

# **M.H.Shinde Mahavidyalya, Tisangi**

## **Programme Outcomes, Programme Specific Outcomes and Course Outcomes**

### **Programme Outcomes**

| <b>Programme</b> | <b>Programme Outcomes</b>  |
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| <b>B.A.</b>      | <ol style="list-style-type: none"><li>1. To increase ability to practice human values</li><li>2. To make Responsible &amp; sensible citizen.</li><li>3. To promote critical thinking and application Knowledge</li><li>4. Engagement in community work and global understanding.</li></ol>   |
| <b>B.Sc.</b>     | <p>Knowledge and understanding of:</p> <ol style="list-style-type: none"><li>1.The range of plant diversity in terms of structure, function and environmental relationships. The evaluation of plant diversity. Plant classification and the flora of Maharashtra. The role of plants in the functioning of the global ecosystem. A selection of more specialized, optional topics. Statistics as applied to biological data.</li><li>2.Practical skills: Students learn to carry out practical work, in the field and in the laboratory, with minimal risk. They gain introductory experience in applying each of the following skills and gain greater proficiency in a selection of them depending on their choice of optional modules. Interpreting plant morphology and anatomy. Plant identification. Vegetation analysis techniques. A range of physiochemical analyses of plant materials in the context of plant physiology and biochemistry. Analyze data using appropriate statistical methods and computer packages. 6. Plant pathology to be added for sharing of field and lab data obtained.</li><li>3.Scientific Knowledge: Apply the knowledge of basic science, life sciences and fundamental process of plants to study and analyze any plant form.</li><li>4.Problem analysis: Identify the taxonomic position of plants, formulate the research literature, and analyze non reported plants with substantiated conclusions using first principles and methods of nomenclature and classification in Botany.</li><li>5.Design/development of solutions: Design solutions from medicinal plants for health problems, disorders and disease of human beings and estimate the phytochemical content of plants which meet the specified needs to appropriate consideration for the public health</li><li>6.Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern instruments and equipments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological activities of plants with an understanding of the application and limitations</li><li>7.The Botanist and society: Apply reasoning informed by the contextual knowledge to assess plant diversity, its importance for society, health, safety, legal and environmental issues and the consequent responsibilities relevant to the biodiversity conservation practice.</li><li>8.Environment and sustainability: Understand the impact of the plant diversity in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.</li><li>9.Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.</li><li>10. Students should understand the analytical techniques in chemistry.</li><li>11. Students can acquire basic knowledge separation science and solvent extractions</li></ol> |

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|  | <p>12. Improvement in the basic knowledge of preparation of dyes &amp; drugs and their applications in everyday life.</p> <p>13. Students acquire the knowledge of extraction some natural drugs, pigments and they are environmentally friendly keeping green approach in mind.</p> <p>14. Understand the impact of the chemicals in societal and environmental contexts, and demonstrate the knowledge and need for sustainable development.</p> |
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### Programme Specific Outcomes

| Programme      | Programme Specific Outcomes   |
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| <b>B.A.</b>    |   |
| <b>History</b> | <ol style="list-style-type: none"> <li>1) To Acquiring the knowledge of History</li> <li>2) To Study of history from ancient to Modern period.</li> <li>3) To Study the socio- economic, political, religious &amp; cultural aspects of history</li> <li>4) The purpose of the history is to enable the student to understand the important development in the historical research in thematic approach.</li> <li>5) To examine and criticize various revolutions and world war along with their impact on history.</li> <li>8) To understand the application of history with reference to archives, Museum &amp; tourism Industry.</li> <li>7) The student will be introduced to the Political, social, economic and religious developments in India during this formative period.</li> <li>8) This course will help the students to understand how India came to be.</li> <li>9) The students will know about the agricultural condition, development of trade and industry as well as the social, religious and architectural Milieu of the period.</li> <li>10) The students will study the accounts of the causes and consequences of the Transformative revolutions which changed the history of mankind.</li> <li>11) The course introduces the students to the political developments which led to the expansion of Maratha power in the eighteenth century.</li> <li>12) They will know the methods of writing history.</li> <li>13) They will understand how a syncretic culture developed in India during the period.</li> <li>14) They will know about some select important Personalities who contributed to the making of the Modern World.</li> <li>15) The course will also introduce the students to the sources of Maratha history.</li> <li>16) The students will be introduced to the technique of collecting data through oral interviews</li> </ol> |
| <b>Hindi</b>   | <ul style="list-style-type: none"> <li>• रोजगार उन्मुख शिक्षा एवं कौशल प्रदान करना।</li> <li>• साहित्य के प्रति रुचि बढ़ाना।</li> <li>• छात्रों में हिन्दी भाषा के श्रवण, पठन एवं लेखन कौशल को विकसित करना।</li> <li>• रोजगारपरक हिन्दी की उपयोगिता स्पष्ट करना।</li> <li>• अनुवाद क्षेत्र में काम करने के लिए छात्रों की रुचि बढ़ाना।</li> <li>• केंद्र सरकार के कार्यालयों में हिन्दी अनुवादक, राजभाषा अधिकारी, सहायक पद पर काम करना।</li> <li>• मनोरंजन जगत में, पत्रकारिता में संपादक, संपादक, न्यूज़ रीडर, उपसंपादक, प्रूफ रीडर के</li> </ul>  |

