SSRI's

ARTS, SCIENCE AND COMMERCE COLLEGE, RAHATA

2.6.1. Programme Outcomes

Course Out Comes of B.A.

1) **English:**

PROGRAM SPECIFIC OUTCOMES OF BA ENGLISH

PSO1: Understand different modes of communication in the context of modern life.

PSO2: Become effective and efficient users of English Language.

PSO3: Enhance Employment opportunities in communication based careers.

PSO4: Understand and apply the basic terms in English literature-drama, poetry and fiction and literary Criticism.

PSO5: To understand and empower independently in the venture of reading and critical examination and evaluation of British, Indian and Commonwealth literature

PSO6: Understand the structure and usage of modern Indian English.

Course Outcomes: General Papers/Compulsory Papers

CO1: Develop competence for self- learning.

CO2: Develop overall linguistic competence and communicative skills.

CO3: Develop interest in reading literary pieces.

CO4: Expose to native cultural experiences and situations in order to develop human values and social Awareness.

CO5: Develop oral and written communicative skills to enhance employability and make English as a medium of livelihood and personality development.

Course Outcomes: Literature Papers

CO1: To realize the beauty and communicative power of English through good pieces of prose and Poetry.

CO2: Appreciate and analyse masterpieces of English literature from different parts of the world.

CO3: Awareness of language used in literature.

CO4: Develop critical insight to read literature closely.

Course Outcomes: Language Papers

CO1: Familiarity with the basics of English language.

CO2: Awareness for the phenomena of world Englishes.

CO3: Sensitivity towards English used in India.

CO4: Explain significance of various sub systems of English language.

Mechanism of Communication

1. Communicated in the class during lectures.

2. Published on the Website.

3. Available in the syllabi document.

2) Marathi: General level course

Course Outcomes: Marathi

CO1: Language skills are developed for facing various fields in era of Globalization.

CO2: Life-style development of through the study of literature.

CO3: Personality development through the study of language.

CO4: Development of literary Aptitude through literature.

CO5: Scientific Awareness of attitude with the help of Language.

CO6: Various opportunities are available such as print media, science, and business with the help of language.

CO7: Introduction of language concepts. Development of language skills among the students

CO8: Development of skills such as understanding power, evaluation through the study of Literature.

CO9: Ability of Language acquisition and utilization can be developed through language.

CO10: Awareness of Marathi language and literature inter-dependence

CO11: Development of practical skills of Marathi language

CO12: To develop literary interest among students

CO13: To enable students understanding of science fiction.

CO14: To develop an attitude of happy life through literature

3) Hindi:

PROGRAM SPECIFIC OUTCOMES OF BA HINDI

PSO1: हिंदी साहित्य के प्रति विद्यार्थियों की रुचि बढाना तथा साहित्य के विविध विधाओं से परिचित करना l

PSO 2: विद्यार्थियों को हिंदी के रचानाकारों से परिचित करना l

PSO **3**: विद्यार्थियों को नैतिक मूल्य. राष्ट्रीय मूल्य के प्रति सजग करना l

PSO **4**: विद्यार्थियों को हिंदी अनुवाद कला से परिचित करना l

PSO**5**: विद्यार्थियों को कहानी और कविता से अवगत करना l

PSO **6**: हिंदी भाषा द्वारा लेखन कौशल्, संवाद कौशल्य, सूत्रसंचालन कौशल्य विकसित करना l

PSO **7**: पत्रलेखन, विज्ञापन लेखन आदि के माध्यम से विद्यार्थियों को परिचित करना l

PSO **8**: विद्यार्थियों को राजभाषा हिंदी के संवैधानिक स्वरूप तथा राष्ट्रभाषा का प्रचार करनेवाली संस्था से परिचित करना l

PSO **9:** विद्यार्थियों की हिंदी उपन्यास एवं नाटक के प्रति रुचि बढाना l

PSO10**:** विद्यार्थियों को पारिभाषिक शब्दावली व पत्र लेखन, निबंध लेखन भेटवार्ता/ साक्षात्कार तथा रिपोर्ट लेखन से परिचित करना l

COURSE OUTCOMES: Hindi

CO 1: विद्यार्थियों को भाषा की परिभाषाओं, विशेषताओं तथा भाषा के विविध रुपों से परिचित कराना l

CO 2: विद्यार्थियों को हिंदी की विविध बोलियों, भाषा विज्ञान के अंग, भाषा विज्ञान की शाखाओं से परिचित करना l

