



Late Laxmibai Deshmukh Mahila Mahavidyalaya, Parli Vaijnath

Programme Outcomes (POs) and Course Outcomes (COs)

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated.

Late Laxmibai Deshmukh Mahila Mahavidyalaya, Parli Vaijnath is affiliated to **Dr. Babasaheb Ambedkar Marathwada University, Aurangabad**. The college offers **BA** with following subjects English, Marathi, Hindi, Sanskrit, Sociology, History, Political Science, Economics, Home Science, Public Administration and Geography.

Bachelor of Arts (BA)

Student seeking admission for B.A. programme is expected to imbue with following quality which helps them in their future life to achieve the expected Goals.

- a. Realization of human values.
- b. Sense of social service.
- c. Responsible and dutiful citizen.
- d. Critical temper
- e. Creative ability.

BA (Marathi)

Programmes Specific Outcomes (PSOs)

- a. Creating an interest in literature.
- b. Availing the job opportunities in translation, transformation and media.
- c. Developing language.
- d. Increasing the critical attitude about literary studies.
- e. Imbibing the literary research attitude.

Course Outcomes (COs)

B.A I (Marathi)

1. Understanding the interrelation between literature and society.
2. Explaining the nature of language and literature.
3. Obtaining the skills of literary criticism.
4. Imbuing the essay writing skills.
5. Illustrating the nature of literary forms like one-act-play, travelogue and short story.

B.A.II (Marathi)

1. Introduction of the medieval Marathi language and literature.
2. Introduction of the contemporary literary works.
3. Acquiring the skill of translation.
4. Explanation of the need and significance of editing.

B.A.III Poetry:

1. Acquaintance with oriental poetry.
2. Understanding the nature and features of poetry.
3. Creating the skill of critical appreciation of a poem.
4. Developing the poetic devices and their usages.

B.A.III Linguistics:

1. Getting acquainted with modern linguistics.
2. Understanding origin, nature and function of language.
3. Getting information about phonetics.
4. Enhancing the interest in Marathi language.

B.A.III Medieval Marathi Literature:

1. Introduction of the historical survey of medieval Marathi literature.
2. Introduction of the literary forms in medieval literature.
3. Explanation of the trends and structure of medieval Marathi literature.

B.A.III Utility and Creativity of Marathi Language:

1. Understanding the formal and informal language.
2. Developing various language skills.
3. Getting motivation for creative writing.
4. Understanding the technique of mass communication.

B.A.III Literary Criticism:

1. Introduction to various trends in literary criticism.
 2. Understanding various trends in rural literature.
 3. Understanding various trends in Dalit Literature.
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BA (English)

Programme Specific Outcomes (PSO's)

A student who has taken admission into this program of BA with English as specific subject of study, is expected to target on following outcomes.

1. Basic knowledge of English as Language.
2. Major knowledge of English as Literature.
3. Basic knowledge of English Grammar.
4. Critical study of English Literary studies.
5. Relation between pleasure of literature and real life.

Course Outcomes (COs) ENGLISH

B.A.I, Paper No.-I & III- The Structure of English

1. Spoken communication and written communication
2. To understand advanced knowledge of English in matter of speaking and writing
3. To enable students to acquire the structure of English language
4. To acquire the basic knowledge of grammar
5. To acquire the knowledge of Word accent in English
6. To enable students to do the phonetic transcription properly
7. To acquire the basic knowledge of grammar
8. To acquire the knowledge about Intonation

B.A.I, Paper No- II, IV- Introduction to Literature

1. To enable students to read and appreciate various forms of literature and critically interact with them from different perspectives
2. To introduce to the students the appropriate literary strategies to read literature
3. To pinpoint how far literary language deviates from ordinary language
4. To unravel many meanings in a literary text

B. A. I, Paper No.- I, II, Learning Language Skill, (English compulsory)

1. To strengthen ability of the students in listening, speaking, reading and writing both at practical and theoretical level
2. To introduce students to the grammatical properties in order to enable them to write and speak English consciously
3. To train them both in precision and in appropriate use of language through prose reading
4. To acquaint students with a keen and subtle way in which the English language used

B.A.II, Paper No. III & IV- Language through Writings (English Compulsory)

1. To introduce students to the grammatical properties in order to enable them to write and speak English consciously
2. To train them both in precision and in appropriate use of language through prose reading
3. To acquaint students with a keen and subtle way in which the English language used

B.A.II Paper No. V&VI- Literature in English (1550-1750)

1. To enable students to read and appreciate various forms of literature and critically interact with them from different perspectives
2. To introduce students to appropriate literary strategies to read literature
3. To pinpoint how far literary language deviates from ordinary language

B.A.II Paper No. VII&VIII- Literature in English (1750-1900)

1. Relation between literature and real life.
2. Emotional development of human mind.
3. To unravel many meanings in a literary text

B.A. III Paper No. IX & XIII Twentieth Century English Literature

1. To make the students how the literature of modern period relates to the important trends

- of the period
- 2. Enjoyment of literature
- 3. Pleasure of literacy forms such as novel, poem, play, and essay.
- 4. Relation between literature and real life.

B.A. III Paper No. X & XIV. Introduction to Literary Criticism and Terms

- 1. To make the students aware of the fact that all readers are critics and introduce them to basic texts in criticism while developing critical thinking in them
- 2. Critical understanding of literature

B.A. III Paper No. XI & XV. Indian Writing in English

- 1. To introduce the students to the thematic concerns, genres and trends of both Indian Writing in English and American Literature
- 2. Relation between literature and real life.
- 3. Pleasure of literacy forms such as novel, poem, play, and essay.
- 4. Interpret the works of great writes of Indian writers in English.
- 5. Demonstrate, through discussion and writing, an understanding of significant Cultural and societal issues presented in Indian English literature

B.A. III Paper No. XII & XVI. Project Work on History of English Literature

- 1. To identify and evaluate appropriate research sources,
- 2. To incorporating the sources into documented academic writing,
- 3. To formulate original arguments in response to those sources.
- 4. To apply appropriate research methodologies to specific problems

B. A. III Literary Criticism

- 1. Introduction to various trends in literary criticism.
 - 2. Understanding various trends in rural literature.
 - 3. Understanding various trends in Dalit Literature.
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Programme Specific Outcomes

- 1) साहित्य के माध्यम से छात्रों को जीवन की कला और जीवन जीने के विभिन्न तरीके, भाषिक शुद्धता, भाषा कौशल्य, भाषा अभिव्यक्ति, संशोधन वृत्ति आदि विकसित होने में मदद होती है।
- 2) व्यावहारिक लेखन का विकास संगणक का ज्ञान प्राप्त करना
- 3) प्रयोजनमूलक हिंदी के पाठ्यक्रम से व्यवसाय और व्यावहारिक हिंदी की जानकारी मिलती।
- 4) संवेदना का विकास ।
- 5) अत्याधुनिक इलेक्ट्रॉनिक माध्यमों का परिचय ।
- 6) भाषा प्रायोगिकी विज्ञापन कला ज्ञान ।
- 7) साहित्य आस्वादन और अभिरुची का परिसंस्कार ।

Course Outcomes

BA/BSc/BCom FY (SL) Sem. I, Paper - I सामान्य हिंदी

- 1) संवेदना का विकास
- 2) भाषा कौशल्य का विकास
- 3) व्यावहारिक लेखन का विकास
- 4) संगणक का ज्ञान प्राप्त करना
- 5) प्रयोजनमूलक हिंदी के पाठ्यक्रम से व्यवसाय और व्यावहारिक हिंदी की जानकारी मिलती है।

