4) Calculate the numerical of Income from other sources.

Course: Cost Accounting

- 1) Understand the difference between Cost and Financial Accounting.
- 2) Prepare the profit reconciliation statement.
- 3) Define Job costing and Process costing.
- 4) Determine contract costing, its elements and features of contract costing.
- 5) Classify normal & abnormal loss and normal & abnormal gain.

Course: Indirect Taxes

- 1) Understand the concept of central excise laws.
- 2) Determine the customs laws.
- 3) Analyze the service Tax, Provision of law and procedure.
- 4) Understand the basic concept of valuesadded tax on sale or purchase of goods.

Course: Management Accounting

- 1) Compare differences between Cost Accounting and Management Accounting.
- 2) Calculate the break even point analysis.



- 3) Prepare cash budget and flexible budget.
- 4) Explain the meaning, importance and limitation of ratio analysis.
- 5) Calculate Ratio, acid test ratio, inventory turnover ratio.
- 6) Prepare statement showing changes in working capital and fund flow statement.

Course: New Auditing Trends

- 1) Acquaint the students with the practical approach of auditing.
- 2) Understand objects and importance of auditing.
- 3) Commerce different types of audits.
- 4) Understand the audit sampling.
- 5) Solve profit & loss account and construct balance sheets.

Course: Advanced Financial Accounting

- 1) Create awareness among the students about Advanced accounting issue and practices.
- 2) Understand Nature and functions of Advance financial Accounting.

Course: Business Communication

- 1) Develop communication skills and use of electronic media in business communication.
 - 2) Learn the way to overcome communication barriers.
 - 3) Practice modern forms of communication.
 - 4) Formulate job related communication and resume preparation.
 - 5) Attend interview and participate in Group Discussion with Confidence.

Course: Computer Application Business

- 1) To understand the components of computer.
- 2) Provide the knowledge about on overview of E-Commerce and E-Business.

- 3) Describe the consumer oriental E-Commerce Applications.
- 4) Appraise the Electronic Data Interchange and its pre-requisites.
- 5) Analysis the different types of E-Marketing techniques.
- 3) Discuss nature meaning and objectives of accounting standards.
- 4) Understand departmental accounts.

Course: Company Law

- Understand the background of the New Company Act 2013 and explain kinds of company.
- 2) Define memorandum of association and articles of association.
- 3) Determine private placement and prospectus and mis presentation in prospectus.
- 4) Write the meaning and nature of capital share and capital.
- Indentify the difference between shares and debentures and owned capital and debt capital.
- 6) Explain membership in a company and its procedure and analyze.

Course: Banking

- 1) Understand the relationshipbetween the banker and the customer, how to apply crossing and endorsement in cheques.
- 2) Understand about commercial banks, EXIM banks and their functions.
- 3) Analysis about the technical banking, mode of charging security.
- 4) Evaluate the elements of mechanical banking.
- 5) Understand the function of Reserve Bank of India and method of audit conduct.



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Vasantrao Naik Mahavidyalaya, Chh. Sambhajinagar

Department of Botany (2024-25)

Program Outcome (PO), Program Specific Outcomes (PSO), Course Outcome (CO)

Program Outcome (PO) PO1. The Citizenship and Society PO2. Environment and sustainability PO3. Ethics PO4. Individual and team work PO5. Project management and finance





Program Specific Outcomes (PSO)

PSO1. Domain knowledge

PSO1. Understanding the various plant groups

PSO1. Understanding processes in plant body

PSO1. Understanding properties and uses of plants to maintain health

PSO1. Enriching knowledge related with Agriculture

Course Outcome (CO): in following table as per semester

Semester-I (NEP)

Sr. No.	Title of Paper	Course Outcome (CO)
1	DSC-1 Morphology of Angiosperms	 On the successful completion of course, student will be able to- Describe morphological peculiarities of vegetative organs of Angiosperms Describe morphological peculiarities of reproductive organs of Angiosperms Know the diagnostic features of plant species
2	GE/OE-1 Seed Production & Preservation Techniques	 After completion of this course the student will > Insist on the quality seed production > Increase the production of quality seeds > Will know the best natural practices to store the

PAO NO	chhatrapati Sambhajing	au Marine State		
(V)	CUA		seeds for longer period	
	- TA	SEC-1. Fungal Diseases of Crop	After learning this course, students will.	
		Plants and their Management	\succ Identify the fungal diseases of crop plants of the	
		5	region	
			Treat the fungal diseases of the crop plants	
			> Manage the crons in their agriculture field from	
			fungal diseases	
		Sem	nester-II (NEP)	
	4	DSC-3 Diversity of Cryptogams-1	After completion of the course, the learners would be	
			able to:	
U			 Classify lichen, algae and fungi up to order according to the system of classification proposed by GM Smith, Alexopoulos and Mims. Classify & Describe the morphology, structure, life cycle of some lichens, algae, fungi & Gymnosperms Exemplified lichens, algae and fungi of economic importance Identify 	
	5	GE/OE-2 Pomology	After completing this course, the students will:	
			 Enrich the knowledge about horticultural principals and practices relevant to fruit cultivation and will take initiative to cultivate fruits Will apply fundamental aspects of orchard operations and its management Will become in plant propagation techniques 	
	6	VSC-1 Organic Composting	On the successful completion of course, student will be able to:	
			 Acquire the knowledge of organic composting techniques Learn laboratory skill, lab organization, & nutritional importance of different organic compost Understand about the composting techniques and economics. 	
	Semester-III (CBCS)			
	7	BOT-311. Taxonomy of Angiosperms	After completing this course, the students will:	
			 Familiarize with basic terminology, plant systematic and its different classification. Acquire the knowledge of identify angiosperm 	

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TRA	Chhath Sambha	Malin Tapati Sjingar				
	No +	VIE	plants and their use.			
	8	BOT-312. Plant Physiology	 After completion of the course, the learners would be able to: To understand plant physiology, metabolic process, plant hormones Role of water in plant life 			
		Sem	nester-IV (CBCS)			
	9	BOT-411. Gymnosperms & Utilization of Plants	 On the successful completion of course, student will be able to: To know and aware of economic and medicinal value of Gymnosperms and Angiosperms in biodiversity. Understand important terminology in industrially and economically important higher plant species. 			
	10	BOT-412. Plant Ecology	 On the successful completion of course, student will be able to: Understand the anatomical characterization of plants & ecological adaptations. Eco-friendly conservation and sustainable utilization. Students cop up with the ecosystem mechanism, analyzing plants ecosystem. 			
	Semester-V (CBCS)					
	11	Biology	 > To create innovative approaches to aware basic terminology of plant cells and it working. > To understand cell at molecular level. > To apply theoretical understanding to the development of humankind. 			
	12	BOT-512. Diversity of Angiosperms-I	On the successful completion of course, student will be able to:			
			 To create awareness about the plant resources. Understand Angiosperm Phylogeny Group System of To classification (APG) of plants Biodiversity and its other aspects 			
		Semester-VI (CBCS)				
	13	BOT-611. Genetics and Evolution	 After completing the course, the student should be able to: ➤ Understand and explain fundamental concepts and terminology in the field of evolutionary genetics. ➤ Have a good understanding of central concepts in 			

		population and quantitative genetics.
14	BOT-612. Diversity of Angiosperms-II	After completing the course, the student should be able
		to:
		> Identification keys, evolutionary theories of
		Angiosperms, Nomenclature of plants
		Understand Angiosperm Phylogeny Group System
		of To classification (APG) of plants



LDV. V. C. Kluitzses



Vasantrao Naik Shikshan Prasarak Mandal Chhatrapati Sambhajinagar's VASANTRAO NAIK MAHAVIDYALAYA, CHHATRAPATI SAMBHAJINAGAR Department of Chemistry NEP- (w. e. f. 2024-25)

Programme Educational Objectives (PEOs) :

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

- 1. **Mastery of Discipline-Specific Knowledge**: Graduates of the Bachelor of Science program will demonstrate a deep understanding of fundamental principles, theories, and methodologies in their chosen scientific discipline, enabling them to analyze complex problems, propose innovative solutions, and contribute to advancements in their field.
- 2. **Interdisciplinary Proficiency**: Graduates will possess the ability to integrate knowledge and skills from multiple scientific disciplines, fostering a holistic approach to problemsolving and innovation. They will be equipped to address multifaceted challenges by drawing upon diverse perspectives and methodologies.
- 3. Critical Thinking and Analytical Skills: Graduates will develop strong critical thinking abilities, enabling them to evaluate information rigorously, analyze data effectively, and make informed decisions based on evidence. They will demonstrate proficiency in applying logical reasoning and scientific methods to solve problems and generate new knowledge.
- 4. Leadership and Innovation: Graduates will demonstrate leadership qualities and entrepreneurial mindset, capable of initiating and driving positive change in their organizations and communities. They will exhibit creativity, resilience, and adaptability, harnessing innovation to address complex challenges and seize opportunities for growth and advancement.
- 5. Global Citizenship and Cultural Sensitivity: Graduates will possess a global perspective and cultural sensitivity, recognizing the interconnectedness of diverse communities and the importance of collaboration across borders. They will engage in cross-cultural dialogue, embrace diversity, and contribute to the advancement of knowledge and understanding on a global scale.

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



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.
- PO2. Environment and sustainability: Apply broad understanding of impact of science subjects in a global, economic, environmental and societal context and demonstrate the knowledge of, and need for sustainable development.
- PO3. Ethics: Apply ability to develop sustainable practical solutions for science subject related problems within positive professional and ethical boundaries.
- PO4. Individual and team work: Function effectively as a leader and as well as team member in diverse/ multidisciplinary environments.
- PO5. Communication: Communicate effectively on complex science subject related activities with the scientific community in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO6. Project management and finance: Demonstrate knowledge and understanding of the first principles of science and apply these to one's own work as a member and leader in a team, to complete project in any environment.
- PO7. Life-long learning: Recognize the need for lifelong learning and have the ability to engage in independent and life-long learning in the broadest context of technological change.