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|                  | <p>पद पर काम करना </p> <ul style="list-style-type: none"> <li>• प्रकाशन क्षेत्रप्रकाशन संस्था में अनुवादक -,संपादक से पद पर काम करना </li> </ul>   |
| <b>Marathi</b>   | <p>१.पौर्वात्य व पाश्चात्य आधुनिक भारतीयसाहित्य शास्त्राचे व आधुनिक भारतीय साहित्य शास्त्राचे स्वरूप समजून घेणे.</p> <p>2. शब्द शक्तिचे आकलन करून घेणे.</p> <p>3. साहित्यातील रसाचे स्वरूप समजून घेणे.</p> <p>4.स्पर्धापरीक्षा प्रशासन पत्रकारिता आकाशवाणी दूरदर्शन चित्रपटनिर्मिती जाहिरात भाषांतर शिक्षण इलेक्ट्रॉनिक मीडिया या क्षेत्रात व्यवसाय व रोजगाराच्या संधी.</p>  |
| <b>Economics</b> | <p>1. To introduce the students to the Indian Economics and environment.</p> <p>2.To develop an understanding of challenges facing by the Indian economy.</p> <p>3.To acquaint the students with structure of the Indian economy, cooperation, environment and changes taking place there.</p> <p>4.In those days globalisation [liberalisation and privatisation] is the backbone of new economic policy. So students study the LPG policy in this programme and create his own opportunities of employment business and also self employment.</p> <p>5.Study economics and learn about economic theory, develop students skills of logical thinking and pickup some great interpersonal skills along the way.</p> <p>6.Economics apply to most aspects of everyday life.</p> <p>7.By studying the Economics you will examine topics of obvious importance to human well being.</p> <p>8.Economics is applicable in a wide range of fields including-</p> <ol style="list-style-type: none"> <li>Business</li> <li>Finance</li> <li>Administration</li> <li>Law</li> <li>Local and national government</li> <li>Cooperations</li> <li>Environment</li> </ol> <p>9.Economics is more than just a subject it is the way of thinking. Economics provides logical way of looking at a variety of issues. Practice the analytical techniques employed in economics and learn to develop students is that General literacy, Communication and numeracy skills, Skills of abstraction, Skills of logical deduction, Critical thinking.</p> <p>10.Studying of economics provides insights into</p> <ol style="list-style-type: none"> <li>The general environment of resources allocation decisions.</li> <li>Opportunity costs and trade-offs</li> <li>Projects evaluation and government policy</li> </ol> <p>11.Economics graduates make great employees because employers are particularly keen on graduates with good analytical and problems solving skills. Training in economics emphasis there skills to students.</p> <p>12.The wide range of skills developed through studying economics(Degree) opens up many, diverse career opportunities for graduates.</p> <p>13.Economics is the study of how people deploy resources and to meet human needs.</p> |
| <b>B.Sc.</b>     |  |
| <b>Botany</b>    | <p>CO1. Critically evaluation of ideas and arguments by collection relevant information about the plants, so as recognize the position of plant in the broad classification and</p>  |

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|                  | <p>phylogenetic level.</p> <p>CO2. Identify problems and independently propose solutions using creative approaches, acquired through interdisciplinary experiences, and a depth and breadth of knowledge/expertise in the field of Plant Identification.</p> <p>CO3. Accurately interpretation of collected information and use taxonomical information to evaluate and formulate a position of plant in taxonomy.</p> <p>CO4. Students will be able to apply the scientific method to questions in botany by formulating testable hypotheses, collecting data that address these hypotheses, and analyzing those data to assess the degree to which their scientific work supports their hypotheses.</p> <p>CO5. Students will be able to present scientific hypotheses and data both orally and in writing in the formats that are used by practicing scientists.</p> <p>CO6. Students will be able to access the primary literature, identify relevant works for a particular topic, and evaluate the scientific content of these works.</p> <p>CO7. Students will be able to apply fundamental mathematical tools (statistics, calculus) and physical principles (physics, chemistry) to the analysis of relevant biological situations.</p> <p>CO8. Students will be able to identify the major groups of organisms with an emphasis on plants and be able to classify them within a phylogenetic framework. Students will be able to compare and contrast the characteristics of plants, algae, and fungi that differentiate them from each other and from other forms of life.</p> <p>CO9. Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. They will be able to use specific examples to explicate how descent with modification has shaped plant morphology, physiology, and life history.</p> <p>CO10. Students will be able to explain how Plants function at the level of the gene, genome, cell, tissue, Flower development. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and mode of life cycle followed by different forms of plants.</p> <p>CO11. Students will be able to explain the ecological interconnectedness of life on earth by tracing energy and nutrient flow through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.</p> <p>CO12. Students will be able to demonstrate proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization within biology.</p> |
| <b>Chemistry</b> | <ol style="list-style-type: none"> <li>1. To promote understanding of basic facts and concepts in Chemistry while retaining the excitement of Chemistry</li> <li>2. To make students capable of studying Chemistry in academic and Industrial courses and to expose the students to different processes used in Industries and their applications.</li> <li>3. To expose the students to various emerging new areas of Chemistry and apprise them with their prevalent in their future studies and their applications in various spheres of chemical sciences.</li> <li>4. To develop problem solving skills in students.</li> <li>5. To developed ability and to acquire the knowledge of terms, facts, concepts, processes, techniques and principles of subjects.</li> <li>6. To develop ability to apply the knowledge of contents of principles of chemistry.</li> <li>7. To inquire of new knowledge of chemistry and developments therein.</li> <li>8. To expose and to develop interest in the fields of chemistry</li> <li>9. To develop proper aptitude towards the subjects</li> <li>10. To develop the power of appreciations, the achievements in Chemistry and role in</li> </ol>   |