BAFY (Opt.) उपन्यास साहित्य Sem. - I, Paper - I

- 1) सामान्य आस्वादन और अभिरुची का परिसंस्कार
- 2) जीवन मूल्यों के प्रति आस्था
- 3) लेखन तथा भाषण कौशल का विकास
- 4) संवेदना का विकास
- 5) कहानी तथा व्यंग्य का अभ्यास

BAFY (Opt.) Sem. 1, Paper | नाटक साहित्य

- 1) हिंदी नाटक तथा रंगमंच अध्ययन
- 2) नाट्यास्वादन तथा नाट्यलोचन का विकास
- 3) संवेदना का विकास
- 4) हिंदी नाटकों के नये भेदों का अध्ययन

BA/BSc SY (SL) Sem III, Paper III सामान्य हिंदी

- 1) साहित्य आस्वादन और अभिरुची का परिसंस्कार
- 2) जीवन मूल्यों के प्रति आस्था
- 3) अत्याधुनिक इलेक्ट्रॉनिक माध्यमों का परिचय
- 4) भाषा प्रायोगिकी विज्ञापन कला जान

BCom SY (SL) Sem. - III. Paper-III संप्रेषणमूलक व्यवसायिक हिंदी

- 1) सामान्य हिंदी पढ़ने से बच्चों को यह ज्ञात होता है की मातृभाषा शिक्षा पद्धति को हम आसानी से सीख सकते हैं।
- 2) आज वैश्वीकरण में हिंदी भाषा को महत्व है।
- 3) व्यापार करने और संप्रेषण कला की जानकारी मिलती है।

BASY (Opt) Sem. III, Paper - V कथेत्तर गद्य साहित्य

- 1) साहित्य आस्वादन और अभिरुची में वृद्धि
- 2) जीवन मूल्यों के प्रति आस्था
- 3) हिंदी कथेत्तर गद्य संवेदना की परंपरा परिचय
- 4) लेखन व पठन कौशल वृद्धि के लिये अध्ययन

BA SY (Opt) Sem. - III, Paper- VI प्रयोजनमूलक हिंदी-1

- 1) हिंदी भाषा के विविध रूपों का परिचय
- 2) राजभाषा हिंदी के विभिन्न पहलुओं का परिचय
- 3) प्रयोजनमूलक भाषा तथा अनुवाद की भूमिका का परिचय
- 4) पारिभाषिक शब्दावली का विविध दृष्टिकोण एवं प्रयास
- 5) प्रयोजनमूलक हिंदी का लेखन पक्ष

BA TY (Opt) Sem. - V. Paper IX प्रादेशिक साहित्य

- 1) साहित्य आस्वादन और अभिरुची का परिसंस्कार
- 2) जीवन मूल्यों के प्रति आस्था
- 3) प्रादेशिक साहित्य का ज्ञान
- 4) भारतीय साहित्य का अध्ययन
- 5) भारतीय भक्ती आंदोलन का अध्ययन
- 6) रीतिकालीन संवेदना का अध्ययन

BATY (Opt) Sem. - V, Paper – X आदि तथा मध्यकालीन हिंदी साहित्य का इतिहास

- 1) आदि तथा मध्यकालीन साहित्य का इतिहास पढ़ने से हमें यह ज्ञात होता है कि उस काल के सामाजिक, धार्मिक, आर्थिक और राजनीतिक परिस्थिति और आज की स्थिति में क्या अंतर है।
- 2) भक्ति, श्रद्धा और प्रेम ही दुनिया में सबसे महत्वपूर्ण है, यह जानकारी मिलती है।
- 3) साहित्य आस्वादन और अभिरुची का परिसंस्कार
- 4) जीवन मूल्यों के प्रति आस्था
- 5) हिंदी साहित्य की परंपरा से परिचय

BATY (Main) Sem. - V. Paper X साहित्यशास्त्र- 1

- 1) साहित्यशास्त्र पढ़ने से बच्चों को यह लाभ होता है कि साहित्य पढ़ने से भाव, कल्पना और शैली का विकास होता है।
- 2) लेखन, पठन कौशल का विकास
- 3) आलोचनात्मक क्षमता का विकास
- 4) अनुसंधानात्माक दृष्टी का विकास

BATY (Main) Sem. - V, Paper XII प्रकल्प कार्य -1

- 1) प्रकल्प साहित्य के प्रश्न पत्र से छात्रों को विशिष्ट विषय पर प्रकल्प लेखन करके संशोधन पद्धति से परिचित करवाया जाता है।
- 2) महाविद्यालय जीवन से ही छात्रों के अंदर शोध वृत्ति जागृत करने का यह एक प्रयास है।
- 3) लेखन, पठन कौशल का विकास
- 4) आलोचनात्मक क्षमता का विकास 5) अनुसंधानात्माक दृष्टी का विकास

BA/BSc/BComFY (SL) Sem II, Paper | सामान्य हिंदी

- 1) इस प्रश्न पत्र से छात्रों को हिंदी साहित्य के बारे में अलगअलग कहानियों के जरिए संस्कृति - और उसकी रक्षा हेतु कौन से कदम उठाना है।
- 2) प्रयोजनमूलक हिंदी के पाठ्यक्रम से व्यवसाय और व्यावहारिक हिंदी की जानकारी मिलती।
- 3) संवेदना का विकास
- 4) भाषा कौशल्य का विकास
- 5) व्यावहारिक लेखन का विकास
- 6) संगणक का ज्ञान प्राप्त करना

BA FY (Opt.) Sem II, Paper III हिंदी गद्य साहित्य

- 1) हिंदी गद्य साहित्य पढ़ने से बच्चों को यह जात होता है कि जिंदगी में संपत्ति का घमंड नहीं होना चाहिए, इंसान को हमेशा खुश होना चाहिए, स्त्री को आधार देना चाहिए, लड़का और लड़की दोनों समान है यह बच्चों को जानकारी प्राप्त होती है।
- 2) सामान्य आस्वादन और अभिरुची का परिसंस्कार
- 3) जीवन मुल्यों के प्रति आस्था
- 4) लेखन तथा भाषण कौशल का विकास
- 5) संवेदना का विकास
- 6) कहाणी तथा व्यंग्य का अभ्यास

BA FY (Opt.) Sem. I, Paper IV एकांकी साहित्य

- 1) एकांकी साहित्य से भी भौतिकीकरण और वैज्ञानिकीकरण के कारण समाज पर होता प्रभाव, टूटते हुए परिवार, घुटन की समस्या, व्यक्तिगत जीवन को लेकर तरसता हुआ आदमी आदि विषयों की जानकारी मिलती है।
- 2) हिंदी एकांकी साहित्य रंगमंच अध्ययन
- 3) संवेदना का विकास
- 4) हिंदी एकांकी साहित्य के नये भेदों का अध्ययन

BA/BSc SY (SL) Sem. IV, Paper IV सामान्य हिंदी

- 1) गद्य के विविध आयाम में सभी स्त्रियों का सम्मान करना चाहिए, परिवार को महत्व देना चाहिए हर इंसान अंधश्रद्धा से दूर होना चाहिए। प्रयोजनमूलक हिंदी में जनसंचार माध्यम और वैज्ञानिक तकनीकी हिंदी का अत्यंत महत्वपूर्ण है। इसकी जानकारी मिलती है।
- 3) साहित्य आस्वादन और अभिरुची का परिसंस्कार
- 4) जीवन मुल्यों के प्रति आस्था
- 5) अत्याधुनिक इलेक्ट्रॉनिक माध्यामों का परिचय