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



Programme Specific Outcomes (PSOs):

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

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

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

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

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

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

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

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

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

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

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



Course Outcomes (CO's) Semester-I

DSC-1: FUNDAMENTALS OF CHEMISTRY-1

Course Outcomes (COs) :

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

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

DSC-2 : Lab Course -1

Course Outcomes (COs):

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

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



SEC-1 B : - Stoichiometry-I

Course Outcomes (COs) :

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

- 1. understand theoretical aspects and working principles of chemistry labwares,
- 2. prepare all standards solutions, buffer solutions, indicators, common laboratory reagents,
- 3. perform the some basic experiments,
- 4. develop skills in common laboratory techniques,

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

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

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

GE/OE -1 : Herbal Chemistry - I

Course Outcomes (COs):

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

CO1: acquainted with importance of herbal drugs,

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

CO3: acquire the knowledge of organic farming

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

CO5: know health benefits and role of nutraceuticals



Semester-II DSC-3 : FUNDAMENTALS OF CHEMISTRY-2

Course Outcomes (COs) :

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

- i) Identify the type bond
- ii) Predict the shape and geometry and bond angle in a molecule
- iii) Understand the factors affecting ionic bond formation
- iv) Identify types of isomerism
- v) Apply the CIP rules for nomenclature of stereoisomers
- vi) Rate of reactions and factors affecting it
- vii) Solve the numerical on order reactions

DSC-4 : Lab course-2

Course Outcomes (COs) :

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

- i) Acquire skills in common techniques for the Volumetric estimations of inorganic compound
- ii) Acquire skills in common techniques preparation and purification of organic compounds.
- iii) Assess the effectiveness of purification techniques
- iv) Develop precision in measuring and recording physical constants
- v) Analyze the relationship between melting/boiling points and purity.
- vi) Develop skills in recording and reporting experimental procedures and results
- vii) Handle different apparatus like eudiometer viscometer, stalagmometer for determining physical properties

VSC-1 B : (TITLE OF PAPER) - Soap and detergents

Course Outcomes (COs):

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

CO1: Can gain the information about soaps, detergents and shampoos.

CO2: Can Acquire knowledge of basic concepts and techniques of soap and detergent industry.

CO3: Get hands training of analysis of soaps and detergents.

CO4: Aware about environmental aspects of detergents.

CO5: Development Skill for detergent, liquid soap and laundry soap making

VSC-2 B : (Lab Course) - Soap and detergents

Course Outcomes (COs):

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

CO1: Can gain the information about soaps, detergents and shampoos.

CO2: Can Acquire knowledge of basic concepts and techniques of soap and detergent industry.

CO3: Get hands training of analysis of soaps and detergents.

CO4: Aware about environmental aspects of detergents.

CO5: Development Skill for detergent, liquid soap and laundry soap making

GE/OE-2 : Herbal Chemistry-II

Course Outcomes (COs):

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

CO1: acquainted with importance of herbal drugs,

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

CO3: acquire the knowledge of organic farming

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

Prof J.V. Bharad) HOD, Chumidty Dept. Chhatrapati Sambhajingar

Dept. of Physics (Senior) Vasantrao Naik Mahavidyalaya, Aurangabad.

Vasantrao Naik Mahavidyalaya, Chh. Sambhajinagar IQAC Department of Physics Academic Year 2024 – 2025

Date:20-07-24

To The Principal, VNM, Chh. Sambhajinagar

Subject: Regarding submission of PSOs, COs for website update...

Resp Sir,

As per the above mentioned subject I am submitting herewith the PSOs, COs for website update based on the syllabi of NEP 2020 for FYBSc and CBCS pattern for TYBSc and SYBSc for the academic year 2024-25.

This is for your kind information. Thank you.

20-7-24 Submitted l

Mrs. Manisha Ghogare Head Dept of Physics VNM.Chh.Sambhajinagar

HEAD

Dept of Physics Vasantrao Najk Mahavidyalaya AURANGABAD-431 003.

Department of Physics

NEP 2020 Program Specific Outcomes (PSOs):

On completion of 03/04 years degree in BSc Physics student will be able to:

- PSO1 : Domain Knowledge : Graduates will have an in depth comprehension of fundamental theories and principles across various domains of Physics, encompassing classical mechanics, electromagnetism, thermodynamics, quantum mechanics, nuclear and high energy physics, solid state physics, material science, electronics and modern physics.
- PSO2: Problem Analysis: Graduates will demonstrate adeptness in analyzing complex physical problems, formulating hypotheses and employing appropriate mathematical and computational techniques and solutions. They will understand the significance of equations, formulas, graphs and mathematical tools. Furthermore they will effectively utilize technology for experimental design and implementation, data analysis, numerical methods and computational techniques in problem solving.
- PSO3: Design development of solutions: Graduates will possess the capability to create and execute experimental setup, simulations and theoretical models, effectively addressing scientific inquiries and resolving practical physics related issues. They will have both fundamental and advanced level expertise in physics, enabling them to proficiently utilize computational tools and scientific software.
- PSO4: Conduct Investigation of complex problems: Graduates will exhibit proficiency in conducting investigations of intricate physics problems, which involves effectively utilizing established knowledge and methodologies to design experiments, meticulously analyzing resulting data to extract pertinent information and accurately interpreting data to draw valid conclusions, thereby contributing to a deeper comprehension of the problem under scrutiny.
- PSO5: Modern Tools: Graduates will demonstrate proficiency in employing modern experimental, computational and data analysis tools and techniques prevalent in physics research and industrial settings. They will adeptly apply and cultivate skills in physics and engineering for industrial applications, production and technology development and transfer. Furthermore they will hone advanced analytical skills tailored for job requirements in industries, consultancies, educational institutions research organizations or public administration.
- PSO6: Communication Skills : Graduates will effectively communicate scientific ideas, methodologies and results through written reports, oral presentations and scientific publications, facilitating collaboration and dissemination of knowledge within the scientific community.



Dept. of Physics (Senior) Vasatiteo Naik Mahavidyalaya, Aurangabad.

Course Outcomes:

B. Sc. F. Y. Semester I: DSC-1: Mechanics, Properties of matter

On completion of this course students will be able to understand-

- To understand Newton's law of motion
- Recognize different forces existing in nature and their physical significance
- Acquire deep knowledge of physical quantities such as elasticity, viscosity, surface tension.
- Develop the capacity to investigate and analyze daily problem related to mechanical movement.

B. Sc. F. Y. Semester I: DSC-2: Practical course based on DSC-1

On completion of this course students will be able to understand-

- Understand gravitational acceleration through pendulum analysis and learn material stiffness and viscosity determination techniques using various setups.
- Explore rotational dynamics through flywheel experiments for moment of inertia and torsional property analysis.
- Develop instrument precision skills via least count analysis, crucial for physics and related field pursuits.

B. Sc. F. Y. Semester II: DSC-3: Optics

On completion of this course students will be able -

- Acquire the basic concept of optics and its applications
- Explain how image formation takes place in lenses
- Understand the operations of many modern optical devices
- Understand the optical phenomenon such as interference and diffraction

B. Sc. F. Y. Semester II: DSC-4: Practical course based on DSC-3

On completion of this course students will be able to understand-

- Understanding of interference and diffraction phenomena through hands-on experimentation.
- Appreciation of practical applications of optical instruments across various scientific disciplines.
- Proficiency in conducting precise measurements and observations using optical instruments.
- Analyse experimental results critically and compare them with theoretical expectations.



Dept. of Physics (Senior) Vasantrio Naik Mahavidyalaya, Aurangabad.

B. Sc. S. Y. Semester III: PHY 311- Statistical Physics and Relativity

On completion of this course students will be able to understand-

- > Show an analytic ability to solve problems relevant to statistical mechanics
- Can explain the procedures for deriving the relation between thermodynamic parameters such as pressure, temperature, entropy and heat capacity from the distribution functions
- Can apply the methods of statistical physics in other fields of physics and related fields
- > Demonstrate knowledge and broad understanding of special relativity

B. Sc. S. Y. Semester III: PHY 312-Modern and Nuclear Physics

On completion of this course students will be able to understand-

- The factors influencing photoelectric effect, experimental setup and applications
- The fundamentals of lasers, laser systems, their characteristics and diversified applications including industry, medicine and defence
- Use this knowledge for applications of lasers in specific fields of their interest
- Demonstrate the ability to critically evaluate the results in nuclear and particle physics
- Identify the strengths and limitations of various nuclear models.

B. Sc. S. Y. Semester IV: PHY 411- Semiconductor and Digital Electronics Paper VII

On completion of this course students will be able to understand-

- Basic semiconductor devices
- Various Transistor biasing Techniques and detailed study of Single stage Amplifier
- How amplifier can be converted into oscillator
- Importance of OP-Amp and its various circuits
- Number systems, logic gates and Boolean Algebra.
- P

B. Sc. S. Y. Semester IV: PHY 412- Condensed Matter Physics Paper VIII

On completion of this course students will be able to understand-

- Expose students to the basic concepts in condensed matter physics
- Recognize common crystal structures
- Explain the physics of different types of bonds and bonding in solids
- Describe electrical conduction in crystals
- Thermal properties of solids
- The detail study of Hall effect



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Dept. 61 Physics (Senior) Vasantrao Naik Mahavidyalaya, Aurangabad,

T Y BSc Sem V : PHY 511: Classical and Quantum Mechanics

On completion of this course students will be able to understand-

- Idea and concepts in classical physics
- Basic concepts in Vibrational principle and Principle of Least Actions
- > Difference between classical and quantum mechanical theory and approach
- Linear Vector Space, operators and tools to calculate Eigen values
- Various techniques to solve time dependent and time independent Schrodinger equations using different coordinate systems.