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|  | nature and society.<br>11. To develop skills required in chemistry such as the proper handling of apparatus and chemicals |
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## Course Outcomes

### Department of History

| Class   | Course   | Semester | Course Outcomes   |
|---------|--|----------|---|
| B.A.-I  | Rise of Maratha power(1600-1707)                           | I        | <b>After studying the course the student will be able to...</b><br>1. To understand the contribution of chhatrapati Shivaji Maharaj in making of Maratha State.<br>2. To Understand the historical sources of Maratha History.<br>3. To understand the role of common people in Maratha independence war.   |
|         | Polity , Society and economy under the Marathas( 600-1707) | II       | <b>After studying the course the student will be able to...</b><br>1. To understand the administration of Marathas.<br>2 To study economic aspects of Marathas<br>3. To study the socio-religious aspects of the Marathas.<br>4. To understand the contribution of Shivaji Maharaj in Agricultural & Management.  |
| B.A.-II | History of Modern Maharashtra -III (1900 to 1960)          | III      | <b>After studying the course the student will be able to...</b><br>1. Understand the beginnings and growth of nationalist consciousness in Maharashtra<br>2. Explain the contribution of Maharashtra to the national movement<br>3. Give an account of various movements of the peasants, workers, women and backward classes<br>4. Know the background and events which led to the formation of separate state of Maharashtra. |
|         | History of Modern Maharashtra –V (1900 to 2000)            | IV       | <b>After completion of the course, the student will...</b><br>1. Acquaint himself with the contribution of eminent leaders of Maharashtra<br>2. Know about the economic transformation of Maharashtra<br>3. Understand the salient features of changes in society<br>4. Explain the growth of education.  |

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|         | History of India-IV<br>(1757-1857)             | III | <p><b>After studying this course, the student will be able to</b></p> <ol style="list-style-type: none"> <li>1. Acquaint himself with significant events leading to establishment of the rule of East India Company</li> <li>2. Know the colonial policy adopted by the company to consolidate its rule in India</li> <li>3. Understand the structural changes initiated by colonial rule in Indian Economy.</li> <li>4. Explain the various revolts against rule of the East India Company.</li> </ol> <p><b>After completion of this course, the student will be able to...</b></p> <ol style="list-style-type: none"> <li>1. Understand the events which lead to the growth of nationalism in India</li> <li>2. Acquaint himself with major events of the freedom struggle under the leadership of Mahatma Gandhi</li> <li>3. Explain the contribution of Revolutionaries, Left Movement and Indian National Army</li> <li>4. Know the concept of Communalism and the causes and effects of the partition of India</li> </ol> |
|         | History of Freedom Struggle –VI<br>(1858-1947) | IV  |  |
| B.A.-II | Social Reforms in India–I                      | III | <p><b>After completion of the course, the student will be able to ...</b></p> <ol style="list-style-type: none"> <li>1. Understand the salient features of prominent socio-religious reform movements</li> <li>2. Explain the thought and work of Mahatma Phule for radical transformation of Indian society</li> <li>3. Know the measures taken by Rajashri Shah Maharaj for emancipation of lower classes and women</li> <li>4. Understand the thoughts of Ambedkar on the annihilation of the caste system and untouchability in India</li> <li>5. Know how the Indian constitution embodies the values of social justice and Equality.</li> </ol>  |
|         | Social Reforms in Maharashtra – II             | IV  | <p><b>After studying the course, the student will be able to...</b></p> <ol style="list-style-type: none"> <li>1. Know about the beginnings of social reforms in Maharashtra by the Paramhansa Mandali and PrarthanaSamaj.</li> <li>2. Understand the contribution of women reformers</li> <li>3. Explain the contribution of Social reformers in the fight for social justice</li> </ol>  |