6) भाषा प्रायोगिकी विज्ञापन कला ज्ञान

BCom SY (SL) Sem. - IV. Paper- IV संप्रेषणमूलक व्यवसायिक हिंदी

- 1) व्यवसाय, मीडिया, अनुवाद, व्यापार और बैंकों में हिंदी को महत्व है। यह सामान्य है, हिंदी पढ़ने से बच्चों को यह लाभ होता है।
- 2) सामान्य हिंदी पढ़ने से बच्चों को यह ज्ञात होता है कि मातृभाषा शिक्षा पद्धति को हम आसानी से सीख सकते हैं।
- 3) आज वैश्वीकरण में हिंदी भाषा को महत्व है
- 4) व्यापार करने और संप्रेषण कला का ज्ञान इसकी जानकारी मिलती है।

BA SY (Opt) Sem. IV, Paper- VII आधुनिक हिंदी कविता

- 1) भूमिजा यह खंडकाव्य पढ़ने से यह ज्ञात होता है कि स्त्री की सहनशीलता और पुरुष की मर्यादा और महान राजा के बारे में हमें जानकारी मिलता है।
- 2) चुनी हुई लंबी कविता में हर व्यक्ति को दुःख रहता है मगर दुःख से बाहर निकलना चाहिए, इसकी जानकारी मिलती है।
- 3) सामान्य आस्वादन और अभिरुची में वृद्धि
- 4) जीवन मुल्यों के प्रति आस्था
- 5) लेखन व पठन कौशल वृद्धि के लिये अध्ययन

BASY (Opt) Sem. - IV. Paper VIII प्रयोजनमूलक हिंदी-2

- 1) प्रयोजनमूलक हिंदी में सरकारी कार्यालयों तथा निमसरकारी कार्यालयों में हिंदी के प्रयोग के कारण कार्यालय कामकाज में किस तरह सुधार आता है।
- 2) भाषिक कौशल्य की दृष्टि से शुद्धता, राजभाषा, राज्यभाषा, राष्ट्रभाषा के रूप में हिंदी की जानकारी मिलती है।
- 3) हिंदी भाषा के विविध रूपों का परिचय
- 4) राजभाषा हिंदी के विभिन्न पहलुओं का परिचय
- 5) प्रयोजनमूलक भाषा तथा अनुवाद की भूमिका का परिचय 6) पारिभाषिक शब्दावली का विविध दृष्टिकोण एवं प्रयास
- 7) प्रयोजनमूलक हिंदी का लेखन पक्ष

BATY (Opt) Sem. - VI. Paper XIII मध्यकालीन काव्य

- 1) मध्यकालीन कविता से संत साहित्य की महाराष्ट्र की पार्श्वभूमि को लेकर यहां के धार्मिक वातावरण पर किस प्रकार संत साहित्य का असर हुआ है इसकी जानकारी मिलती है।
- 2) साहित्य आस्वादन और अभिरुची का परिसंस्कार
- 3) जीवन मुल्यों के प्रति आस्था
- 4) भारतीय साहित्य का अध्ययन
- 5) भारतीय भक्ती आंदोलन का अध्ययन

BATY (Opt) Sem. VI, Paper- XIV आधुनिक हिंदी साहित्य का इतिहास

- 1) आधुनिक हिंदी साहित्य का इतिहास पढ़ने से हमें यह लाभ होता है कि समाज में नयेन ये परिवर्तन हो रहा है।
- 2) समाज में मानवतावादी दृष्टिकोण के साथ उस साहित्य को आधुनिकता के साथ कैसे जोड़ दिया जाए यह

- जानकारी मिलती है।
- 3) साहित्य आस्वादन और अभिरुची का परिसंस्कार
 - 4) जीवन मुल्यों के प्रति आस्था
 - 5) हिंदी साहित्य की परंपरा से परिचय

BATY (Main) Sem. - VI. Paper XV साहित्यशास्त्र - 2

- 1) साहित्यशास्त्र पढ़ने से हमें यह ज्ञात होता है कि इंसान को सुंदर दिखने के लिए आभूषण (अलंकार) की आवश्यकता नहीं उसे जान की आवश्यकता होती है।
- 2) लेखन, पठन कौशल का विकास
- 3) आलोचनात्मक क्षमता का विकास
- 4) अनुसंधानात्माक दृष्टी का विकास

BATY (Main) Sem. - VI. Paper- XVI प्रकल्प कार्य - 2

- 1) प्रकल्प साहित्य के प्रश्न पत्र से छात्रों को विशिष्ट विषय पर प्रकल्प लेखन करके संशोधन पद्धति से परिचित करवाया जाता है।
 - 2) महाविद्यालय जीवन से ही छात्रों के अंदर शोध वृत्ति जागृत करने का यह एक प्रयास है।
 - 3) लेखन, पठन कौशल का विकास
 - 4) आलोचनात्मक क्षमता का विकास
 - 5) अनुसंधानात्माक दृष्टी का विकास
-

BA (Political Science)

Program Specific Outcomes

1. Knowledge about political system of the nation.
2. Study of national and international political affairs.
3. Study from competitive examination point of view.
4. Understanding the government mechanism, its functions, duties and responsibilities.
5. Creating appropriate and efficient political leaders.
6. Getting knowledge of political law.
7. Getting knowledge of Constitution of India.

Course Outcomes

B.A.-I: Indian Government and Political System

1. Acquiring the knowledge about Indian Constitution.
2. Getting awareness about one's rights and duties.
3. Getting information about political parties and system of justice in India.
4. Knowing about the problems and challenges in Indian politics.

B.A.II: Paper 3 & 5- Government of Maharashtra

1. Getting information about the historical survey the formation of Maharashtra State.
2. Study of the local governing mechanism.
3. Developing leadership at local level.

Paper No. 4 & 6 Indian Political Thinkers

1. Study of the Indian Political Thinking and their thoughts.
2. Study of the contribution of political thinkers in independent movements and their need for modern society.

B.A.III -Public Administration

1. Study of the administrative system of the nation.
2. Getting information about various concepts in Public Administration.
3. Study of the mechanism for the solution of problems in Public Administration

The Constitution of America, China & Sweden

1. Getting information about the system of the Constitution and Government
2. Study of different constitutions comparatively.

International Relationship: -

1. Study of the international political system.
2. Study of the international & regional organizations.
3. Study of the relations of India with neighbouring countries.

Western Political Thinkers: -

1. Getting information about western thinkers and their political thoughts.
 2. Comparative study of the ancient thoughts and modern thoughts.
-

BA (History)

Program Specific Outcomes

- 1) To Presentation of Indian culture.
- 2) To study the Historical monuments.
- 3) To study the biography of great leads
- 4) To study the Historical women's great achievements in history.
- 5) To acquire the knowledge tourist place in India.
- 6) To create the unity by study history.

Course Outcomes

B. A. F. Y. 1) शिवाजी व शिवकाळ - Paper-I (Shivaji and History Times) (1630- 1707) (AD 1630- 1707)

1. To acquire knowledge of history of Maratha.
2. To Study the history of Shivaji Maharaj.
3. To study the different forts.
4. To study the 17th century social and economic condition.

2) History of modern Maharashtra – Paper-II (AD 1818 – AD 1905)

1. To acquire knowledge history of modern Maharashtra.
2. To study socio science and economics condition of Maharashtra in 19th century.
3. To study of biography Janbekar, Ranade, Agarkar, Pandita Ramabai.
4. To Study national movement in Maharashtra.
5. To Study the history of Indian National Congress.

3) History of the Marathas – Paper-III (AD 1707 – AD 1818)

1. To acquire the knowledge of history of Peshwa.
2. To study the administrative system of Peshwa period.
3. To study the causes and consequences Decline the Maratha power.
4. To study social structure and religious life during Peshwa period.
5. To study the position of women.