CO 3: लिपि का स्वरूप, इतिहास तथा देवनागरी लिपि की वैज्ञानिकता की जानकारी देना l

CO 4: मध्ययुगीन संत एवं भक्तों के काव्य से विद्यार्थियों को परिचित करना l

CO 5: साहित्य कृतियों के माध्यम से साहित्य के शिल्प एवं सौंदर्य से परिचित करना l

CO **6**: हिंदी साहित्य के इतिहास लेखन से अवगत करना l

CO **7**: हिंदी साहित्य के इतिहास के कालखंडों के नामकरण एवं पृष्ठभूमि का परिचय देना l

CO **8**: विद्यार्थियों में भाषा के वैज्ञानिक अध्ययन की दृष्टि निर्माण करना l

CO **9:** भाषाविज्ञान का अन्य विज्ञान से संबंध विशद करना **l**

CO **10:** हिंदी साहित्य में आये हुये बदलाव से विद्यार्थियों को परिचित करना l

4) Course Out Comes of B.A Economics

Programme Specific Outcome:

- Ability to develop an understanding of the economic environment and the factors affecting economic environment.
- Ability to develop awareness on the various new developments in the different sectors of an economy – agriculture, industry, services, banking, etc.
- Ability to compare and contrast Indian Economy with other world economies.
- At the end of the course, the student should be able discuss and debate on the various issues and challenges facing the Indian Economic Environment.
- Set a suitable background for students to comprehend knowledge of economics in their academic career and apply the knowledge in their life.

Course Outcomes: Economics

CO1: Indian Economic Environment:

Realize the importance and influence of environment on the economy including the quality of manpower. Arouse their feelings to make cleaner environment so as to achieve harmonious development.

CO2: Modern Banking: Online banking, e-trading, internet banking is as part of economics.

CO3: Micro Economics: Apply basic statistical skill necessary for analysis of problems in economics.

CO 4: Macro Economics: It is helpful for human issues including project, excess, production, less consumption, optimum utilization of resources.

CO 5: Economic Development & Planning: It is helpful for in recent times, besides hard core economic prescriptions to development, concern hitherto relegated to background, like education, health, sanitation and infrastructural development.

CO6: International Economics: This course provides the students a thorough understanding and deep knowledge about the basic principles that tend to govern the free flow of trade in goods and services at the global level.

CO7: Public Finance: It is helpful for to understanding and keep Knowledge about Role and functions of the Government in an economy has been changing with the Passas of time. The term 'Public Finance' has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures while budgetary policy is an important part to understand the basic problems of use of resources, distribution of Income, etc.

CO8: Business Economics (Micro)

Communicate knowledge of business economics
Clarify micro economic concepts
Understand basic theories, concepts of micro economics and their application

CO9: Business Economics (Macro)

Demonstrate the meaning and function of money, high powered money, monetary and paper system, illustrate various version of quantity theory of money.

CO10: International Economics:

Show the benefits of international trade in a way how nations with strong international trade have become prosperous and have the power to control world economy and how global trade can be one of the major contributors of reducing poverty.

5) Geography:

Program Specific Outcomes of BA Geography

PSO1: Students will acquire an understanding of and appreciation for the relationship between geography and culture.

PSO2: Students will acquire an understanding of and appreciation for the role that geography can play in community engagement.

PSO3: Students will understand through lectures but also local, regional, and/or international travel the interconnection between people and places and have a general comprehension of how variations in culture and personal experiences may affect our perception and management of places and regions.

PSO4: Students will have a general understanding of physical geographic processes, the global distribution of landforms and ecosystems, and the role of the physical environment on human populations.

Course Outcomes: Geography

CO1: Students will have a general understanding of cultural geographic processes, the global distribution of cultural mosaics, and the history and types of interaction between people within and among these mosaics.

CO2: Students will have a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.

CO3: Students will have a general understanding of the various theoretical and methodological approaches in both physical and human geography and be able to develop research questions and critically analyze both qualitative and quantitative data to answer those questions.

CO4: Students will understand global and regional patterns of cultural, political and economic institutions, and their effects on the preservation, use and exploitation of natural resources and landscapes. Students will be able to locate on a map major physical features, cultural regions, and individual states and urban centers.

CO5: Students will understand global and regional patterns of cultural, political and economic institutions, and their effects on the preservation, use and exploitation of natural resources and landscapes.