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|          |  |    | 4. Explain the role played by educational reforms in transformation of society.  |
| B.A.-III | Early India-VII<br>((from beginning to 4th c. BC)  | V  | <b>After studying the course the student will be able to ...</b><br>1) Understand the transition of humans in India from Hunters to Farmers<br>2) Explain the transition from Early to Later Vedic period.<br>3) Clarify the causes for the first and second urbanizations<br>4) Give an account of the teachings of Gautama Buddha and VardhamanaMahavira<br>5) Describe the rise and growth of the Mauryan Empire<br>6) Explain the salient features of Ashoka'sDhamma   |
|          | Ancient India-XII<br>(From 4th c. BC to 7th c. AD) | VI | <b>After studying the course the student will be able to...</b><br>1) Know the political ,economic and religious developments which took place in early historic India<br>2) Explain the role played by Major Satavahana, Kushana, Gupta and Vakataka Kings<br>3) Give an account of the developments in the Post-Gupta period<br>4) Have an informed opinion about the society and culture of Ancient India   |
| B.A.-III | History of Medieval India-VIII<br>(1206-1526)      | V  | <b>After studying the course the student will be able to...</b><br>1) Describe the different types of historical sources available for writing the history of medieval India<br>2) Explain the contributions of medieval rulers like AllaudinKhilji, Muhammad-bin-Tuqhlaq, Krishnadevraya, and Mahmud Gavan<br>3) Give an account of the administration and economy of the Delhi sultanate and Vijayanagar Empire<br>4) Elucidate the significant developments which took place in religion, society and culture |
|          | History of Medieval India XIII<br>( 1526-1707)     | VI | <b>After studying the course the student will be able to...</b><br>1) Know about the various sources for writing Medieval Indian history<br>2) Explain the role of rulers like Babar, Akbar, Chandbibibi and Ibrahim Adilshah II<br>3) Gain knowledge about the administrative and revenue system<br>4) Describe the condition of Industry and trade<br>5) Explain important developments in religion, society and culture   |

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| B.A.-III | Age of Revolutions - IX  | V  | <b>After studying the course the student will be able to...</b> <ol style="list-style-type: none"> <li>1) Explain the causes and consequences of the Reformation</li> <li>2) Give an account of the role played by Martin Luther</li> <li>3) Explain the salient features of the Industrial revolution</li> <li>4) Give an account of the American revolution</li> <li>5) Explain the causes, effects and major events of French Revolution</li> <li>6) Explain the role of major leaders of the French Revolution</li> </ol>   |
|          | Making of the Modern World- XIV<br>(16 <sup>th</sup> & 19 <sup>th</sup> century) | VI | <b>After studying this course the Student will be able to:</b> <ol style="list-style-type: none"> <li>1) Know the causes and consequences of the Glorious revolution in England</li> <li>2) Explain the concept of Nationalism and account for its rise and spread.</li> <li>3) Describe the unification of Italy and Germany.</li> <li>4) Give an account of the rise, growth and impact of Imperialism</li> <li>5) Explain the significance of the Partition of Africa</li> <li>6) Know the life and thoughts of important leaders like Metternich, Karl Marx and Abraham Lincoln.</li> </ol> |
| B.A.-III | Political History of the Marathas - X  | V  | <b>After studying the course the student will be able to...</b> <ol style="list-style-type: none"> <li>1) Describe the political conditions of the Marathas upto the year 1740</li> <li>2) Explain the role of BalajiBajirao.</li> <li>3) Explain the causes and effects of the Battle of Panipat.</li> <li>4) Understand the political condition of the Marathas after 1761.</li> <li>5) Critically analyze the causes for the decline of Maratha power.</li> </ol>  |
|          | Polity, Economy and Society under the Marathas-XV                                | VI | <b>After studying the course the student will be able to...</b> <ol style="list-style-type: none"> <li>1) Know the various sources for writing the history of the Marathas</li> <li>2) Explain the significant developments in the polity of the Marathas</li> <li>3) Describe the economic conditions</li> <li>4) Explain the social conditions.</li> </ol>  |



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| B.A.-III | History: Its Theory -XI                 | V  | <b>After studying the course the student will be able to...</b><br>1) Understand the definition and scope of the subject of History<br>2) Know the process of acquiring historical data<br>3) Explain the process of presenting and writing history<br>4) Understand the methods of writing history |
|          | Methods and Applications of History-XVI | VI | <b>After studying the course the student will be able to...</b><br>1) Understand the nature of archival sources<br>2) Gain conceptual clarity about recent trends in history.<br>3) Know about the application of history in museums.<br>4) Explain the concept and scope of heritage tourism.      |

### Department of Economics

| Class  | Name of the Papers   | Outcome   |
|--------|--|---|
| B.A.I. | Indian Economy   | 1. This paper intends to acquaint the students with various dimensions of challenges, confronting the Indian Economy. It endeavors to provide useful insights to the students about the present Economic standing and composition of the Indian Economy, the major sectors and there relative importance in the Indian Economy and the major challenges faced by it.<br>To acquaint the students with the polices and performances of major sectors in Indian Economy.      |
| B.A.II | 1. Macro Economics<br>2. Money and Banking<br>3. Cooperation<br>4. Environmental Studies | 1.This paper on money banking , income & employment public finance which combines within its folds systematic discussion and objectives analysis of theory and policy concerning.<br>2.This paper has been prepared to cater for the requirements of all those students who are interested in acquiring basic knowledge of money and banking. It would also prove useful to students specialising in money and banking as well as to students who engaged in banking sector |

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|         |   | <p>3. Generally cooperation means living, thinking, working together and help each other to develop all society.</p> <p>4. This paper students study nature of environmental studies, natural resources and associated problems, also environmental problems, social issues, environmental protection, bio-diversity and its conservation and also field work. So students help to develop their awareness in environment.</p>   |
| B.A.III | <p>1. Micro Economics</p> <p>2. Research methodology in Economics</p> <p>3. Development of Economics</p> <p>4. History of Economic thoughts</p> <p>5. International Economics</p> | <p>1. In this paper the major developments in modern micro economics are analysed vigorously and critically, mathematics being an inherent part of economics theory, so students study basic concepts, models, tools and methodology of economics.</p> <p>2. Degree level students increase awareness in research and student study any problem, fact, research tools too</p> <p>3. One of the most significant demographic phenomena, of the 20th century has been the fast pace of development. Students study the meaning of development, its benefits, types.</p> <p>4. In this paper students study the development of economic thought and basic concept of economics.</p> <p>5. This paper shows how to development of international economics. Theory has traditionally been shaped by the need to understand the changing world economy and analyse actual problems in international economic policy.</p> |