4) Twentieth Century Maharashtra – Paper-IV (AD- 1905 – AD 1960)

1. To acquire the knowledge of twentieth century Maharashtra.
2. To study national movement (1905- 1920)
3. To study revolutionary movement.
4. To study the non-Brahmin movement.
5. To study Hyderabad freedom struggle. (Marathwada Region)

B. A. II year – History of Early India 5) (Up to B. C. 300) Paper – V

1. To study Harappan Civilization.
2. To study Vedic culture.
3. To study religion movement. (Jainism and Buddhism)
4. To study of Mauryan Empire.
5. To Study Archeological, Numismatic Sources.

6) History of Delhi Saltanat. (AD- 1200 – AD - 1526) Paper - VI

1. To acquire knowledge History of Delhi Saltanat.
2. To study of Political History Khaji, Tughuqs, Sayyid and Lodi Dynasty.
3. To study Religious Policy of Delhi Saltanat.
4. To study Mahanubhav and Warkari Cults, Bhakti Movement in North India, Sikhism, Sufism.
5. To study Arts and Architecture of Delhi Sultanat.

7) History of Mughal India – Paper - VII (AD 1526 – AD 1707)

1. To acquire knowledge of History of Mughal.
2. To study a Brief Survey of Political History of Mughal Period.
3. To study Mughal Administration.

4. To study the Religious and Social life in Mughal Period.
5. To study Art and Architecture in Mughal period.

8) History of India – Paper - VIII (BC 300 – AD 650)

1. To study literary and Archeological Sources.
2. To study Sungas and Knvas dynasty.
3. To study Harshwardhan
4. To study Art and Architecture in period (B.C. 300 – AD 650)

B. A. T. Y. (B. A. - III)

9) Historiography – Paper - IX

1. To acquire knowledge Definition, Nature, Scope of History.
2. To study Sources of History.
3. To study modern thinkers of History.
4. To study major trends in Indian History writing.
5. TO study the use of History.

10) History of Indian National Movements – Paper – X (AD 1885 – AD 1947)

1. To study Background Nature, Policies and Administration of British Rule in India.
2. To study Rise of Nationalism in India.
3. To study Indian National Congress and National Movement.
4. To study Revolutionary Movement.
5. To study Mahatma Gandhi.

11) Women’s struggle in Modern India – Paper – XI

1. To acquire knowledge of women and social struggle.
2. To study Mahatma Phule, Dr. B. R. Ambedkar and Tarabai Shinde.
3. To study social reform movement.
4. To study consent bill Sharada Act, Patel Bill.
5. To study women in caste movement.

12) Fields of History – Paper – XIII

1. To study Archaeology.
2. To study museology.
3. To study tourism.
4. To study motivation of tourism.
5. To study types and forms of tourism.

13) Landmarks in the History of Modern World – Paper – XIV

1. To study Renaissance and Reformation in Europe.
2. To study American War of Independence.
3. To study Industrial Revolution.
4. To study Russian Revolution.
5. To study first and second World War.

14) Glimpses of the History of Marathwada. – Paper – XV

1. To acquire knowledge of Political History of Marathwada.
 2. To study Religious Movement.
 3. To study Art and Architecture. (Cave, Temple, Forts)
 4. To study Hyderabad Freedom Struggle. (1937 to 1948)
-

BA (Economics)

Programme Specific Outcomes of Economics

1. Understanding how different degrees of competition in a market affect Pricing and output.
2. Understanding the efficiency and equity implications of market interference, including government policy.
3. Developing research knowledge in economics.
4. Developing the skill of data collection & use of sampling techniques in research.
5. Developing the knowledge about theories of economic growth & Development and issues of economic planning.
6. Creating awareness about changing macro-economic policies and theories.

Course Outcomes of Economics

B.A I Indian Economy

1. Understanding characteristics, features, structural changes in Indian Economy.
2. Comprehension of the nature and impact of New Economic Reforms on the Indian Economy.
3. Knowing the problems of unemployment, poverty, rising economic and social inequality and problems of regional imbalances in India.
4. Evaluating the changing role of agriculture, industrial and service sector and foreign sector in Indian Economy.
5. Measuring the problems and prospects of cottage and small-scale Industries and industrial sicknesses.
6. Measuring the growth, volume, composition and direction of India's foreign trade and capital inflow since 1991.

B.A-II Banks and Financial Institutions

1. Understanding the meaning, function and role of commercial banking.
2. Comprehending the procedure of an account opening, operating and closing.
3. Knowing the structure, function and role of RBI in economic development.
4. Judging the progress of financial inclusion.
5. Evaluating the importance, characteristics and components of the financial Market.
6. Understanding the role and types of development banks and non-banking financial intermediaries.
7. Realizing the banking reforms and Basel norms-I and II.
8. Identifying recent trends in Indian Banking such as E- Banking, MICR Clearing, ATMs, Credit cards and Debit Cards, Travelers Cheques, Gift, Cheques, Demat Account.

B.A.-II Macro Economics

1. Identifying the basic concepts and theories of Macroeconomics.
2. Awareness about changing macroeconomics policies and theories.
3. Understanding various concepts such as; GDP, GNP NNP, Personal Income, Disposable Income, Per Capita Income, and National Income.
4. Identifying the factors determining gross domestic product, employment, the general level of prices, and interest rates.
5. Realizing the law of markets, consumption function and investment function.
6. Judging the role of fiscal policy and monetary policy in a Developing economy.
7. Knowing features, phases and theories of trade cycles.
8. Evaluating types, merits and demerits of taxes.
9. Comprehending the role of public finance in developing economy.

B.A.-III Micro Economics

1. Knowing the decision making of consumer.
2. Identifying the nature of revenue and cost of production
3. Comprehending the demand function and production function
4. Realizing various production theories

5. Clarifying the meaning of Marginal, average, total revenue, and Marginal, average and total cost and its implication
6. Awareness of different markets structure
7. Understanding pricing in different markets
8. Judging the factor pricing

B.A.-III Research Methodology

1. Understanding the basic framework of research process
2. Defining various research designs and techniques.
3. Identifying various sources of information for literature review and data collection.
4. Discussing the ethical dimensions of conducting applied research.
5. Appreciating the components of scholarly writing and evaluate its quality.
6. Knowing various aspects of Research in Economics.
7. Understanding various data analysis techniques (Mean, Mode, Median, Range, Standard Deviation, Karl person coefficient of correlation).
8. Ability to interpretation of data and report writing.

B.A.-III History of Economic Thoughts

1. Acquaintance with the economic thoughts of Classical, Nationalist and Socialist Thinkers.
2. Judging the development of economic thoughts.
3. Realizing the economic concepts and theories of Neo-classical and Indian thinkers.
4. Evaluating the development of Indian economic thoughts.

B.A.-III Economics of Development

1. Understanding the concept and aspects of economic Development.
2. Knowing the theories of economic growth & Development.
3. Measuring the concept and issues of economic planning.
4. Discussing the need, types and necessary conditions of economic planning.

B.A.-III International Economics

1. Elaborating the importance of the study of International Economics.
 2. Finding similarities and dissimilarities in inter-regional and international trade.
 3. Knowing the changes in the import-export policies of India.
 4. Evaluating various types of exchange rates and its merits and demerits.
 5. Discussing the types and effects of tariffs and quotas.
 6. Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).
 7. Realizing the volume, composition and direction of Balance of trade and Balance of payments.
-

BA (Sociology)

Program Specific Outcomes:

- a) Acquaintance with social transactions, social relations, social formations, social control, social values and culture.
- b) Knowing the significance of social institution, caste system, religion, nationalism, integrity, equality and justice.
- c) Getting the knowledge of the works of social reformers all over the nation.
- d) Ability to follow new stream of thoughts and theories of social thinkers.
- e) Getting the deep knowledge about various social groups like tribal Community, women bulk etc.
- f) Ability to deal with research in sociology.
- g) Awareness about secularism and Democracy

Course outcomes

B.A. I

Paper No-I: - Introduction to sociology

1. Introduction to the basic concept of Sociology, subject matter & Importance of Sociology and origin and development of sociology
2. Understanding in brief the knowledge of human Society and Sociology.
3. Analysing of Social problems, Evaluation of Social change, social policy and action.