T Y BSc Sem V : PHY 512: Electrodynamics

On completion of this course students will be able to understand-

- The difference between static and dynamical systems
- Maxwell's equations and time-varying fields
- Gauges in electrodynamics, retarded potentials and its applications
- Radiation from time varying source, charged particle dynamics and relativistic electrodynamics

T Y BSc Sem VI : PHY 611: Atomic and Molecular Physics

On completion of this course students will be able to understand-

- Gain the through understanding of the basic structure of hydrogen like atoms
- Learn the selection rules for two electron atoms and many electron atoms
- Apply various molecular spectroscopy principles
- Apply knowledge of physics to become successful in national level examinations

T Y BSc Sem VI : PHY 612: Optical Fiber and Communication

On completion of this course students will be able to understand-

- Realize the significance of optical fiber communication
- Designing the optical system
- Understand the construction and working of optical fiber cable
- Develop the knowledge of fiber fabrication
- Identify and understand the needs of OFC

Mr. Manisha Shogare) HoD, Dept. of Physics

VASANTRAO NAIK MAHAVIDYALAYA

CHH. SAMBHAJINAGAR

MATHEMATICS DEPARTMENT 2024-25

- Programme Objectives
- Programme Outcomes
- Programme Specific Outcomes
- Course Outcomes



Programme Objectives



The undergraduate degree course in Mathematics aims to provide:

- a) In-depth knowledge in Mathematics through understanding of key mathematical concepts, principals, theories and their applications .
- b) Inculcate strong interest in learning mathematics.
- c) Evolve broad and balanced knowledge and understanding of definitions, key concepts, principles and theorems in mathematics.
- d) Enable learners/students to apply the knowledge and skills acquired by them during the programme to solve specific theoretical and applied problems in mathematics.
- e) Develop in students the ability to apply relevant tools developed in mathematical theory to handle issues and problems in social and natural sciences.
- f) Provide students with sufficient knowledge and skills that enable them to undertake further studies in mathematics and related disciplines.
- g) Sufficient subject matter competence enable students to prepare for various competitive examinations such as IIT-JAM, GATE, GRE, UGC-CSIR, NET-JRF and civil services examinations etc.

Programme Outcomes

The learning outcomes of the undergraduate degree course in Mathematics are as follows:

- a) Communicate mathematics effectively by written, computational and graphic means.
- b) Create mathematical ideas from basic axioms.
- c) Gauge the hypothesis, theories, techniques and proofs provisionally
- d) Utilize mathematics to solve theoretical and applied problems by critical understanding, analysis and synthesis.
- e) Identify applications of mathematics in other disciplines and in the real world leading to enhancement of career prospects in a plethora of fields and research.

Programme Specific Outcomes

On completion of the 03/04 years degree in B.Sc. (Mathematics) students will be able to:

- a) Disciplinary Knowledge bachelor's degree in mathematics is the culmination of indepth knowledge of Algebra, Calculus, Geometry, Differential Equations and several other branches of pure and applied mathematics. This also leads to study the related areas.
- b) Communication Skills ability to communicate various mathematical concepts effectively using examples and their geometrical visualization. The skills and knowledge gained in this programme will lead to proficiency in analytical reasoning which can be used for modelling and solving real life problems.
- c) Critical Thinking And Analytical Reasoning the students undergoing this programme acquire ability of critical thinking and logical reasoning and capability of recognizing and distinguishing various aspects of real life problems.



- d) Problem Solving the mathematical knowledge gained by the students through the programme develops an ability to analyze the problem, identify and define appropriate computing requirements for its solution. This programme enhances students' overall developments.
- e) Research Related Skills Completing of this programme develops capability of inquiring about appropriate questions relating to the mathematical concepts different areas of mathematics.
- f) Information/digital literacy the completion of this programme will enable the learner to use appropriate software to solve algebraic equations and differential equations.
- g) Self-Directed Learning the students completing this programme will develop ability of working independently and to make an in-depth study of various notions of mathematics.
- h) Moral And Ethical Awareness/reasoning the student completing this programme will develop an ability to identify unethical behavior such as fabrication, falsification or misinterpretation of data and adopting objectives, unbiased and truthful actions in all aspects of life in general and mathematical studies in specific.
- i) Lifelong Learning this programme provides self directed learning and lifelong learning skills. This programme helps the learner to think independently and develop algorithms and computational skills for solving real world problems.
- j) Ability to pursue advanced studies and research in pure and applied mathematical sciences.

Course Outcomes

DSC 1 Calculus

After completion of course students will be able to:

- Find derivative of hyperbolic, inverse hyperbolic functions and nth derivative of given functions.
- 2) Find the Maclaurin's series expansion of functions.
- 3) Find the partial derivatives of functions.
- 4) Determine areas of plane regions, length of curves and volume of solid of revolution.

DSC 2 Lab Course On Calculus

After completion of course students will be able to:

- Find derivative of hyperbolic, inverse hyperbolic functions and nth derivative of given functions.
- 2) Find the Maclaurin's series expansion of functions.
- 3) Find the partial derivatives of functions.
- 4) Determine areas of plane regions, length of curves and volume of solid of revolution.

Sec 1A Combinatorial Mathematics

After completion of course students will be able to:

- 1) Apply permutations and combinations.
- 2) Find the number of circular permutations.
- 3) Find the number of ways of selection out of given things.
- 4) Apply pigeonhole principle and inclusion-exclusion principle.

Sec 2 Lab Course Outcomes

After completion of course students will be able to:

- 1) Apply permutations and combinations.
- 2) Find the number of circular permutations.
- 3) Find the number of ways of selection out of given things.
- 4) Apply pigeonhole principle and inclusion-exclusion principle.

DSC 3 Differential Equations

After completion of course students will be able to:

- 1) Determine the solution of first order linear differential equations,
- 2) Determine the solution of exact differential equation.
- 3) Determine the solution of linear equations with constant coefficients using general and short method.
- 4) Determine the solution of linear homogeneous differential equations.

DSC 4 Lab Course 2 Depending on Differential Equations

After completion of course students will be able to:

- 1) Determine the solution of first order linear differential equations.
- 2) Determine the solution of exact differential equation.
- 3) Determine the solution of linear equations with constant coefficients using general and short method.
- 4) Determine the solution of linear homogeneous differential equations.

VSC 1B Basic Statistics

After completion of course students will be able to:

- 1) Derivation of mean, mode and median and derivation for the given data.
- 2) Apply the concepts of probability.

VSC 2 Lab Course Depending on Basic Statistics

After completion of course students will be able to:

1) Understand the Basic Statistics.



MAT 301 Differential Equations



Course Objectives:

Students will learn the basic methods of finding Solutions of Differential Equations.

Course Outcomes:

- 1) Determine the solution of first order linear differential equations,
- 2) Determine the solution of exact differential equation.
- 3) Determine the solution of linear equations with constant coefficients using general and short method.
- 4) Determine the solution of linear homogeneous differential equations.

MAT 302 Laplace and Fourier Transform

Course Objectives:

Students will learn the fundamental properties of Laplace and Fourier Transform.

Course Outcomes:

- 1) Determine Laplace Transform for various functions and understand the properties of Laplace Transform.
- 2) Determine Inverse Laplace Transform, properties of Inverse Laplace Transform and Solve problems using Convolution Theorem.
- 3) Determine Fourier Transform and understand the properties of Fourier Transform, Fourier Sine and Cosine Transform.
- 4) Apply Laplace Transform to find solutions of differential equations.

MAT 401 Partial Differential Equations

Course Objectives:

Students will learn the methods of finding Solutions of Partial Differential Equations.

Course Outcomes:

- 1) Solve Lagrange's Equation.
- 2) Find different types of solutions like complete integral, general integral and singular integral.
- 3) Determine the solution of partial differential equations using Charpit's Method.
- 4) Describe Monge's Method, Method of Transformation.

MAT 402 Numerical Analysis

Course Outcomes:

1) Describe Finite Differences and apply Newton's Formulae for Interpolation.



- 2) Explain and apply Lagrange's and Newton divided difference formula for interpolation.
- 3) Apply Gauss Interpolation Formulae, Stirling and Bassel's Formulae for interpolation.
- 4) Apply Numerical Differentiation and Numerical Quadrature Formulae.

MAT 302P Lab Course 1

Based on MAT 301 and MAT 302:

CO1: Understand Differential Equation and Laplace and Fourier Transform by problem solving.

MAT 402P Lab Course 2

Based on MAT 401 and MAT 402:

CO1: Understand Partial Differential Equation and Numerical Analysis by problem solving.

MAT 501 Real Analysis 1

Course Outcomes:

- 1) To introduce the basic concepts and notions of real analysis.
- 2) To learn the basic concepts of Sequence and Series of Real Numbers.
- 3) To acquire the skills of finding Jacobians.

MAT 502 Abstract Algebra 1

Course Outcomes:

- 1) Describe Group and Subgroup.
- 2) Explain Normal Subgroup and Quotient groups.
- 3) Define Rings and some special type of Rings.
- 4) Describe Ideals and Maximal Ideals.

MAT 503P Lab Course 3

Based on MAT 501 and MAT 502:

Course Outcomes:

- Define and recognize bounded, convergent, divergent, Cauchy's and Monotonic Sequences.
- 2) Define and recognize convergence and divergence of series.
- 3) Determine the Jacobian of Implicit and Explicit Function.



- 4) Describe Group and Subgroup.
- 5) Explain Normal Subgroup and Quotient groups.
- 6) Define rings and some special types of rings.
- 7) Describe ideals and maximal ideals.

MAT 505 Programming in C 1 (Skill Course)

Course Outcomes:

- 1) Understand and apply the fundamentals of C Program.
- 2) Define and declare data types and variables.
- 3) Apply various types of operators and mathematical expressions.
- 4) Read and write the character, input and output.

MAT 601 Real Analysis 2

Course Outcomes:

- 1) Describe several basic concepts of metric spaces and their properties.
- 2) Understand properties of Riemann integrable functions and applications of fundamental theorems of calculus.
- 3) Find Fourier Series of some standard functions and its applications.

MAT 602 Ordinary Differential Equation

Course Outcomes:

- 1) Classify and identify types of functions.
- 2) Solve first and Second Order Differential Equations.
- 3) Solve Initial Value Problems and study properties of solutions of IVP.
- 4) Find Wronskian of the solutions.