### Department of Hindi

| <u>Class</u> | <u>प्रश्नपत्र</u> | <u>Course Outcome</u>  |
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| बी ए1 -      | प्रश्न पत्र 1, 2. | <ul style="list-style-type: none"> <li>छात्रों की हिन्दी साहित्य के प्रति रुचि बढ़ाना तथा छात्रों को साहित्य की विविध विधाओं से परिचित कराना।</li> <li>छात्रों को हिन्दी के प्रतिनिधि गद्यकारों एवं कवियों से परिचित कराना।</li> <li>निबंध, कहानी, रेखाचित्र, एकांकी, रिपोर्टाज, संस्मरण, व्यंग आदि विधाओं के माध्यम से छात्रों का भावात्मक विकास कराना।</li> <li>छात्रों की विचार क्षमता तथा कल्पनाशीलता को बढ़ाना देना।</li> </ul> |

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| बी ए<br>भाग 2 | प्रश्न पत्र 3. | <ul style="list-style-type: none"> <li>• कथा साहित्य का स्वरूप, तत्व प्रकारों का अध्ययन करना।</li> <li>• समीक्षा मानदंडों के आधारपर कथा साहित्य का अध्ययन करना।</li> <li>• कथेत्तर साहित्य का समीक्षात्मक अध्ययन करना।</li> <li>• कथा और कथेत्तर साहित्य का वर्तमान प्रासंगिकता के साथ अध्ययन करना।</li> </ul>   |
|               | प्रश्न पत्र 4  | <ul style="list-style-type: none"> <li>• छात्रों की साहित्य के प्रति रुचि बढ़ाना तथा साहित्य के विविध विधाओं से परिचित कराना।</li> <li>• छात्रों को मध्यकालीन हिन्दी कवियों से परिचित कराना।</li> <li>• नैतिक मूल्य, राष्ट्रिय मूल्य एवं उत्तरदायित्व के प्रति आस्था निर्माण कराना।</li> <li>• आधुनिक हिन्दी कविता में चित्रित विविध विमर्शों से परिचित कराना।</li> </ul>  |
|               | प्रश्न पत्र 5  | <ul style="list-style-type: none"> <li>• छात्रों में हिन्दी में कार्य करने की विचार क्षमता, कल्पनाशीलता एवं रुचि को विकसित कराना।</li> <li>• रोजगार उन्मुख शिक्षा एवं कौशल प्रदान कराना।</li> <li>• पत्राचार के स्वरूप का परिचय कराना।</li> <li>• कार्यालय और व्यवसाय में हिन्दी का प्रयोग का कौशल ज्ञान विकसित कराना।</li> <li>• अनुवाद और व्यावहारिक लेखन का महत्व तथा उपयोगिता का परिचय कराना।</li> <li>• छात्रों में हिन्दी भाषा के श्रवण, पठन एवं लेखन कौशल को विकसित कराना।</li> </ul> |

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|  | प्रश्न पत्र 6 | <ul style="list-style-type: none"> <li>• विविध कवियों से परिचित कराना।</li> <li>• छात्रों में हिन्दी भाषा के श्रवण, पठन एवं लेखन की क्षमता विकसित कराना।</li> <li>• साहित्य के प्रति रुचि बढ़ाना।</li> <li>• नैतिक मूल्य, राष्ट्रिय मूल्य एवं उत्तरदायित्व के प्रति आस्था निर्माण कराना</li> </ul> |
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| <p>बी ए<br/>भाग 3</p> | <p>प्रश्न पत्र 7</p> <ul style="list-style-type: none"> <li>• नाटककार कुसुम कुमार की बहुमुखी प्रतिभा से परिचित कराना।</li> <li>• कुसुम कुमार के साहित्य से परिचित कराना।</li> <li>• नाटककार कुसुम कुमार के विचार धारा से परिचित कराना।</li> <li>• निर्धारित ग्रंथ का सूक्ष्म आलोचनात्मक अध्ययन कराना।</li> </ul> <p>प्रश्न पत्र 8</p> <ul style="list-style-type: none"> <li>• साहित्य निर्मिति की प्रक्रिया का बोध कराना।</li> <li>• साहित्यकाव्य के विभिन्न अंग/भेदों से परिचित कराना।</li> <li>• काव्य की नवीन विधाओं से परिचित कराना।</li> <li>• समीक्षा सिद्धांतों से परिचित कराना।</li> <li>• काव्य के तत्वों से परिचित कराना।</li> <li>• अलंकारों से परिचित कराना।</li> </ul> <p>प्रश्न पत्र 9</p> <ul style="list-style-type: none"> <li>• हिन्दी भाषा तथा साहित्य की विकास यात्रा से अवगत कराना।</li> <li>• हिन्दी भाषा के माध्यम से अलग अलग विचारधारा और प्रवृत्तियों से अवगत कराना।</li> <li>• संत, कवि उनकी रचनाएं, उनके समाज सुधार कार्य से परिचित कराना।</li> <li>• गद्यपद्य-, विधा और उसके भेदों/उपभेदों से अवगत कराना -।</li> </ul> <p>प्रश्न पत्र : 10 प्रयोजन मूलक हिन्दी</p> <ul style="list-style-type: none"> <li>• पारिभाषिक शब्दावली से परिचित कराना।</li> <li>• सरकारी पत्राचार से परिचित कराना।</li> <li>• जनसंचार एवं एलेक्ट्रॉनिक माध्यमों से परिचित कराना।</li> <li>• अनुवाद स्वरूप महत्व तथा उपयोगिता से परिचित कराना।</li> </ul> <p>प्रश्न पत्र 11:</p> <ul style="list-style-type: none"> <li>• भाषा के विविध रूपों का परिचय कराना।</li> <li>• हिन्दी भाषा एवं लिपि के उद्भव और विकास का परिचय कराना।</li> <li>• भाषा की धृद्धता के प्रति छात्रों को जागृत कराना।</li> <li>• मानक हिन्दी वर्तनी और व्याकरण से छात्रों को परिचित कराना।</li> </ul> |
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## Department of Marathi