Paper No-II: - Individual and Society

1. knowing about culture, socialization and agencies of socialization
2. getting knowledge about status and role of social structure
3. Understanding about cast and class system in social stratification
4. Awareness about social change and social control

Paper No- III: Subfields of Sociology

1. Learning the problems of rural society
2. Acquainting the knowledge about social psychology and political sociology in social interaction
3. Getting knowledge about anthropology in social culture

Paper No- IV: Indian Social Composition

1. Studying the features of Indian Society
2. Creating the bonds of unity among students
3. Studying the Indian population's characteristics, Quantitative problems as well as population planning and control
4. Acquainting the knowledge about forms of diversity like language and religion
5. Studying the concept of democracy and secularism
6. Acquainting the knowledge about Indian constitution
7. Awareness about *Baluta* System and importance of land holding in Indian rural agrarian structure

B.A. II, Paper No- V: Problems of Rural India

1. Understanding the profile of Rural Community
2. Introduction to the basic concepts of Rural Community and Rural Development
3. Awareness about the problems in rural economy such as landless labourers, and rural Industries
4. Understanding rural unemployment corruption in governmental schemes

Paper No- VI: Contemporary Urban Issues

1. Introduction to major Social Problems and challenges before the problem of the Indian society.
2. Awareness of Contemporary Social Problems in India.
3. Awareness about unemployment and poverty, crime and prostitution
4. Understanding the planning like development of slums and urban infrastructure

Paper No- VII: Population in India

1. Getting knowledge about fertility, morality and density of population
2. Awareness about population growth, sex ratio and female feticide
3. Studying the new population policy and China experience of population

Paper No- VIII: Sociology of Development

1. Getting knowledge about development issues and problems of weaker sections
2. Awareness about development approaches and mixed approach
3. Getting knowledge of Government schemes and consequence of L.P.G. in Indian experience
4. Learning the developmental issues like infrastructure and education in Marathwada

Paper No- IX: Sociological Traditions

1. Acquainting the knowledge about French revolution, Industrial revolution, recent trends in sociological theory
2. Getting knowledge about August Comte of Positivism, Law of three stages, Spencer theory Organism
3. Getting awareness of the Classical tradition

Paper No- X: Introduction to Research Methodology

- 1) Imparting basic Research Skills
- 2) Introduction to various steps in conducting research.
- 3) Acquaintance with different types of research and issues in research

Paper No- XI: Social Problems in Contemporary India

1. Introduction to major Social Problems and challenges before the problem of the Indian society.
2. Awareness of Contemporary Social Problems in India.
3. Learning the problems of Inequality
4. Learning about Displacement and Rehabilitation

Paper No- XIII: Sociological Theories

1. Getting knowledge about Sociological theories of the Functionalism
2. Making awareness of the symbolic interaction C.H. Colley Looking Glass Self, Primary Group
3. Getting knowledge about Conflict Theory

Paper No- XIV: Social Research Methods

1. Imparting basic Research Skill Techniques of Sociological instigation
2. Learning the use of Computer in Social Research, Intend, Introduction of SPSS
3. Learning the utility of social research
4. Getting knowledge of society and social structure

Paper No- XV: Social Disorganization in Contemporary India

1. Getting knowledge of problem of Disorganization concept and nature
 2. Acquainting the violence and social disorder, problem of *Naxalism* in India
 3. Awareness about regional imbalance of development in India
 4. Analysing of regional imbalance special reference to *Marathwada* and *Vidharbha*
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Bachelor of Science (BSc)

The college offers BSc in Chemistry, Botany, Zoology, Physics, Mathematics and Computer Science.

Program Outcomes

Students taking admission to this program of B.Sc. are expected to get equipped with following outcomes

- a. Explaining the basic scientific principles and methods.
- b. Inculcating scientific thinking and awareness among the student.
- c. Ability to communicate with others in regional language and in English.
- d. Ability to handle the unexpected situation by critically analysing the problem.
- e. Understanding the issues related to nature and environmental contexts and sustainable development.

English course for B.Sc. I & II

1. Spoken communication and written communication.
2. Writing of Resume, letters of application, business letters.
3. Writing News-report, Essay, paragraph, Review, etc.
4. Narration of experience, daily routine.
5. Interview Techniques.
6. Understanding and interpretation of poem, prose, essay, short stories, etc.

BSc (Chemistry)

B.Sc. FY

Program Outcomes

1. Demonstrate, solve and an understanding of major concepts in all disciplines of chemistry.
2. PO-2. Solve the problem and also think methodically, independently and draw a logical conclusion.
3. Employ critical thinking and the scientific knowledge to design, carry out, record and analyse the results of chemical reactions.
4. Create an awareness of the impact of chemistry on the environment, society, and development outside the scientific community.
5. Find out the green route for chemical reaction for sustainable development.

Program Specific Outcomes

1. Gain the knowledge of Chemistry through theory and practical's.
2. To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.
3. Identify chemical formulae and solve numerical problems.
4. Use modern chemical tools, Models, Chem-draw, Charts and Equipment.
5. Know structure-activity relationship.
6. Understand good laboratory practices and safety.
7. Develop research-oriented skills.
8. To make aware and handle the sophisticated instruments/ equipment.

Course Outcomes

Inorganic Chemistry

1. Know the meaning of various terms involved in co-ordination chemistry
2. To understand Werner's formulation of complexes and identify the types of valences
3. Know the limitations of VBT
4. Know the shapes of d-orbitals and degeneracy of d-orbital's
5. Draw the geometrical and optical isomerism of complexes

Organic Chemistry

1. Define organic acids and bases.
2. Distinguish between geometrical and optical isomerism.
3. Discuss kinetics, mechanism and stereochemistry of SN1 and SN2 reactions.
4. Compare between E1 and E2 reactions.
5. Understand the evidences, reactivity and mechanism of various elimination and substitution reactions.

Physical Chemistry

1. Understand Mechanics of system of particles.
 2. Know the Redox reaction.
 - 3 Study the Crystal Field Theory.
 4. Solve the cell reaction and calculate EMF.
 5. Calculate inter-planar distance.
 6. Understand De-Broglie hypothesis and Uncertainty principle
 7. Derive Schrodinger's time dependent and independent equations
-

BSc (Computer Science)

Program Specific Outcomes

1. Effectively communicating computing concepts and solutions to bridge the gap between computing industry experts and business leaders to create and initiate innovation.
2. Ability to use approximately system design notations and apply system design engineering process in order to design, plan and implement software systems.
3. Preparing for a career in an information technology-oriented business or industry or for graduate study in computer science or other scientific or technical fields.
4. Ability to complete successfully to program small –to-mid-size programs on their own.
5. Effectively utilizing the knowledge of computing principles and mathematics theory to develop sustainable solutions to current and future computing problems.
6. Developing and implementing solution-based system and/or process that address issues and/or improve existing systems within a computing-based industry.