MAT 603P Lab Course 4 based MAT 601 and 602

Course Outcomes:

- 1) Describe several basic concepts of metric spaces and their properties.
- 2) Understand properties of Riemann integrable functions and applications of fundamental theorems of calculus.
- 3) Find Fourier Series of some standard functions and its applications.
- 4) Classify and identify types of functions.
- 5) Solve first order and second order differential equations.
- 6) Solve Initial Value Problems and study properties of solutions of IVP.
- 7) Find Wronskian of the solutions.



MAT 605 Programming in C 2

Course Outcomes:

- 1) Understand and apply various types of statements.
- 2) Understand and apply loops in C program.
- 3) Understand and apply one dimensional, two dimensional and multidimensional arrays.

G. S. Kawale HOD of Mathematics Department

Vasantrao Naik Shikshan Prasarak Mandal's Vasantrao Naik Mahavidyalaya, Chhatrapati Sambhajinagar Department of Zoology

Course Outcome/Program Outcome and Program Specific Outcome 2024-25

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.
- PO2. Environment and sustainability: Apply broad understanding of impact of science subjects in a global, economic, environmental and societal context and demonstrate the knowledge of, and need for sustainable development.
- PO3. Ethics: Apply ability to develop sustainable practical solutions for science subject related problems within positive professional and ethical boundaries.
- PO4. Individual and teamwork: Function effectively as a leader and as well as team member in diverse/multidisciplinary environments.
- PO5. Communication: Communicate effectively on complex science subject related activities with the scientific community in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO6. Project management and finance: Demonstrate knowledge and understanding of the first principles of science and apply these to one's own work as a member and leader in a team, to complete project in any environment.
- P07. Life-long learning: Recognize the need for lifelong learning and have the ability to engage in independent and life-long learning in the broadest context of technological change.

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



Programme Specific Outcomes (PSOs):

On completion of the 03/04 years Degree in B.Sc. (Zoology) students will be able to:

- PSO1: Domain knowledge: This programme will demonstrate and apply the deep knowledge of fundamental and advanced areas of subject zoology that will provide both classical and modern concepts of zoology in higher education.
- PSO2: Problem Analysis: Identify the problems related to subject at varied complexity and develop strong, critical thinking and abilities for substantiated solution and conclusion effectively.
- PSO3: Design Development of solutions: Graduates will possess the capability to create and execute research ideas. They will have both fundamental and scientific approach towards Zoology.
- PSO4: Conduct Investigation of complex problems: Graduates will be established knowledge and methods to design experiments, analyze resulting data and interpret the same to provide valid conclusions. Importance is given to practical learning and presentation skill of students. The lab courses and skill provide students to their employability.
- PSO5: Modern Tools and techniques: Graduate will create appropriate techniques and cultivate skills in life science for agricultural, animal husbandry and relevant to human studies more emphasis is given to branches like biochemistry, economic zoology, behavioural biology, evolutionary biology, molecular biology, genetic engineering, bioinformatics etc.
- PSO6: Communication Skills: Graduates will effectively communicate scientific ideas, methodologies, and results through written reports, oral presentations, and scientific publications, facilitating collaboration and dissemination of knowledge within the scientific community.
- PSO6: Research related skill: Ability to pursue advanced studies and research in zoology and provide opportunity for the mobility of the student both within and across the world.



<u>BSc I</u> Revised Course Structure and Curriculum (As per NEP-2020)

Semester: I

Class: B.Sc I

Title/Number of the Paper: Animal Diversity-I (Non-Chordata)/DSC-1

Course Outcomes (COs): After completion of the course, students will be able to -

i Understand general organization of unicellular and multicellular animals.

ii Recognize diversity and adaptation of invertebrate animals and significance.

iii Acquire deep knowledge and importance of biodiversity conservation. iv Develop the capacity to investigate pathogenicity of micro and macro fauna.

Semester: I

Class: B.Sc I

Title/Number of the Paper: DSC-2: Practical's Based on DSC-1, Animal Diversity-I (Non-Chordata)

Course Outcomes (COs): After completion of the course, students will be able to-

i Understand systemic position, habit and habitat of invertebrate animals.

ii Understand the pathogenicity and life cycle of parasite and vectors.

iii Develop skills to recognize surrounding animals and their importance

Semester: II

Class: B.Sc I

Title/Number of the Paper: DSC-3: Animal Diversity-II (Chordata)

Course Outcomes (COs): On completion of the course, students will be able to,

i. Understand general organization of vertebrate animals.

ii. Recognize diversity, migration and adaptive radiation of vertebrate, animal

iii. Acquire deep knowledge and importance of biodiversity conservation.

iv. Develop the capacity to understand biological importance and their conservation methods.

Semester: II

Class: B.Sc I

Title/Number of the Paper: DSC-4: Practical Based on DSC-3 (Animal Diversity-II)

Course Outcomes (COs): On completion of the course, students will be able to,

i Understand systemic position, habit and habitat of vertebrate animals.

ii Understand the adaptive features of fishes, birds.

iii Understand the physiological and anatomical study of vertebrate animals

iv Develop skills to recognize biodiversity of animals and their importance

Semester: I

Class: B.Sc I (Skill Enhancement Course)

Title/Number of the Paper: SEC-1: Bee Keeping

Course Outcomes (COs): After completion of the course, students will be able to -

i The learner will able to differentiate in different types of honey bee castes.

ii Learner will be able to use the artificial hive for beekeeping

iii Learner will be able to use the technique of honey purification and processing.

iv Learner will be able to construct the artificial honey hive and maintain it.

v Learner if is not employed can find own employment by doing Bee keeping vi Lerner can start own beekeeping equipment agency for farmers or beekeepers

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Class: B.Sc I (Skill Enhancement Course)

Title/Number of the Paper: SEC-2: Practical's based on SEC-1 (Bee Keeping) Course Outcomes (COs): After completion of the course,

i The learner will able to differentiate in different types of honey bee castes.

ii Learner will be able to use the artificial hive for beekeeping

iii Learner will be able to use the technique of honey purification and processing.

iv Learner will be able to construct the artificial honey hive and maintain it

V Learner if is not employed can find own employment by doing Bee keeping

vi Lerner can start own beekeeping equipment agency for farmers or beekeepers

Semester: I

Class: B.Sc I (Generic/Open Elective)

Title/Number of the Paper: Vectors, Diseases and Management /GE/OE-1

Course Outcomes (COs): After completion of the course, students will be able to-

i To develop awareness about the causative agents and control measures of many commonly vector borne diseases

ii Recognize the symptoms and proper identification of vectors.

iii Learn feeding mechanism and causing ideas.

iv Understand the strategies for the management of vector borne diseases by Chemical, Biological and IPM

Semester: II

Class: B.Sc I (Vocational Skill Courses)

Title/Number of the Paper: VSC-1: Poultry Farming

Course Outcomes (COs): On completion of the course, students will be able to,

i Understand the status of Indian Poultry Industry.

ii Learn the Scientific Poultry farming.

iii Applied diversified Poultry practices

iv Recognize the different breeds of chicken

Semester: II

Class: B.Sc I (Vocational Skill Courses)

Title/Number of the Paper: VSC-2: Practical Based on VSC-1 (Poultry Farming)

Course Outcomes (COs): On completion of the course, students will be able to,

i. Understand the status of Indian Poultry Industry.

ii. Learn the Scientific Poultry farming.

iii.Applied diversified Poultry practices.

iv. Recognize the different breeds of chicken.

Semester: II

Class: B.Sc I (Generic/Open Elective)

Title/Number of the Paper: Dairy Production Technology/ GE/OE-2

Course Outcomes (COs): On completion of the course, students will be able to,

i. Understand the pre-requisites for starting a Dairy farm.

ii Recognize different breeds of Cows & buffaloes following safety precautions.

iii Prepare and give recommended feed and water for livestock

iv Maintain health of livestock along with productivity

v Vaccination of cattle, nutrients requirements

vi Entrepreneurship i.e., Effectively market dairy products

vii Ensure safe and clean dairy farm and Standard safety measures to be taken in establishing an industry viii Efficiently start and manage to establish or develop a Dairy Industry

B.Sc II

Semester Pattern Curriculum under, Choice based Credit System (CBCS

Semester: III Class: B.Sc II Title/Number of the Paper: Developmental Biology of Vertebrates/V Course Outcomes:

i. To know the basic concepts related to embryonic development

ii. To understand the basis of life of animal.

Semester: III Class: B.Sc II Title/Number of the Paper: ZOL-321 Practical based on Developmental Biology of Vertebrates Course Outcomes:

i.To learn the different developmental stages in vertebrates

ii. To understand the reproductive functions and types in various vertebrates

Semester: III Class: B.Sc II Title/Number of the Paper: Ecology /VI Course Outcomes:

1. Demonstrate knowledge of biotic and abiotic interactions.

2. Express understanding of environmental issues, and inter-relation between different components of ecosystems.

3. Ability to elaborate about distribution and abundance of organisms.

4. Apply different experimental techniques to study any ecosystem or its components.

5. Describe the relation between structures and function species in environment

Semester: III Class: B.Sc II Title/Number of the Paper: ZOL-322 Practical based on Ecology Course Outcomes:

i.To study physicochemical parameters of abiotic components

ii. Learn the water ecosystem organism through permanent slides

Semester: III

Class: B.Sc II Skill Enhancement Course (SEC) ZOL-SEC-313: Haematology

Course Outcomes:

At the end of course, student should be -

1. Able to analyze, study and report on material learned.

2. Able to assess the scope of animal biology and select appropriate area for further study.

3. Ability to explain composition and functions of blood.

2. Knowledge about compounds used in processing and storage of blood

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Semester: IV Class: B.Sc II Title/Number of the Paper: Biochemistry and Endocrinology/VII Course Outcomes:

i.Students will learn the fundamentals of biochemical process and their applications ii.Students will understand the structure and function of endocrine system.