| Class         | पेपर   |  |
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| बी .ए भाग 1   | 1.शब्दसंहिता (कंपल्सरी)<br>2.अक्षरबंध (ऐच्छिक)                 | 1.विद्यार्थ्यांची मराठी साहित्या विषयी अभिरुची विकसित करणे .<br>2.मराठी साहित्य परंपरालेखक, कवी यांचा परिचय करून देणे.<br>3. विद्यार्थ्यांमध्ये मातृभाषा, राष्ट्रीय एकात्मता आणि उच्च मानवी मूल्ययाविषयी जाणीव निर्माण करणे.<br>4. विद्यार्थ्यांचा व्यक्तिमत्व विकास घडवून स्पर्धापरीक्षांची पूर्वतयारी करून घेणे.<br>5. निबंधलेखनाच्या माध्यमातून भाषा उपयोजनाची कौशल्ये विकसित करणे.<br>6.चित्रपटवप्रसारमाध्यमेयांच्यालेखनआणिउपयोजनाच्याआकलनाचाअवकाशवाढविणे  |
| बी .ए . भाग 2 | 1.काय डेंजर वारा सुटलाय -जयंतपवार (नाटक)<br>2.काव्यगंध( कविता) | 1.नाटक या वाङ्.मय प्रकाराचे आकलन करून घेणे.<br>2.समकालीन नाटकातून नाटककारांच्या समकालाचे प्रतिबिंब कशाप्रकारे प्रकट होते याचा अभ्यास करणे.<br>3.नाट्याभ्यासाद्वारे प्रयोगरूप नाटकव नाट्यक्षेत्रातील ज्ञान संपादना सचालना देणे .<br>4.नाट्याभ्यासातून सभ्यता संस्कृती ,राष्ट्रीय एकात्मता व बंधुता वाढीस लावणे.<br>5.विद्यार्थ्यांमध्ये संवादलेखन कौशल्य विकसित करणे.<br>6.मराठी काव्य परंपरा, प्रवाहांची ओळख करून घेणे .<br>7.मराठी काव्यातून प्रकट होणारे माणूस आणि समाजयातील परस्परसंबंध शोधणे आणि समाजयातील परस्पर संबंध शोधणे.<br>8.कवितेच्या कलात्मक आकृतिबंधाचे मूळ अभ्यासणे .<br>9.काव्यप्रवाह अनुरूप काव्यलेखनाचे लेखनाचे विशेष अभ्यासणे<br>10 .प्रात्यक्षिकाद्वारे काव्यलेखन कौशल्य रुजविणे |
| बी.ए.३        | साहित्यविचार   | १.पौर्वात्य व पाश्चात्य आधुनिक भारतीय साहित्य शास्त्राचे व आधुनिक भारतीय साहित्य शास्त्राचे स्वरूप समजून घेणे.<br>2. शब्दशक्तिचे आकलन करून घेणे.<br>3. साहित्यातील रसाचे स्वरूप समजून घेणे .   |
|               | मराठी भाषा व भाषा विज्ञान                                      | 1.भाषा विज्ञानाचा परिचय करून देणे.<br>2. मराठीभाषेची वर्ण व्यवस्था समजून घेणे .<br>3. बोलींचे स्वरूप व विशेष समजून घेणे .  |