Course Outcomes

1. To develop problem solving abilities using a computer
2. To build the necessary skill set and analytical abilities for developing computer based solutions for real life problems.
3. To imbibe quality software development practices.
4. To create awareness about process and product standards
5. To train students in professional skills related to Software Industry.
6. To prepare necessary knowledge base for research and development in Computer Science
7. To help students' build-up a successful career in Computer Science

Fundamentals of Computers (BSc – I)

1. Use technology ethically, safely, securely, and legally.
2. Identify and analyse computer hardware, software, and network components.
3. Design basic business web pages using current HTML/CSS coding standards.
4. Install, configure, and remove software and hardware.
5. Use systems development, word-processing, spreadsheet, and presentation software to solve basic information systems problems.
6. Apply standard statistical inference procedures to draw conclusions from data.
7. Retrieve information and create reports from relational databases.
8. Make intelligent computer purchase decisions.
9. Analyse compression techniques and file formats to determine effective ways of securing, managing, and transferring data.

Digital Electronics (BSc I)

1. Have a thorough understanding of the fundamental concepts and techniques used in digital electronics.
2. To understand and examine the structure of various number systems and its application in digital design.
3. The ability to understand, analyze and design various combinational and sequential circuits.
4. Ability to identify basic requirements for a design application and propose a cost effective solution.
5. The ability to identify and prevent various hazards and timing problems in a digital design.
6. To develop skill to build, and troubleshoot digital circuits.

Database Management System (BSc I):

1. Understanding the purpose and differences between Database models.
2. Knowing the design and implement relational database.
3. Designing and implementing SQL queries for both data manipulation and data definition tasks.
4. Knowing about protecting data from physical harm and unauthorized access with user

access privileges.

5. Designing and executing programs using PL/SQL.

6. Getting known of new software application i.e., MYSQL for designing database.

Programming in C language (BSc I):

1. Ability to develop applications.

2. Creation algorithms and flowcharts to solve simple programming problems.

3. Understanding to design, implement, test, debug a program that uses calculations, loops, array, function, pointers, structure etc.

4. Memory management using C.

B. Sc II Object Oriented Programming Using C++ (BSc II):

1. Using the characteristics of an object-oriented programming language in a program.

2. Using the basic object-oriented design principles in computer problem solving.

3. Programming with advanced features of the C++ programming language.

4. Using C++ classes for code reuse.

B. Sc. III Fundamental of Software Engineering (BSc II):

1. Understanding how to work as an individual and as part of a multidisciplinary team to develop and deliver quality software.

2. Demonstrating an understanding of and apply current theories, models, and techniques that provide a basis for the software lifecycle.

3. Understanding methods and tools to design, implement, test, document, and maintain a software system.

4. Communicating effectively and professionally both in writing and by means of presentations to both specialist and a general audience.

Computer Network (BSc III):

1. Understanding the concepts, vocabulary and techniques currently used in the area of computer networks.

2. Getting known with wireless networking concepts.

3. Understanding classification of network, transmission impairments, Data transmission methods etc.

4. Understanding installation of Windows Server 2008 and managing active directory.

PHP and MySQL (BSc III):

1. Getting the PHP Programming skills needed to successfully build interactive, data driven sites.

2. Understanding working of XAMPP server and working of different array functions to insert, retrieve, display and sort array elements.

3. Understanding how to develop web applications in PHP using MySQL.

Network Technology (BSc III):

1. Understanding reference models in networking like ISO/OSI reference model and TCP/IP reference model.

2. Introducing switching, multiplexing and de-multiplexing techniques.

3. Getting knowledge of file sharing and security in windows server 2008.

4. Understanding group, group policy and inheritance of group policy etc.

E-Commerce (B. Sc III):

1. Knowledge of technologies supporting E-commerce, including web services and electronic payment system.

2. Recognition of fundamental principles of E-business and Knowledge about Electronic Data Interchange.

3. Analysis of real business cases regarding their E-Business strategies and transformation processes and choices.

4. Knowledge about security threats and security solutions in e-commerce.

BSc (Mathematics)

Program Specific Outcomes

1. Ability to calculate and reason to design complex and critical financial models for Bank and Insurance Companies.
2. Ability to understand both concrete and abstract problems.
3. Ability to make critical observations.
4. Ability to accurately organize, analyse and interpret data.
5. Develop the mathematical logic which is very useful for solving mathematical reasoning problems.

Course Outcomes

1. Understand the foundations of mathematics.
2. Be able to perform basic computations in higher mathematics.
3. Be able to read and understand middle-level proofs.
4. Be able to write and understand basic proofs.
5. Develop and maintain problem-solving skills.
6. Use mathematical ideas to model real-world problems.

BSc I

B. Sc - I Differential Calculus I

1. Understand how to analyse and synthesize given data to solve problems in geometry
2. Understand the basic ideas of conics
3. Explain the ideas of conics and their various applications
4. Find the equation to tangent, normal at a point on a conic
5. Apply the properties of conics to solve problems in real life situations

B. Sc - I Differential Equations II

1. The main aim of the course is to introduce the students to the technique of solving various problems of engineering and science
2. Distinguish between linear, nonlinear, partial and ordinary differential equations.
3. Solve basic application problems described by second order linear differential equations with constant coefficients.
4. Find power series solutions about ordinary points and singular points.
5. Find the transforms of derivatives and integrals.

B. Sc-I Integral Calculus III

1. To perform integration and other operations for certain types of functions and carry out the computation fluently;
2. Approximation techniques for integration;
3. To determine whether a sequence or a series is convergent or divergent and evaluate the limit of a convergent sequence or the sum of a convergent series;
4. To recognize when and explain why such operations are possible and/or required;
5. To interpret results and determine if the solutions are reasonable.

B.Sc. I Geometry IV

1. Apply appropriate techniques, tools, and formulas to determine measurements
2. Select and use units of appropriate size and type to measure angles, perimeter, surface area, and volume
3. Analyse characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships
4. Apply transformations and use symmetry to analyse mathematical situations
5. Use visualization, spatial reasoning, and geometric modelling to solve problems

B. Sc. II

Number Theory - V

1. Demonstrate knowledge and understanding of topics including, but not limited to divisibility, prime numbers, congruence's, quadratic reciprocity, Diophantine equations.

2. Learn methods and techniques used in number theory.
3. Write programs/functions to compute number theoretic functions.
4. Use mathematical induction and other types of proof writing techniques.
5. Evaluate trigonometric and inverse trigonometric functions.

Integral Transforms – VI

1. Understand integral calculus and special functions of various engineering problem and to know the application of some basic mathematical methods via all these special functions.
2. Explain the applications and the usefulness of these special functions.
3. Classify and explain the functions of different types of differential equations.
4. Understand purpose and functions of the gamma and beta functions, Fourier series and transformation.
5. Use the gamma function, beta function and special functions to: evaluate different types of integral calculus problems and Fourier series to solve differential equations.

Mechanics (A) - VII

1. Familiarize with subject matter, which has been the single centre, to which were drawn mathematicians, physicists, astronomers, and engineers together.
2. Understand necessary conditions for the equilibrium of particles acted upon by various forces and learn the principle of virtual work for a system of coplanar forces acting on a rigid body.
3. Determine the centre of gravity of some materialistic systems and discuss the equilibrium of a uniform cable hanging freely under its own weight.
4. Deal with the kinematics and kinetics of the rectilinear and planar motions of a particle including the constrained oscillatory motions of particles.

Numerical Methods – VIII

1. Obtain numerical solutions of algebraic and transcendental equations.
2. Find numerical solutions of system of linear equations and to check the accuracy of the solutions.
3. Learn about various interpolating and extrapolating methods to find numerical solutions.
4. Solve initial and boundary value problems in differential equations using numerical methods.
5. Apply various numerical methods in real life problems

Partial Differential Equations – IX

1. Classify partial differential equations and transform into canonical form
2. Solve linear partial differential equations of both first and second order
3. Apply partial derivative equation techniques to predict the behaviour of certain phenomena.
4. Apply specific methodologies, techniques and resources to conduct research and produce innovative results in the area of specialization.
5. Extract information from partial derivative models in order to interpret reality.
6. Identify real phenomena as models of partial derivative equations.