Semester: IV Class: B.Sc II Title/Number of the Paper: ZOL-411 Practical based on Biochemistry and Endocrinology Course Outcomes:

i.To gain skills of chemical preparations ii.Knowledge of analytical instruments ii.Learn histology of endocrine glands

Semester: IV

Class: B.Sc II Title/Number of the Paper: Evolution /VIII Course Outcomes: On successful completion of the course, the students will be able to i. Understand the theories and concepts of evolution ii. Learn the process of evolution in animals iii. Understand the patterns of evolutionary changes in animals

Semester: IV Class: B.Sc II Title/Number of the Paper: ZOL-422 Practical based on Evolution Course Outcomes: i.Undertsand evidences of Evolution ii.Learn adaptations and successive stages in Evolution iii.Identify patterns of speciation

Semester: IV Class: B.Sc II Skill Enhancement Course ZOL-413 Apiculture Course Outcomes:

1. Ability to understand and describe the life stages and social organization of honey bee species.

2. Ability to correctly explain and perform bee rearing, farming and harvesting practices.

3. Appreciate the economic importance of derivative benefits and byproducts of apiculture.

4. To identify and take remedial measures against the different bee diseases and predators

B.Sc III

Semester Pattern Curriculum under, Choice based Credit System (CBCS)

Semester: V Class: B.Sc III Title/Number of the Paper: Animal Physiology I /IX Course Outcomes: Understand the nutrition and physiology of digestion in man. Describe the structure and respiratory mechanism and transport of gases. Learn the structure and working of mammalian heart, blood composition and clotting mechanism. Semester: V Class: B.Sc III Title/Number of the Paper: Practical ZOL 521 based on ZOL511 Animal Physiology I Course Outcomes: Acquire increased practical knowledge of role of enzymes in organ system Learn the blood composition Describe blood count methods

Semester: V Class: B.Sc III Title/Number of the Paper: C2-- Fishery Science I /X Course Outcomes:By the end of course students will be able to i.Identify the marine, brackish as well as freshwater fishes. ii.Develop knowledge on inland and marine fisheries resources of India

Semester: V

Class: B.Sc III

Title/Number of the Paper: ZOL 522 based on ZOL 512 C2 - Fishery Science I

Course Outcomes: i.ldentify fish species ii.ldentify fishing nets and gears iii.Recognize edible fish species

Semester: VI

Class: B.Sc III

Title/Number of the Paper: Animal Physiology II /XI

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

i. Understand the structure and functional anatomy of kidney, osmoregulation and homeostasis.
ii. Describe the structure of nerve cells, and synapse muscles, and eye and ear and its physiology.
iii, Learn the process of gametogenesis, r hormones, reproductive cycle and methods of contraception.

Semester: VI Class: B.Sc III Title/Number of the Paper: ZOL-621 Practical based on ZOL611 Animal Physiology II Course Outcomes:

i. Acquire increased practical knowledge of role of biomolecules in organ system ii. Understand the reproductive control measures

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I.Identify histological structures of various organ system

Semester: VI Class: B.Sc III Title/Number of the Paper: C2 - Fishery Science II /XII Course Outcomes: By the end of course students will be able to i.Identify the freshwater fishes. ii.Develop knowledge on freshwater fish farming and fish seed production techniques. iii. Apply skills for identifying fish diseases and their control

Semester: VI Class: B.Sc III Title/Number of the Paper: ZOL-622 Practical based on C2 - Fishery Science II Course Outcomes: i.Identify Crafts and Gears ii.Describe fish parasites

Snehalata Ankaram Dept. of Zoology HEAD Departm 1 f Zoology Vasantrao North Havidy alays Aurange Soct-431003 Vasantrao Naik Mahavidyalaya, Chh. Smbhajinagar

Department of Computer Science

Chhatrapati Sambhajingar

Year 2024-2025

Programme Outcome (PO) --- B.Sc. Computer Science

PO 1. To develop problem solving abilities using a computer.

PO2. To prepare necessary knowledge base for research and development in Computer Science.

PO 3. **Ethics**: Apply ability to develop sustainable practical solutions for science subject related problems within positive professional and ethical boundaries.

PO 4. **Individual and team work**: Function effectively as a leader and as well as team member in diverse/ multidisciplinary environments.

PO 5. **Communication**: Communicate effectively on complex science subject related activities with the scientific community in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 6. **Project management**: Demonstrate knowledge and understanding of the first principles of science and apply these to one's own work as a member and leader in a team, to complete project in any environment.

PO 7. Life-long learning: Recognize the need for lifelong learning and have the ability to engage in independent and life-long learning in the broadest context of technological change.

PO 8. To train students in professional skill related to Software Industry.

Programme Specific Outcome (PSO) --- B.Sc. Computer Science

PSO1. **Domain knowledge**: Apply the knowledge of Computer Science fundamental, and advanced areas of Computer Science to provide comprehensive solution.

PSO2. **Problem Analysis**: Identify Computer Science related problems at varied complexity and analyse the same to formulate/ develop substantiated conclusion.

PSO3. **Design Development of solutions**: Design/ develop solutions for problems at varied complexity in various areas of Computer Science to address changing challenges put forward by market demand/ stakeholder

PSO4. **Conduct Investigation of complex problems**: Use established knowledge and methods to design of experiments, analyse resulting data and interpret the same to provide valid conclusions.

PSO5. **Modern tools**: Create, select, and apply appropriate techniques, resources, and modern electronics and relevant IT tools including prediction and modelling to complex Information Technology related activities with clear understanding of the limitations.



Department of Computer Science Vasantrao Naik Mahavidyalays, Aurangabad-4311 903.



Vasantrao Naik Mahavidyalaya, Chh. Smbhajinagar

Department of Computer Science

Year 2024-2025

Course Outcome

B.Sc. Computer Science First Year (First Semester)

B.Sc. Computer Science F.Y. First Semester		
Course	Course Outcomes	
M1-DSC-1: Programming in C	 Implement basic C programs Develop and implement conditional and iterative statements Implement different types of arrays Develop and implement modular applications in C using functions Implement structure and pointers 	
M2: DSC-3 : Database Management System (DBMS)	 Design data models, schemas and instances. Design E-R Model for given requirements and convert he same into database tables. Implement SQL: Data definition, constraints, schema, queries and operations in SQL. 	
M3-DSC-5: Operating System	 Gain a comprehensive understanding of the distinction between system software and application software. Grasp the diverse types of operating systems, their fundamental functions, and the evolutionary progression of OS, encapsulating advancements in functionality and compatibility over time. Gain insight into the concept of processes, process control blocks, Understand CPU Scheduling. Understand device management 	
SEC-1-A): HTML and CSS	 Understand fundamentals of web technologies. Construct visually appealing static web page. Understand linking in web page. Understand basics of forms. Use CSS for enhanced presentation and user experience. 	
SEC-1 B): P.C. Maintenance	 Understanding of computer hardware components and peripheral devices identify and troubleshoot common hardware issues Perform routine maintenance tasks ensure optimal performance Install, configure, and update operating systems, drivers, and software applications to maintain system stability and security Assembling and disassembling computer systems 	
GE/OE-1: Cyber Security	 Understands the concept and process of cyber security Understands the Online Dispute Resolution. Knows the Network & Mobile Security Techniques 	



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B.Sc. Computer Science First Year (Second Semester)

B.Sc. Computer Science F.Y. Second Semester		
Course	Course Outcomes	
M1-DSC-7 : Programming in C++	 Understand Principles of OOP's using C++ Design and implement OOP programs using C++ Understand Classes, Objects Inheritance and Polymorphism using C++ Develop Object oriented programming Skills and gain practical Experience 	
M2: DSC-9: Advanced Database Management System (ADBMS)	 i) Design E-R Model for given requirements and convert the same into database tables ii) Use database techniques such as SQL & PL/SQL- iii) Explain transaction Management in relational database System. 	
M3-DSC-11: Linux Operating System	 i) Upon successful completion of the course, the students will: ii) To acquaint students with various Linux commands and installation of iii) open source operating system. iv) To cultivate implementation skill of open source operating system. v) To develop skills in managing software and system administration tool. vi) To prepare students for future courses having technical operating system knowledge. 	
VSC-IA : JavaScript	 i) Ability to understand fundamentals of JavaScript ii) Proficiency in developing interactive and dynamic web applications. iii) Understanding of basic functions in JavaScript. iv) Understand Internet and web technology 	
VSC-1B Basics OF Networking	 i) Design and implement Computer Network ii) Analyse and troubleshoot Computer Network elated problems iii) Understand the various Newark protocols and services: iv) Understand network security threats and Vulnerability as well as various security protocols and encryption techniques 	
GE/OE-2: E-Commerce and E-Contracts	i) Understand issues in e-commerce.ii) Understands E-Commerce and E-Business and Approaches	



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B.Sc. Computer Science Second Year (Third Semester)

B.Sc. Computer Science S.Y. Third Semester		
Course	Course Outcomes	
CS-311 T Object Oriented	 Apply OOP principles to design efficient and scalable programs. Use C++ features to create complex and extensible programs. 	
C++	3. Develop generic and reusable code using Polymorphism.	
CS-312T Relational Database Management System	 Design and create a relational database schema using SQL. Implement various RDBMS functionalities such as data insertion, deletion, modification, and retrieval. Demonstrate the ability to use SQL to write complex queries for data analysis and reporting. Understand the principles of database normalization and apply them to ensure data integrity and optimize database performance. 	
CS-321T Linux Operating Systems	 Understand the various features and distributions of Linux OS. Ability to execute basic Linux commands. Ability to set ownership and permissions for files/directories. Ability to use the Vi Editor. 	
CS-322T Advance Data Structure	 Understand linked-lists and non-linear data structures like trees and graphs. Program Linked list and non-linear data structure's implementation in memory. Select appropriate data structures and algorithms for problems and to justify their choice. Understand advance algorithms like heaps, Kruskal's Algorithm, and Prim's Algorithm. 	
CS-331T Computational Statistics Using R	 Understand the core concepts and methods in statistics, and recognize their importance in various disciplines. Effectively use the R programming language to manage, analyse, and visualize data. Apply appropriate statistical techniques, such as hypothesis testing and regression analysis, to answer research questions and make data-driven decisions. Analyze real-world datasets using statistical methods and R, interpret the results, and communicate their findings to both technical and non-technical audiences. 	
CS-332T Web Fundamentals	 Develop functional and visually appealing web pages using HTML and CSS. Design responsive web layouts that adapt to different devices and screen sizes. Implement client-side scripts using JavaScript to add interactivity and dynamic behaviour to web pages. Validate and optimize web pages for accessibility, performance, and compliance with web standards. 	
CS-341T(A) Office Automation	 Define and explain the scope and benefits of office automation. Create and format documents using word processing tools. Manage data using spreadsheet and database management tools. Use communication and collaboration tools securely and maintain data privacy. 	