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|  | मध्ययुगीन मराठी वाङ्.मयाचा इतिहास ( प्रारंभ ते इ.स१८००) | १ ).मध्ययुगीन मराठी वाङ्.मयाचा परिचय करून घेणे.<br>2.) मध्ययुगीन मराठी वाङ्.मयाचा कालिक अभ्यास करणे .<br>3.) पंडितकवी, बखरवाङ्.मयवशाहीरीवाङ्.मययांचाअभ्यासकरणे.  |
|  | मराठी भाषा व अर्थार्जनाच्या संधी                        | 1.सर्जनशील लेखन प्रक्रिया समजून घेणे.<br>2.वैचारिक लेखनाचे स्वरूप अभ्यास करणे .<br>3. प्रसारमाध्यमातील अर्थार्जनाच्यासंधी आणि भाषिक कौशल्य यांचा परिचय करून घेणे .<br>4. उद्योग व सेवाक्षेत्रात मराठीभाषेद्वारे अर्थार्जनप्राप्ती संदर्भात ज्ञान संपादन करणे |
|  | वाङ्.मय प्रवाहाचे अध्ययन ( मध्ययुगीन व आधुनिक)          | 1. मध्ययुगीन महाराष्ट्र व महानुभवपंथ यांचा परिचय करून घेणे.<br>2.दृष्टांतपाठातील भाषिक वैभव यांचा परिचय करून घेणे.<br>3.ललितगद्यवाङ्.मयप्रकार याचे स्वरूप अभ्यासणे.<br>4.व्यक्तिचित्रसंकल्प नाव स्वरूप समजून घेणे.   |

### Department of Botany

| Class              | Syllabus  | Outcome  |
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| B.Sc.<br>I<br>CBCS | Botany Paper IDSC- 13<br>A: BIODIVERSITY OF MICROBES, ALGAE AND FUNGIBotany<br>Paper II: DSC- 14 A: BIODIVERSITY OF ARCHEGONIATE- Bryophytes,Pteridophytes, Gymnosperms | Understanding of concept of biodiversity of non flowering plants   |
|                    | Botany Paper III: DSC- 13 B: PLANT ECOLOGY<br>Botany Paper IV: DSC- 14 B: PLANT TAXONOMY  | Understanding ecological factors and phytogeography of India.<br>Study of angiosperm taxonomy and role of botanical gardens. |
| B.Sc.              | Botany Paper V: DSC   | Reproduction in angiosperms.   |

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| II<br>CBCS           | C13: EMBRYOLOGY<br>OF ANGIOSPERMS<br>Botany Paper VI: DSC<br>C14: PLANT<br>PHYSIOLOGY                | Significance of polyembryony and apomixes<br>Study of mineral nutrition, photosynthesis and growth  |
|                      | Botany Paper VII: DSC<br>D13: PLANT<br>ANATOMY<br>Botany Paper VIII: DSC<br>D14: PLANT<br>METABOLISM | Understanding anatomy of parts of plant.<br>Study of enzyme and nitrogen metabolism, respiration and seed germination.  |
| B.Sc.<br>III<br>CBCS | Paper- IX DSE –E25<br>Genetics and Plant<br>Breeding   | Understand the biochemical nature of nucleic acids, their role in living systems, experimental evidences to prove DNA as a genetic material, Understanding concepts of genetics and to study analytical techniques in botany<br><br>Understand the science of plant breeding. 2. To introduce the student with branch of plant breeding for the survival of human being from starvation. 3. To study the techniques of production of new superior crop varieties. 4. Understand the modern strategies applied in Genetics and Plant Breeding to sequence and analyze genomes 5. Get the detail knowledge about modern strategies applied in Plant Breeding for crop improvement i.e. Mass selection, Pureline Selection and Clonal selection. 6. Know about exploitation of Heterosis, hybrid and variety development and their release through artificial hybridization. |
|                      | Paper- XDSE –E26<br>Microbiology, Plant<br>Pathology and Mushroom<br>Culture Technology              | Study of applications of microbiology and plant Diseases<br><br>Understand the concept, principle and types of sterilization methods. 2) Know the concept and characteristics of antiseptic, disinfectant and their mode of action. 3) Know the cultivation methods of bacteria, yeast, fungi and virus. 4) Principle, working and applications of instruments viz, pH meters, spectrophotometer, centrifuge, viscometer, and laminar air flow. 5) Understand the Microbial Genetics and Recombination in   |



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|  |  | Bacteria. 6) Know the terminologies in plant pathology. 7) Understand the scope and importance of Plant Pathology. 8) Know the prevention and control measures of plant diseases and its effect on economy of  |
| Paper- XI DSE –E27<br>Cytology and Research<br>Techniques in Biology           |  | Know the details of Microscopy- Principles of light microscopy, electron microscopy (TEM and SEM). 4. Understand & perform Chromatography and cultural techniques in Botany. 5. Understand the methods used in Micrometry, Microtomy and Microphotography.   |
| Paper- XII DSE–E28<br>Horticulture and<br>Gardening                            |  | To gain knowledge of gardening , cultivation, multiplication , raising of seedlings of ornamental plants   |
| Paper- XIII DSE –F25<br>Plant Biochemistry and<br>Molecular Biology            |  | Understand the properties of Monosaccharides, Oligosaccharides and Polysaccharides. 2) They will learn about the Significance of Carbohydrates. 3) Understand the Properties of saturated fatty acids, and unsaturated fatty acids. 4) Understand lipid metabolism in plants. 5) Understand the Beta Oxidation, Gluconeogenesis and its role in mobilization of fatty acids during germination. 6) They will learn about the Significance of lipids. 7) They will be able to understand Brief outline of biosynthesis of amino acid. 8) Understand the protein - structure and classification and protein biosynthesis in prokaryotes and eukaryotes. 9) They will learn about the nucleic acid metabolism                     |
| Paper- XIV DSE –F26<br>Bioinformatics,<br>Biostatistics and<br>Economic Botany |  | With a working knowledge of the practical and theoretical concepts of bioinformatics, you will be well qualified to progress onto advanced graduate study. The portfolio of skills developed on the programme is also suited to academic research or work within the bioinformatics industry as well as range of commercial settings. After studying Economic Botany, students would have first hand information of plants used as food, the various kinds of nutrients available in the plants. The dietary requirements of proteins, fats, amino-acids, vitamins etc that can be met by plants. The students will learn to perform the micro-chemical tests to demonstrate various components. The students will learn about |