6) Political Science:

Program Specific Outcomes of BA Political Science

POS1: Politics interviews open to all graduating seniors. Interviews include questions about mastery of intended learning outcomes as well the general classroom experience.

POS2: Annual senior survey open to all graduating seniors, which includes questions about students' accomplishments and achievements as well as post graduate plans and opportunities.

Course Outcomes: Political Science

CO1: An understanding of how political institutions emerge, how they operate, how they interact with their external environment, and how they shape individual and collective behavior

CO2: Familiarity with different approaches to the study of politics and an ability to apply these to contemporary collective and political problems, and political behavior.

7) History: General level

Course Outcomes: History

CO1: To understand the Socio-Economic, cultural and political background of 17th Century Maharashtra history is useful for new generation.

CO2: Mainly students who are preparing for competitive exams such as M.P.S.C., U.P.S.C. and other exam this history is very important for them.

CO3: This subject aims at enabling the subject to understand the process of 'Rise of Modern India'.

CO4: Study of 'History of modern world in 20th Century' acquaints students about the main developments in the contemporary world.

Course Out Comes of B.Sc.

1) Chemistry:

B.Sc. in Chemistry is undergraduate course and M. Sc. in Organic Chemistry is postgraduate course. It aims to provide training for students planning careers in the chemical sciences.

Course Outcome:

CO1: Development and application of the general principles of thermodynamics and statistical thermodynamics. Chemical kinetics, rate laws for chemical reactions and reaction mechanisms. Thermochemistry-Determine energy changes in chemical reaction.

CO2: Discovery of radioactivity, types of radioactivity, general characteristics of radioactive decay and decay kinetics, Measurements radioactivity, gaseous ion collection method, proportional and G.M. counter.

CO3: Chemistry and properties of the transition metals, lanthanides and actinides. Specifically, the class introduces electron configurations for the elements and oxidation state trends for each group.

CO4: Need of Molecular orbital theory (MOT), Features of MOT, Formation of molecular orbitals (MO's) by LCAO principle, Rules of LCAO combination, M.O. Energy level diagram for homonuclear diatomic molecules, Bond order and existence of molecule from bond order, Energy (β) and magnetic behavior.

CO5: Introduction of Valence Bond Theory (VBT), Need of concept of hybridization, Aspects of VBT, Assumptions, VB representation of tetrahedral, square planer, trigonalbipyramidal and octahedral complexes

CO6: Study of aromatic and aliphatic substitution reactions, elimination reactions, rearrangement reaction and addition reaction to Carbon-carbon Double and triple bond and Carbon-Oxygen double bond.

CO7: Application of spectroscopic methods to organic chemistry such as Ultraviolet, Infrared, Nuclear Magnetic resonance.

CO8: Industrial chemistry course focuses the important industrial techniques includes Modern Approach to Chemical Industry, Agrochemicals, Manufacture of Basic Chemicals, Petrochemicals and eco-friendly fuels, Food and Starch Industry, Cement and Glass industry.

CO9: Natural product chemistry provides a survey of natural products including biogenesis by enzyme-mediated pathways, structure determination, medicinal and biochemical significance and synthesis.

CO10: Explain the nature of oxidation and reduction reactions

CO11: Apply the skills and conventions of science in communicating information & ideas &in assessing results.

Programme Outcome: (PO)

PO1: Demonstrate, solve & understanding of major concepts, theoretical principles and

experimental findings in chemistry.

PO2: Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problems.

PO3: To know the green route for chemical reaction for development in research.

PO4: To develop research oriented skills.

PO5: An ability to work effectively in diverse teams in both classroom and laboratory.

PO6: An ability to employ critical thinking and efficient problem-solving skills in the four basic areas of chemistry (analytical, inorganic, organic, and physical)

PO7: An ability to conduct experiments, analyzes data, and interprets results, while observing responsible and ethical scientific conduct.

PO8: Effective written and oral communication skills, especially the ability to transmit complex technical information in a clear and concise manner.

PO9: The ability to use modern instrumentation for chemical analysis and separation.

PO10: A familiarity with, and application of safety and chemical hygiene regulations and practices.

PO11: Students will demonstrate the ability to communicate clearly and effectively.

PO12: Students will demonstrate awareness and understanding of the skills necessary to live and work in a diverse world.

PO13: Students will demonstrate awareness and understanding of the ethical standards of their academic discipline and/or profession.