Mechanics (B) – X

1. Familiarize with subject matter, which has been the single centre, to which were drawn mathematicians, physicists, astronomers, and engineers together.
2. Understand necessary conditions for the equilibrium of particles acted upon by various forces and learn the principle of virtual work for a system of coplanar forces acting on a rigid body.

Real Analysis – I (A) – XI

1. Describe fundamental properties of the real numbers that lead to the formal development of real analysis.
2. Comprehend rigorous arguments developing the theory underpinning real analysis.
3. Demonstrate an understanding of limits and how they are used in sequences, series, differentiation and integration.

4. Construct rigorous mathematical proofs of basic results in real analysis.
5. Appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.

Abstract Algebra – I (A) – XII

1. Demonstrate understanding of and the ability to verify relationships between operations satisfying various properties (e.g. commutative property)
2. Demonstrate understanding of and the ability to work within various algebraic structures
3. Assess properties implied by the definitions of groups and rings
4. Acquire the basic knowledge and the structure of Group, Subgroup and Cyclic Groups
5. Explain the significance of the notion of a normal subgroup, and of a simple group

Ordinary Differential Equations – A- XII

1. Student will be able to solve first order differential equations utilizing the standard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.
2. Student will be able to find the complete solution of a non-homogeneous differential equation as a linear combination of the complementary function and a particular solution.
3. Student will be introduced to the complete solution of a non-homogeneous differential equation with constant coefficients by the method of undetermined coefficients.
4. Student will be able to find the complete solution of a differential equation with constant coefficients by variation of parameters.
5. Student will have a working knowledge of basic application problems described by second order linear differential equations with constant coefficients.

Real Analysis – B – XIV

1. Expand functions using Taylor Series
2. Understand partitions and their refinement
3. Understand Inerrability and theorems on inerrability
4. Acquire the idea about Riemann Inerrability and Riemann Integration
5. Understand various theorems associated with Riemann Integration

Abstract Algebra – II – XV

1. Use Lagrange's Theorem to analyse the cyclic subgroups of a group
2. Acquire the notion of permutations and operations on them
3. Prove Cayley's theorem and understand its applications
4. Explain the terms isomorphism and homomorphism
5. Develop an idea about Isomorphism, homomorphism and auto orphism

Ordinary Differential Equations (B) – XVI

1. Distinguish between linear, non-linear, partial and ordinary differential equations
 2. Recognize and solve homogeneous diff. equations, exact diff. equations, linear diff. equations by using Integrating factors
 3. Identify ordinary and singular points
 4. Find power series solution about ordinary point and a power series solution about singular points
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BSc (Physics)

Program Specific Outcomes

1. Identifying and describing physical systems with their professional knowledge.
2. Developing their scientific intuition, ability and techniques to tackle problems either theoretical or experimental in nature.
3. Knowledge of general physics like sound, wave, friction, forces and laws of motion and use of mathematics.
4. Information of electrical current, circuits, construction and their use.
5. Learning about concepts of nuclear physics and nuclear energies and importance of their use for mankind.
6. Knowing about the light and its importance in life, its characteristics, properties and use in various instruments

Course Outcomes

B.Sc., I Paper I Physics

Mechanics, Properties of Matter & Sound

1. Bending of beams and expression for bending moment
2. Definition of Cantilever and expression for depression and elevation
3. Expression for Young's Modulus by Uniform and Non-Uniform bending
4. Cantilever – derivation for depression and elevation of bending
5. Expression for Young's Modulus by Uniform and Non-Uniform bending

B.Sc. I Paper II Physics

Heat & Thermodynamics

1. Use thermodynamic terminology correctly.
2. Explain fundamental thermodynamic properties.
3. Derive and discuss the first and second laws of thermodynamics.
4. Solve problems using the properties and relationships of thermodynamic fluids.
5. Analyse heat & thermodynamic cycles.

B.Sc. I Paper III Physics

Geometrical & Physical Optics

1. The candidates should demonstrate fundamental knowledge and insight into geometrical optics in order for
2. The candidate to be able to understand and solve problems related to the eye and optical instruments/lenses.
3. Students should learn function and correction.
4. Knowledge and understanding should be demonstrated in the areas of: (1) refraction at single spherical or plane surfaces, (2) thin lenses, (3) thick lenses

B.Sc. I Paper IV Physics

Electricity & Magnetism

- 1) Understand electric and magnetic fields in matter
- 2) Apply Maxwell's equations to various physical problems
- 3) Calculate EM wave propagation
- 4) Understand radiation, relativistic effects and the processes that produce EM waves from astrophysical objects in space

B.Sc. II Paper V Physics

Mathematical, Statistical Physics & Relativity

B.Sc. II Paper VI Physics

1. Use of Cathode ray oscilloscope and functions of its parts.
2. Amplifier and feedback requirements in amplifier circuits.
3. Effects of positive and negative feedbacks.
4. Operational amplifier and their designing.
5. Circuit and properties of UJT and FETs.

B.Sc. II Paper VII Physics

1. Lenses and various cardinal points.
2. Formation of Images by Newton's formula.
3. Properties of light like interference, diffraction and polarization with theory and experiments.
4. Properties of optical fiber and use in telephone communication.
5. LASERS and applications in various fields.

B.Sc. II Paper VIII Physics

1. Theory of relativity and its consequence.
 2. Wave particle duality and development of new theory.
 3. Development of vector atom model and its superiority on various other models.
 4. Nuclear energy resources and their importance in modern life.
 5. X-rays and their applications.
-

BSc (Botany)

Program Specific Outcomes

1. Identifying different resources helpful for human life.
2. Identifying different groups of plants
3. Acquiring knowledge about inheritance, biochemical and metabolic activities.
4. Development of horticultural skill.
5. Acquiring knowledge about importance of environment.

Course Outcomes:

B.Sc. FY (Botany)

Diversity of Cryptogams I– (P-I)

1. Study of cryptogams to understand their Diversity.
2. Know the systematic, morphology and structure of algae, fungi, bryophytes, and Pteridophytes.
3. Know life cycle pattern of cryptogams.
4. Know economic importance of cryptogams.
5. Know evolution of algae, fungi, bryophytes and Pteridophytes.

Morphology of Angiosperms – (P-II)

1. Systematic study of angiosperms.
2. Understand the morphological and reproductive character of spermatophytic plants.
3. Understand economic importance of angiosperms.
4. Understand the diversity among spermatophyte.
5. To bring investigation of palaeobotanical study in India.

Diversity of Cryptogams – II (Paper – IV)

1. Comprehend the diversity of lower cryptogams (Algae, Fungi, Bacteria, Phytoplasm and viruses.
2. Collection and study of algae, fungi, bacteria from different localities, Identification up to generic level.
3. Recognize the morphology, anatomy, physiology, reproduction and lifecycle pattern.
4. Their diversification and familiarize with various ecological niche.
5. Positive and negative values.

Histology, Anatomy and Embryology (P-V)

1. Use their knowledge and skills in progressive morphological methods.
2. Critically evaluate research results based on the state-of-the-art knowledge of human and animal structures.
3. Perform independent research and critically discuss its results.
4. Publish their own results in research journals with a high impact factor.

B. Sc. SY (Botany)

Taxonomy of Angiosperms (P-VII)

1. Understand the diversity of angiosperms.
2. Understand the comparative account among the families of angiosperms.
3. Know the economic importance of the angiosperm plants.
4. Understand the distinguishing features of angiosperm families.