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|  |  | the use of fibre plants, beverages, fruits and vegetables that are integral to day to day life of plants. Students will learn to explore the regional diversity in food crops and other plants and their ethno-botanical importance as well.  |
|  | Paper- XV DSE –F27<br>Plant Biotechnology and<br>Paleobotany         | Know about the genomic organization or living organisms, study of genes genome, chromosome etc. 2) Gain knowledge about the mechanism and essential component required for prokaryotic DNA replication. 3) Understand the fundamentals of Recombinant DNA Technology. 4) Know about the Genetic Engineering. 5) Understand the principle and basic protocols for Plant Tissue Culture. 6) The concept of operon and its structure and regulation<br><br>) Know the scope of Paleobotany, types of fossils, its role in global economy and geological time scale. 11) Understand the various fossil genera representing different fossil groups. |
|  | Paper- XVI DSE –F28<br>Bio fertilizers and Herbal<br>Drug Technology | The student would have a deep understanding of ecofriendly fertilizers. They will be able to understand the growth and multiplication conditions of useful microbes such as Rhizobium, cyanobacteria, mycorrhizae, Azotobactoretc, their role in mineral cycling and nutrition to plants. The can also think of the methods of decomposition of biodegradable waste and convert into the compost  |

## Chemistry

| Programme Name                | Course Name/<br>paper                      | Course Outcome  |
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| B. Sc. I<br>Semester<br>I &II | Paper I Inorganic<br>Chemistry<br>DSC-3A   | 1. Basic concepts regarding nature of chemical bonds.<br>2. Chemical bonding according to VBT and MOT.                    |
|                               | Paper II Organic<br>Chemistry<br>DSC-4A    | 1. Understanding the stability of compounds on the basis of aromaticity.<br>2. Basic knowledge of reactive intermediates. |
|                               | Paper III Physical<br>Chemistry<br>DSC 3B  | 1. Basic concepts of Thermodynamics and Chemical Kinetics.<br>2. Entropy and enthalpy of chemical system.                 |
|                               | Paper IV Analytical<br>Chemistry<br>DSC-4B | 1. Basic skills of various analytical unit operations.  |
| B. Sc. II                     | Paper V Physical                           | 1. Understand functioning and construction of   |

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| Semester<br>III & IV             | Chemistry<br>DSC- C3                           | Electrochemical cell.<br>2. Physical properties of liquids.   |
|                                  | Paper VI Industrial<br>Chemistry<br>DSC-C4     | 1. Chemical constitution in soap and detergents and its applicability<br>2. Concepts of corrosion and electroplating in metals  |
|                                  | Paper VII Inorganic<br>Chemistry<br>DSC-D3     | 1. Understanding the basics of coordination chemistry.<br>2. Understand the concept of catalysis  |
|                                  | Paper VIII Organic<br>Chemistry<br>DSC- D4     | 1. Stereo chemical aspects of various organic compounds.<br>2. Industrially important Name reactions and its applicability in various field.                                    |
| B. Sc. III<br>Semester<br>V & VI | Paper IX Inorganic<br>Chemistry<br>DSE-E5      | 1Detail study of organometallic compounds and semiconductors.<br>2Applicability and hazards of various polymers   |
|                                  | Paper X Organic<br>Spectroscopy<br>DSE-E6      | 1. Elucidation of structure of various organic compounds by using UV-VIS, IR, NMR and Mass spectroscopic techniques   |
|                                  | Paper XI Physical<br>Chemistry<br>DSE-E7       | 1. Quantum theory and its applicability in chemistry.<br>2.Elucidation of structure of chemical compounds by studying the spectroscopic techniques.                             |
|                                  | Paper XII Analytical<br>Chemistry DSE-E8       | 2. Understanding of different chemical processes in industry.   |
|                                  | Paper XIII Inorganic<br>Chemistry<br>DSE-F5    | 1. Radioactivity and its applications in various field.<br>2. Kinetic and thermodynamic stability of complexes.   |
|                                  | Paper XIV Organic<br>Spectroscopy<br>DSE-F6    | 1. Reaction mechanism and industrial applicability of various name reactions and reagents.<br>2. History and chemistry of Natural products and its pharmaceutical applications. |
|                                  | Paper XV Physical<br>Chemistry<br>DSE-F7       | 1. Radioactivity of various elements and its usefulness.<br>2.Rate of simultaneous reactions can be studied by chemical kinetics  |
|                                  | Paper XVI<br>Analytical<br>Chemistry<br>DSE-F8 | 1. Chromatographic techniques for chemical analysis.<br>2.Applicability of various instruments like Potentiometer, conductometer, etc.  |