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B.Sc. Computer Science Second Year (Fourth Semester)

B.Sc. Computer Science S.Y. Fourth Semester		
Course	Course Outcomes	
CS-411T Core Java	 Understand the basic concepts of Java programming language. Write and implement exception handling in Java. Use constructors, wrapper classes, and string operations in Java programming. Use interfaces and threads in Java programming to create multi-threaded applications. 	
CS-412T Computer Graphics	 Geometrical Transformations in 2-Dimensional and 3-Dimensional perspectives Object representations Surface detection procedures Computer Animations 	
CS-421T Basics of Android OS	1. Student should perfect in the android operating system and its real time application development.	
CA-422T Computer Networks	 Design and implement computer networks. Analyze and troubleshoot network-related problems. Understand various network protocols and services. Understand network security threats and vulnerabilities, as well as various security protocols and encryption techniques. 	
CS-431 T Data Analytics	 Able to Analyze data using Excel. Able to effectively visualize data using advanced charting techniques Apply statistical analysis techniques in business scenarios Able to make data-driven decisions using advance analysis techniques. 	
CS-432T Open-Source Web Application	 Install and configure MySQL and Apache, and write basic PHP code to interact with them. Write PHP scripts to handle form submissions, set and delete cookies, and interact with files and directories. Develop an understanding of advanced PHP topics, including functions, arrays, objects, and strings, dates, and time. Build dynamic web applications using PHP and integrate them with MySQL and Apache. 	
CS-441T(C) Basic Python Programming	 Students will be able to comfortably use Python for programming tasks. Students will develop strong problem-solving skills applicable to computational and real-world scenarios. Students will be able to design and implement Python programs using OOP principles. Students will be adept at using key Python libraries for numerical computation, data manipulation, and visualization. 	

B.Sc. Computer Science Third Year (Fifth Semester)

	B.Sc. Computer Science Third Year (Fifth Semester)				
Sr. No	Course Code	Course Outcomes			
1	DSE-1A (1) A1: Advanced Java	 Implement Networking and Data base connectivity in Java for giapplication. Implement webpage with dynamic content and server side web applications. Implement and JSP. Use web application framework JSF to build user interfaces. Apply Model-View-Controller architecture to build complex client-server applications. 			
2	 2 DSE-1A (2) B2: Data Mining 3 DSE-2A (1) 3 A1: Software Engineering 1. Perform the pre-processing of data and apply mining techniques on in Identify the association rules, classification, and clusters in large data Solve real world problems in business and scientific information usin mining. 4. Use data analysis tools for scientific applications. 5. Implement various supervised machine learning algorithms. 1. Prepare SRS (Software Requirement Specification) document and SF (Software Project Management Plan) document. Apply the concept of Functional Oriented and Object Oriented Approach for Software Dess 3. Apply various testing techniques and test plan in. 4. Able to understand modern Agile Davalement 				
3					
4	DSE-2A (2) B2: Basic Data Science	 Recognize various disciplines that contribute to a successful data science effort. Understand the processes of data science - identifying the problem to be solved, data collection, preparation, modelling, evaluation and visualization. Be aware of the challenges that arise in data sciences. Develop and appreciate various techniques for data modelling and mining. 			
5	DSE-3A (1) A1: Artificial Intelligence	 Understand the search technique procedures applied to real world problems. Understand and use various types of logic and knowledge representation schemes. Understand various Game Playing techniques and apply them in programs. Gain knowledge in AI Applications and advances in Artificial Intelligence. 			
 4 DSE-3A (2) A1: Android Programming 4 I. To obtain knowledge of android and lite etc 2. To understand these concepts studen environment and its concepts with concepts with concepts with concepts with concepts with concepts with concepts and a student of the student		 To obtain knowledge of android and its features like history, designing, Sql lite etc To understand these concepts students should be aware from basic Java environment and its concepts with connectivity. It is one type of advance Operating System by learning this OS Students would be able to create smart phones application by themselves with database connectivity. 			
5	SEC-3(E) Aptitude and Reasoning	 Understand the basic concepts of quantitative ability Understand the basic concepts of logical reasoning Skills, Acquire satisfactory competency in use of reasoning Solve campus placements aptitude papers covering Quantitative Ability, Logical Reasoning Ability Compete in various competitive exams like CAT, CMAT, GATE, GRE, GATE, UPSC, GPSC etc. 			

KM

Chhatrapati Sambhajingar

B.Sc. Computer Science Third Year (Sixth Semester)

Sr. No	Course Code	Course Outcomes
1	DSE-1B (1) A1: Java Web Frameworks	 Implement MVC structure & its types in Java Web application. Understand use of Struct web frame work in web site development Use web application framework JSF to build user interfaces. Apply Model-View-Controller architecture to build complex client-server applications using hibernate and Spring boot.
2	DSE-1B (2) B2: Data Warehouse	 Learn and understand the usage, need and cost of Data Warehouse Learn various techniques for Data Warehouse. Understand Market Basket Analysis.
3	DSE-2B (1) A1: Software Quality Assurance & Testing	 Utilize the concepts in software development life cycle. Demonstrate their capability to adopt quality standards. Assess the quality of software product. Apply the concepts in preparing the quality plan & documents.
4	DSE-2B (2) B2: Advance Data Science	 Recognize various disciplines that contribute to a successful data science effort. Identify the data types, relation between data and visualization technique for data. Explain probability, distribution, sampling, Estimation Solve regression and classification problem. Develop and appreciate various techniques for data modelling and mining.
5	DSE-3B (1) A1: Machine Learning	 Explore the fundamental issues and challenges in Machine Learning including data and model selection and complexity. Appreciate the underlying mathematical relationships within and across Machine Learning algorithms Evaluate the various Supervised Learning algorithms using appropriate Dataset. Evaluate the various unsupervised Learning algorithms using appropriate Dataset. Design and implement various machine learning algorithms in a range of real-world applications.
6	SEC-4(G): Personality Development	 The students will be able to perform well on social ground. To help the student to be creative, and analytical. To develop their own specific skills. Polishing manners to behave appropriately in professional circles. Developing and maintaining optimistic nature. Understanding the art of entertaining.

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Department of Computer Science



Year 2024-2025

Programme Outcome (PO) --- B.C.A. Management Science

PO1: **Computational information**: Appreciate and apply mathematical organization, computing and domain information for the conceptualization of computing models from clear harms.

PO2: **Difficulty Analysis**: Talent to classify, significantly evaluate and prepare complex computing problems using fundamentals of computer knowledge and request domains.

PO3: **Drawing/Improvement of Solutions**: Facility to transform composite production 1 scenarios and present-day issues into problems, explore, recognize and propose included solutions using rising technologies.

PO4: Accomplish Investigations of Compound Computing Troubles: Ability to invent and ways experiments interpret data and present well up to date conclusions.

PO5: **Current Implement Procedure**: Skill to select recent computing tools, skills and techniques compulsory for original software solutions

PO6: Acquire Knowledge of business functions and associated regulations.

PO7: Develop Problem solving abilities

PO8: Acquire Administrative and managerial skills with desired technical proficiency.

Programme Specific Outcome (PSO) --- B.C.A. Management Science

PSO1: Understanding of the principles and operation of computer systems is known as knowledge of computing systems.

PSO2: Project development objectives are an understanding of the structure and evolution systems of software methodologies.

PSO3: Software Development Skills would be proficiency in a variety of programming languages and opensource platforms.

PSO4: Ability to acquire knowledge in various fields of computer science, and to apply in industry, entrepreneurship and/or higher studies, for a thriving career.

PSO5: Ability to develop software systems to enable the convenient use of the computing system and possess technical credentials.

PSO6: Ability to exercise the principles of management and strategic concepts required for teamwork as well as team management.



Department of Computer Science Vasantrao Nalk Mahavidyalaya, Aurangabed-4311 003.





Year 2024-2025

Course Outcome

B.C.A. Management Science First Year (First Semester)

Sr.No	Course Code	Course Outcomes
1	Fundamentals of Computer (BCA 101T)	 Implement basic C program. Develop and implement conditional and iterative statements Implement different types of array Develop and implement modular application in C using functions
2	Fundamentals of Computer Lab (BCA 102T)	 Understanding the basic Application of Computer Software Study the basic Components of Computer system Learn browsing and searching. Establish virtual Communication using various online Platforms.
3	Principles of Management (BCA 103T)	 Learners will absorb various management concepts such as planning, organizing, implementing, staffing, coordinating, controlling, motivating and Managerial Grid Learners will recognize the human skills and conceptual skills as per industry requirements about basic management skills. Learners will diagnose various styles and qualities of efficient leadership, Coordination, Controlling, Green Management
4	Accountancy (BCA 104T)	 Understand the theoretical framework of accounting and to prepare financial statements Explain and determine depreciation and value Understand the concepts of partnership firm and prepare accounts Develop the skill of preparation of trading and profit and loss account and balance sheet using computerized accounting
5	Cyber Security Generic Elective (from Science Faculty)	 Understanding the concept and process of cyber security Understanding the online dispute and resolution Knows the network and mobile security techniques
6	Web development using HTML (BCA 106P)	 Recognize the structure and purpose of HTML and use basic tag Create structure documents and organize content using headings, paragraphs, lists and tables Create hyperlinks and navigation menus incorporate Multimedia: embed images, audio, and video into web pages.
7	English: Communication skill /BCA 107T	 To develop awareness of the complexity of the communication process To develop effective listening skills in students so as to enable them to comprehend instructions and become a critical listener To develop effective oral skills so as to enable students to speak confidently interpersonally as well as in large groups To develop effective writing skills so as enable students to write in a clear, concise, persuasive and audience centred manner To develop ability to communicate effectively with the help of electronic media
8	IKS-1 (BCA 108T)	 Explain the importance of Forts. Study of Forts in Marathwada. Creating a public awareness about the fort in Marathwada.
9	CC-1 Health and Wellness (BCA 109T)	 Understand the awareness about the concept of Health and Wellness. Study the physical, mental, Social, emotional, wellbeing and lifestyle of an individual.