Plant Ecology (P-VIII)

1. Know the scope and importance of the discipline.
2. Understand plant communities and ecological adaptations in plants.
3. Learn about conservation of biodiversity, Nonconventional Energy and Pollution.
4. Discover botanical regions of India and vegetation types of Maharashtra.

Gymnosperms and Utilization of plants (P-XI)

1. Understand Gymnosperms with respect to distinguishing characters, comparison with Angiosperms, economic importance and classification.
2. Understand the life cycles of Pinus and Gnetum.
3. Know the scope of Paleobotany, types of fossils and geological time scale.
4. Understand the various fossil genera representing different fossil groups.

Plant Physiology (P-XII)

1. Know importance and scope of plant physiology.
2. To understand the plants and plant cells in relation to water.
3. Understand the process of photosynthesis in higher plants with particular emphasis on light and dark reactions, C3 and C4 pathways.
4. Understand the respiration in higher plants with particular emphasis on aerobic and anaerobic respiration.
5. Learn about the movement of sap and absorption of water in plant body.
6. Understand the plant movements.

B. Sc. TY (Botany)

Cell Biology and Molecular Biology (P-XV)

1. To understand the implications of prokaryotic and eukaryotic cell structure and functions from the subject area concepts, theory, experimental, research and health-care perspectives
2. To gain experience in the techniques and in using instruments that are commonly used to study cells
3. To understand the implications of genes, their structure and functions from the subject area concepts, theory, experimental, research and health-care perspectives
4. To gain a hands-on experience in techniques used in molecular biology and their applications

Diversity of Angiosperms – I (P-XVI - A)

1. Understand the diversity of angiosperms.
 2. Understand the comparative account among the families of angiosperms.
 3. Know the economic importance of the angiosperm plants.
 4. Understand the distinguishing features of angiosperm families.
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BSc (Zoology)

Program Specific Outcomes

1. Improving the knowledge about criteria for animal classification.
2. Study of salient features of chordates and non-chordates.
3. Improving the knowledge of animals about their special adaptations and evolutionary relationship.
4. Scientific study of their nature of habitant with environment.
5. Improving information about external morphology and anatomy of animals including human being.

Course Outcomes

B. Sc. FY

Protozoa to Annelida (P-I)

1. Introduction about animal kingdom, Protozoa, Parazoa, Metazoa and Major Phyla
2. General Characters, Structure, Life cycle, Pathogenecity, Control, Prevention and treatment of Protozoan Parasites
3. Genetal Characters, Morphology, Different types of cells and canal system in sycon.
4. General Characters, Morphology of obelia colony, development of hydra, polymorphism in coelenterates
5. General Characters of helminthes and different helminthetic parasitic diseases, life cycle, pathogenecity and control measures
6. General Characters of Annelida, Morphology, Digestive, Excretory and Reproductive systems of Leech.

Cell Biology – (P-II)

1. General structure of the cell, Structure of Prokaryotic and Eukaryotic cell, cell cycle, Mitosis, Meiosis.
2. To understand Structure and Function of various cell organelles and Cytology and Types of Cancer.
3. To study the different types of Microscopes and Microtechniques in methods in cell biology.

Arthropoda to Echinodermata and Protochordata (P-III)

1. General characters of Arthropoda, Structure, Digestive, Nervous, Reproductive, Respiratory systems of Prawn and Cockroach.
2. General characters of Mollusca, External characters, Respiratory, Circulatory, Nervous and Reproductive systems of Pila.
3. General characters of Echinodermata, Morphology, water vascular system, Reproductive system of Asterias.
4. General characters and classification of Protochordata.

Genetics- I (P-V)

1. To Understand various elements of heredity and variation and Mendel's laws of heredity.
2. To provide knowledge about gene interaction, Epistasis, Supplementary and complementary gene.
3. To understand about Multiple alleles like Coat colours in rabbit and blood group in Man
4. To understand about cytoplasmic inheritance in snail, Male sterility, CO₂ sensitivity in Drosophila and kappa particles in paramecia.
5. Knowledge about sex determination in man and Drosophila, Chromosomal theory, Generic balance theory, Triploid intersexes, Gynandromorph in drosophila, sex linked inheritance.

B. Sc. SY

Vertebrate Zoology (P-XI)

1. Introduction about outline classification general characters and affinities of

- cyclostomatous.
2. understand out line classification and general characters of Pisces and the example scoliodon studied with External characters, Digestive system, Respiratory system, Blood vascular system and Nervous system.
 3. Outline classification and general characters of Amphibia, Development of Frog Fertilization, cleavage, Blastula, Gastrulation and formation of germinal layers
 4. Outline classification and general characters of Reptilia with example Calotes- External features, Respiratory system and Blood vascular system, Poisonous and Non-poisonous snakes.
 5. Outline classification and general characters of Aves, Columba livia- External features, Respiratory system, Embryology of chick, Flight adaptation in Birds, Migration in Birds.

Genetics-II (P-VIII)

1. Knowledge about gene and its expression, Definition, concept and function of gene, Transcription, Translation and Genetic code.
2. To understand population genetics, gene pool, gene frequency, Herdy Weinberg Law.
3. Knowledge about Human Chromosome, Sex linked inheritance, Dizygotic and Monozygotic twins, inborn errors in metabolism, PKU, Genetic disorders.
4. Knowledge about Microbial genetics like transformation, Conjugation and Transduction
5. To understand Genetic Engineering.

Animal Physiology (P-XI)

1. To understand brief introduction of physiology of Digestion.
2. To understand Physiology of Respiration.
3. Knowledge about physiology of circulation.
4. Knowledge about physiology of Excretion.
5. Knowledge about Nerve Physiology, Structure and Synapse.
6. To provide knowledge about Muscle Physiology.
7. To provide knowledge about Reproductive Physiology

Biochemistry and Endocrinology (P-XII)

1. Knowledge about Enzyme, Concept and Nomenclature, Properties, Classification, Mechanism of enzyme action and factor affecting enzyme action.
2. To give the knowledge about definition, Classification and Metabolism of Carbohydrate.
3. knowledge about Definition, Classification, Structure and Metabolism of Protein.
4. Knowledge about Definition, Classification and Metabolism of Lipid.
5. To understand the Vitamin source and deficiency.

B. Sc. TY

Ecology (P-XV)

1. Introduction about Definition, Concept, terminology used in ecology.
2. To understand a biotic environmental factors, Effect of Temperature and light on animals, Adaptation to salinity and moisture.
3. Biotic environmental factors- Competition, Predation, Commensalism, Mutualism, Parasitism – definition, Types with examples
4. To study the definition and concept of population, Characteristics, population growth, population regulation.
5. Definition, concept and types of community, Structure and characters of community, Community succession.
6. To understand various ecosystem.

Entomology – I (P-XVI)

1. Introduction about economic Entomology.
2. To understand methods of collection and preservation of insect.
3. To understand systematic position, external morphology, digestive, nervous, reproductive system of Grasshopper

4. To understand insect orders like Thysanuran, Collembola, Lepidoptera, Diptera, Coleoptera, Hymenoptera.
5. To understand House hold and Human insect pest- Bed bugs, Mosquito, Rat Flea and house fly, Cockroach, Pediculus.

Evolution (P-XIX)

1. To introduce the organic evolution and their theories.
2. Description of origin of life and introduction to chemical evolution.
3. To introduce or describe the evidences of organic evolution.
4. Darwinism- Introduction about natural selection theory, Artificial and Sexual selection theory.
5. Describe elemental forces of evolution on genetics base changes.

Entomology – II (XX)

1. Introduction about pest- Definition, Types of pests.
2. Study of major crop pest.
3. Study of stored grain pests.
4. Knowledge about control measures of insect pest- Chemical, Biological, Integrated pest management.
5. To study migration of insect.



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