Year 2024-2025 Course Outcome

B.C.A. Management Science First Year (Second Semester)		
Sr.No	Course Code	Course Outcomes
1	Programming in C (BCA 201T)	 1: illustrate the flowchart and design an algorithm for a given problem and to develop IC programs using operators 2: Develop conditional and iterative statements to write C programs 3: Exercise user defined functions to solve real time problems 4: Inscribe C programs that use Pointers to access arrays, strings and functions. 5: Exercise user defined data types including structures and unions to solve problems
2	Business Statistics (BCA 203T)	 Comprehend the concept and scope of statistics Understand types and classification of data with analytical perspective Application of various statistical tools. identify and apply various methods of survey
3	Accountancy-II (BCA 204T)	 Describe concept and methods of goodwill for business with social perspective. Understand preparation of receipt and payment accounts Understand accounts of non-trading with company final accounts Describe concept of Single Entry System Apply steps to prepare income and expenditure account with balance sheet for business
4	E-business & Contract Generic Elective (BCA 205T)	 Understand issues in e-commerce Understand E-Commerce and E-Business-Models and Approach To make the student understand the E-commerce and its application. To make the student understand the Electronic Contract.
5	E-Business (BCA 206T)	 Understand e-Commerce and e-Business and their different platform Understand business models of- marketing Infer online financial services with all recent changes as per global need Acquire knowledge about c-Business systems and network topology Analyze growth of e-Commerce and associated regulatory act
6	Constitution of India (BCA 208T)	 To realise the significance of constitution of India to students from all walks of life and help them to understand the basic concepts of Indian constitution. To identify the importance of fundamental rights as well as fundamental duties. To understand the functioning of Union, State and Local Governments in Indian federal system. To learn procedure and effects of emergency, composition and activities of election commission and amendment procedure.
7	Yoga Education (BCA 209T)	 To enable the student to have good health. To practice mental hygiene. To possess emotional stability. To integrate moral values. To attain higher level of consciousness.

		Course Outcome
B.C.A. Management Science Second Year (Third Semester)		
Sr.No	Course Code	Course Outcomes
1	Principles of management/XIII	 To explain the evolution of Management and its principles. To discuss the functions of management and their importance in business. To propose the application of the principles of management in an organizational setup
2	Oops using C++ (XIV)	 Understand principles of OOP Using C++. Design and implement OOP programs using C++. Understand classes, objects, inheritance, and polymorphism using C++. Develop Object Oriented Programming skills and gain practical experience.
3	Business law I: xv	 Learn Indian contract act 1872.Sale of goods act 1930.Negotiable Instrument act 1881.Consumer protection act (amended 2002) and cyber and IT act 2000. Understand the basics structures, rules and power of consumer protection act. To know the provision regarding consumer protection act and redressal.
4	DBMS-XVI	 Understand the different issues involved in the design and implementation of a database system Understand and use data manipulation language to query update, and manage a database
5	E-business Essentials/XVII	 The nature and scope of e-business technologies along with a brief history of their development and implementation. The course familiarizes students with the way e-business technologies can be applied within business firms. This subject considers the organizational dimension of e-business implementation in order to reflect the likely nature of future challenges and opportunities. To prepare student to acquire the knowledge of recent trend in e- commerce .also, students are prepare for websites management which can helpful in industry.
6	RDBM XVIII	 Understand RDBMS concepts, including definitions, characteristics, and advantages. Learn and compare various data models and the ER model, including integrity constraints. Master relational algebra operations, joins, and relational calculus. Develop proficiency in SQL, including DDL, DML, and complex queries. Introduction to PL/SQL basics, control structures, and database programming. Apply practical skills in designing, implementing, and managing databases.

Course Outcome

B.C.A. Management Science Second Year (Fourth Semester)

Sr.No	Course Code	Course Outcomes	
1	Cost Accountancy (XIX)	 Ascertainment of the cost per unit of the different products that a business concern manufacturers. To correctly analyse the cost of both the process and operations. Disclosure of sources for wastage of material, time, expenses or in the use of the equipment and the preparation of reports which may be necessary to control. Provide requisite data and help in fixing the price of products manufactured or services rendered. Determination of the profitability of each of the products and help management in the maximization of these profits. 	
2	Java programmin g (XX)	 To introduce the object-oriented programming concepts. To understand object-oriented programming concepts, and apply them in solving problems. To introduce the principles of inheritance and polymorphism; and demonstrate how they relate to the design of abstract classes To introduce the implementation of packages and interfaces To introduce the concepts of exception handling and multithreading. To introduce the design of Graphical User Interface using applets and swing controls. 	
3	MIS & DSS (XXI)	 To describe the role of information technology and decision support systems in business and record the current issues with those of the firm to solve business problems. To enable the students to use information to assess the impact of the Internet and Internet technology on electronic commerce and electronic business and understand the specific threats and vulnerabilities of computer systems. To provide the theoretical models used in database management systems to answer business questions. 	
4	Business Law-II (XXII)	 1The course aims to give the learners a broad understanding about important aspects of legal environment of business 2 To make them study how various special contracts are brought into force 3 to impart knowledge about legal agreement so that they get acquainted with the process of establishing legal relationships. 4 To have knowledge of various measures protecting the interest of the consumers. 	
5	Entrepreneu rship Development (XXIII)	 To explain concepts of Entrepreneurship and build an understanding about business situations in which entrepreneurs act To qualify students to analyse the various aspects, scope and challenges under an entrepreneurial venture. To discuss the steps in venture development and new trends in entrepreneurship. 	
6	PC maintenance (XXIV)	 Identify Computer Components Understand hardware parts and their functions. Set up and manage Windows/Linux operating systems. Perform system updates, backups, and component upgrades. Understand Power Supply and Cooling Systems 	



Course Outcome

B.C.A. Management Science Second Year (Fifth Semester)			
Sr. No	Course Code	Course Outcomes	
1	Management accounting: XXV	 To familiarise the student with the basics management accounting concepts and process. Learn analysis and interpretation of financial statement, fund flow statement and cash flow analysis ratios analysis. understand the concept of relevant and irrelevant costs and make decisions related to different business situations using marginal costing and differential costing techniques. 	
2	SQL2017- XXVI	 Understand user requirement and frame it in data model. Understand the impotance and major issues of database security and the maintenance of data integrity. 	
3	VB (XXVII)	 The objective of this course is to provide students with a comprehensive understanding of Visual Basic programming, including its development environment, programming paradigms, GUI design, and database connectivity. The course aims to equip students with the skills needed to create functional applications using Visual Basic, covering both basic and advanced programming concepts. 	
4	Organisational Behavioural :(XXVIII)	nisational vioural1. To prepare students to understand human behaviour at work 2. To study human behaviour at work 3. To get knowledge of individual and interpersonal perspectives. 4. To get the depth knowledge of motivation, leadership and organisational change	
5	Software Engineering (XXIX)	 To study Software Development Life Cycle, Development models and Agile Software development. To study fundamental concepts in software testing, including software testing objectives, process, criteria, strategies, and methods. o discuss various software testing issues and solutions in software unit test; integration, regression, and system testing. To learn the process of improving the quality of software work products. To gain the techniques and skills on how to use modern software testing tools to support software testing projects. 	
6	Banking and Insurance/XXX	 To acquaint the fundamental principles of banking supervision and its practices in India To explain about the various technologies used in banking To acquaint the working of insurance companies :To explain about Insurance Industry Environment 	



Course Outcome

B.C.A. Management Science Third Year (Sixth Semester)

Sr.No	Course Code	Course Outcomes
1	Elements of Commercial Portal (ECP) (XXXI)	1. Student will be able to know the Elements of commercial portal with XML, JQuery, and other details.
2	Android 9(XXXII)	 1.To obtain knowledge of android and its features like history, designing, Sql lite etc 2.To understand these concepts students should be aware from basic Java environment and its concepts with connectivity. 3.provide basic ideas about how to create mobile application using android operating System
4	Business Law- III(XXXIII)	 1 The course aims to give the learners a broad understanding about important aspects of legal environment of business 2 to make them study how various special contracts are brought into force 3 to impart knowledge about legal agreement so that they get acquainted with the process of establishing legal relationships. 4 To have knowledge of various measures protecting the interest of the consumers.
5	Software Testing(XXXV)	 Understand and describe the basic concepts of functional (black box) software testing. Identify a number of test styles and techniques and assess their usefulness in your context. Understand the basic application of techniques used to identify useful ideas for tests. Help determine the mission and communicate the status of your testing with the rest of your project team. Characterize a good bug report, peer-review the reports of your colleagues, and improve your own report writing. Understand where key testing concepts apply within the context of unified processes.
6	Service marketing (XXXVI)	 The course brings out the emerging service environment in India and the world. It emphasises the distinctive aspects of Services Marketing. It aims at equipping students with concepts and techniques that help in taking decisions relating to various services marketing situations.



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Course Outcome

B.Sc. Computer Science Optional First Year (First Semester)

B.Sc.	Computer Science F.Y. First Semester Opt	
Course	Course Outcomes	
M1-DSC-1: Basics of Computer	 Implement basic L programs Develop and implement conditional and iterative statements. Implement different types of arrays Develop and implement modular applications in C using functions Implement structure and pointers 	
SEC-1 A: HTML and CSS	 Understand fundamentals of web technologies. Construct visually appealing static web page. Understand linking in web page. Understand basics of forms. Use CSS for enhanced presentation and user experience. 	

B.Sc. Computer Science F.Y. Second Semester Opt	
Course	Course Outcomes
M1-DSC-7: Programming in C	 Implement basic L programs Develop and implement conditional and iterative statements. Implement different types of arrays Develop and implement modular applications in C using functions Implement structure and pointers
VSC-1A: JavaScript	6.Ability to understand fundamentals of JavaScript .7.Proficiency in developing interactive and dynamic web applications.8.Understanding of basic functions in JavaScript9.Understand Internet and web technology.

B.Sc	c. Computer Science S.Y. Third Semester Opt
Course	Course Outcomes
CMP-311 Data Structure	 To impart students for develop and refine their programming skills. In particular, the importance of this subject is on the organization of information, the implementation of linear data structures such as arrays, lists, stacks, queues, and techniques of data abstraction, including searching and sorting. Choose an appropriate data structure for a particular problem.
CMP-312 Advance C Program ming.	 1.T'o obtain in depth knowledge of C language. 2.To apply the advanced Programming concepts functions, structures, union, pointers with implementation of graphics.
CMP-313(A) Office Automation	 Define and explain the scope and benefits of office automation. Create and format documents using word processing tools. Manage data using spreadsheet and database management tools.



B.Sc. Computer Science S.Y. Fourth Semester		
Course	Course Outcomes	
CMP-411 DBMS with SQ L	 To understand the different issues involved in the design and implementation of a database system. To understand and use data manipulation language to query, update, and manage a database. 3. Design and create a relational database schema using SQL. 	
CMP-412 Object Oriente d Programing using C++	1.To get understand the difference between object oriented programming and procedural oriented language & data types in C++, be able to program using C++ features such as composition of objects, Operator overloading, inheritance, Polymorphism etc	
CMP-413 (A) Digital Marketing	 To understand the fundamentals of digital marketing and its significance in today's business world. To develop a comprehensive content marketing strategy that aligns with business goals. To gain an indepth understanding of search engine optimization techniquesand how to optimize a website for search engines. 	

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B.Sc. Computer Science T.Y. Fifth Semester Opt		
Course	Course Outcomes	
COM-511 -DSE-1 C (1) Software Engineering	 To study Software Development Life Cycle, To study different Software Development models To study Agile Software development. To study software project planning To study software cost estimation 	
COM-512 -DSE-1B (2) Basic Computer Networks	 Design and implement Computer Network Analyze and troubleshoot Computer Network related problems Understand the various network protocols and services Understand network security treats and vulnerability, as well as various security protocols. 	
COM-513 - SEC-3 (F) R Programing	 Student will learn how to program in R Student will learn how to use R for effective data analysis. Student will learn reading data into R, accessing R packages, Student will learn writing R functions, debugging, profiling R code 	

	B.Sc. Computer Science TY. Six Semester Opt
Course	Course Outcomes
COM- 611 -DSE- 2C (1) Software Testing	 To study fundamental concepts in software testing, including software testing objectives, process, criteria strategies, and methods2. To discuss various software testing issues and solutions in software unit test; integration, regression and system testing To learn the process of improving the quality of software work products.
COM-612 - DSE-2B (2) Advance Computer Network	 The major components of computer based information systems is computer networks. Through computer networks we can share hardware, Software, Processing, Data and Applications besides getting global connectivity for internet based communication and services. To make students learn the technology of establishing, commissioning (making operational) and maintaining computer network
COM- 612 - DSE-2D (2) Python	 Student will understand basic of Python viz. keywords, data types, built in functions. They will understand python control flow Get Knowledge about Python Functions and stings, Get Knowledge about Python list, dictionaries, tuples and sets Get Knowledge about Python il handling and exception handling. Get Knowledge of OPP concepts used in Python Get Knowledge about Python user interface, data analysis and data visualisation

All Lotte Savita A.

Vasantrao Naik Mahavidyalaya, Chhatrapati Sambhajinagar

M Sc Chemistry

Program Objectives:

M. Sc. Chemistry program aims to provide the following objectives:



1. Provide the Advanced Knowledge: The program aims to provide the core/basic concepts in chemistry, including organic, inorganic, physical, and analytical chemistry, while also exploring interdisciplinary areas.

2. Provide the Research Skills: Students will get the research-oriented environment in the department and learns the laboratory techniques and methodologies required in the research.

3. Create Analytical Thinking: We will encourage the students to create analytical thinking and encouraging, approaching complex challenges with creativity and scientific reasoning.

4. Ability of Communication and Collaboration:

In the program, students will work on their abilities to present and discuss scientific ideas clearly and work collaboratively with others

Program Outcomes:

The program outcomes (PO's) are the statement of competencies/ abilities. POs are the statement that describes the knowledge and the abilities, the post-graduate will have by the end of program studies.

i) In-depth and detailed functional knowledge of the fundamental, theoretical concepts and experimental methods of chemistry.

ii) Apply or implement interface between on the one hand, the history of chemistry and natural science and on the other hand, issues pertaining to the areas of modern technology, health, and environment.

iii) Skills in planning and conducting advanced chemical experiments and applying structuralchemical characterization techniques.

iv) Skill in examining specific phenomena theoretically and experimentally.

v). Generation of new scientific insights or to the innovation of new applications of chemical research.

Course Program outcome

Analytical Chemistry

Cos

On completion of this course student will be able to:

1. Understand analytical measurements.

2. Understand the importance of producing reliable results.

3. Understand the importance of sampling and able to identify different types of samples.

4. Understand the basics in each separation techniques, *viz*.crystalization, sublimation, distillation, extraction.

5. Understand the theory of liquid-liquid extraction.

6. Understand the theory of solid-phase extraction.

7. Understand basic of chromatographic Techniques for separation of constituents of mixtures

8. Understand rate and plate theory of chromatography.

Inorganic Chemistry

To understand the stability constant of metal complex, stepwise and overall formation constant.

To describe the factors affecting for stability of metal complexes.

To identify and describe techniques for determination of formation constant of metal complexes.

To analyse the structural and stereoisomerism of metal complexes and their classifications.

To understand the mechanism in metal complexes.

To understand acid and base hydrolysis of metal complex and their mechanism.

To understand the role of trans effect in the synthesis of platinum complex.

To distinguish between the inner and outer sphere mechanism of electron transfer reaction of metal complexe

To memorise the function of essential and trace elements in biological systems.

To describe the structure and function of metalloporphyrins, Hemoglobin, cytochrome and hemocyanine.

Course outcomes

Student will be able to

Understand the chemical and molecular processes in organic chemical reactions.

Study the concept of Alternant and non-alternant hydrocarbons

Study the energy levels of π -molecular orbitals

Explain the concept of aromaticity

Know the types of mechanism in organic reactions

Understand the correlation between the thermodynamic and kinetic parameters





Study the different intermediates involved in organic chemical reactions Learn the various types of aliphatic nucleophilic substitution reactions To understand the electron transfer, respiration and photosynthesis of biological system

Course Name: Organic Chemistry

To Understand the chemical and molecular processes in organic chemical reactions. Study the concept of Alternant and non-alternant hydrocarbons Study the energy levels of π -molecular orbitals Explain the concept of aromaticity Know the types of mechanism in organic reactions Understand the correlation between the thermodynamic and kinetic parameters Study the different intermediates involved in organic chemical reactions Learn the various types of aliphatic nucleophilic substitution reactions

Course Outcome :

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

Explore conceptual fact of chemical bonding and basis of reactivity

Apply the concept of aromaticity to various molecules

Explain the types of reactions and reaction intermediates

Compare the SN^1 , SN^2 and SN^i with respect to mechanism, orientation and stereochemical outcome

Course Name: Physical Chemistry-1

Course outcomes: student will be able

- 1. To understand the fundamental principles of chemical kinetics.
- 2. To learn different theories of chemical kinetics.
- To understand concept of fast and slow reactions based on their rate constant and reaction rates.
- 4. To understand the concept of thermodynamics.
- 5. To apply critical thinking and problem solving skills to solve problem related to thermodynamics and chemical kinetics.
- 6. To understand the basic concept of micelles.

Course Name: Inorganic Chemistry Laboratory Course-1

Course outcomes:

On completion of this course, the students will be able:

- 1. To understand the difference between qualitative and quantitative analysis.
- 2. To understand the concept of qualitative and quantitative chemical analysis and their chemical reactions and constituents.
- To understand the design and development of experimental setup and procedure, for volumetric and gravimetric analysis of chemical compound.
- 4. To identify constituents of chemicals qualitatively and quantitively
- To understand importance of accuracy and precision in measurement of chemical analysis
- 6. To apply grasped knowledge to solve chemical analysis related issues of stakeholder.
- 7. To understand importance of laboratory skills, precaution, accuracy and precision.
- 8. To separate and identify acidic & basic radicals from chemical sample.
- 9. To apply the knowledge in chemical analysis of unknown sample.

Course Name: Organic Chemistry Laboratory Course-1

Learning Outcome:

On completion of this course, the students will be able

- 1. Understand the separation and purification techniques
- 2. Understand various step involved in identification of organic compounds
- 3. Understand the handling of equipment required for the analysis of organic compounds.
- 4. Understand the Stoichiometry of the reaction,
- 5. Students able check the purity of compound using TLC.

Course Name: Physical Chemistry Laboratory Course-1

Course Outcomes :

On completion of this course, the students will be able:

To analyse sample by various instrumental techniques

To handling of electronic equipment

To understand laboratory skills, precaution, accuracy and precision.

To design experimental procedure for analysis important chemicals &samples

To understand the physical properties of chemicals

To distinguish accuracy of results in instrumental and non instrumental methods

(Dr BR Madje)

Chhatrapati Sambhajinga