2) Physics:

After completion of degree program in B. Sc Physics the student should acquire following skills

PO1: Basic and advanced knowledge of physics

PO2: Ability to analyse problems and find possible and most effective solutions.

PO3: Ability to perform Experimentations independently and can provide better and suitaible techniques.

PO4: Critical thinking and use of modern techniques.

PO5: Awareness about society, Environment and related issues.

PO6: Ethics, individual and team work ability

PO7: Project Management.

PO8: Lifelong Learning.

3) Botany

F. Y. B. Sc. CBCS syllabus 2019-20

Programme Outcome

BO 111 Plant life and utilization

- Understand the morphological diversity of Lower and Higher cryptogams.
- General Classification of Lower and Higher cryptogams
- Understand the economic importance of the Algae, Lichen, Fungi and Bryophytes.
- Know the salient features of Cryptogamic plants.
- Become aware of the status of cryptogams as a group in plant kingdom.
- Understand the life cycles of selected genera.
- Learn about the economic and ecological importance of Cryptogams plants

BO 112 Plant morphology and Anatomy

- To know the primary structure of the angiosperms.
- Understand the basic concepts of inflorescence. •
- Can understand & describe the parts of flower & its various modifications with examples.
- Field visit to explore & actually observe the various modifications related to flower.
- Gets familiar with the types of fruits and their botanical relevance.
- Can grasp the workings of plant tissue systems in details.
- Can get knowledge of internal structure of monocot & dicot plants & identify their anatomical characters.

BO 113 Practical based on BO 111 & BO 112

- Examines the specimens and classifies them in different groups
- Identifies and classifies the specimens up to genus level
- Describes the variation in reproductive structures of angiosperm plants w.r.t inflorescence, parts of flowers and fruits.
- Develops sectioning, staining and mounting technique of vegetative parts of angiospermic plants

BO 121 Plant life and utilization

- Understand the morphological diversity of Pteridophytes, Gymnosperm and Angiosperms.
- Understand the economic importance of the Pteridophytes, Gymnosperm and Angiosperms.
- Know the salient features of plants.
- Understand the life cycles of selected genera.
- Learn about the economic and ecological importance of Pteridophytes, Gymnosperm and Angiosperms.
- General Classification of Pteridophytes, Gymnosperm and Angiosperms.

BO 122 Principles of plant science

- Understand the Biochemical nature of cell.
- Learn about the movement of sap and absorption of water in plant body.
- Understand the plant movements.
- Understand the mechanism of Transpiration in plants.
- Know importance and scope of plant physiology.
- Understand the plants and plant cells in relation to water
- Understand the growth mechanism in plants.
- Know about the genetic material, genome etc.
- Gain knowledge about the mechanism and essential component required for prokaryotic DNA replication.
- Know about the Genetic Engineering.

BO 123 Practical based on BO 121 & BO 122

- Understand the life cycle of given genera.
- Develops sectioning, staining and mounting technique of vegetative parts as well as reproductive parts.
- Understand the utilization and economic importance of Angiosperms- food, fodder, fibers, horticulture and medicines
- Know about the structure of cells.
- Understand the physiological mechanism.

Botany:

CO1: Students will be able to access the primary literature, identify relevant works for a particular topic, and evaluate the scientific content of these works.

CO2: 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.

CO3: 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.

CO4: 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.

CO5: They will be able to use specific examples to explicate how descent with modification has shaped plant morphology, physiology, and life history.

CO6: Students will be able to explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system.

CO7: They will be able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.

CO8: Students will be able to explicate the ecological interconnectedness of life on earth by tracing energy and nutrient flows through the environment.

4) Zoology:

CO1: Students will be able to identify the major groups of organisms with an emphasis on animals and be able to classify them within a phylogenetic framework.

Students will be able to compare and contrast the characteristics of animals that differentiate them from other forms of life.

CO2: 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 animal morphology, physiology, life history, and behavior.

CO3: Students will be able to explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.

CO4: Students will be able to explicate the ecological interconnectedness of life on earth by tracing energy and nutrient flows through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.

CO5: Students will be able to demonstrate proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization within biology.

CO9: They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.

5) Mathematics:

CO1: Demonstrate a computational ability in solving a wide array of mathematical problems.

CO2: Differentiate between valid and invalid mathematical reasoning.

CO3: Utilize mathematics to solve theoretical and applied problems.

CO4: Identify applications of mathematics in other disciplines and in society

CO5: Understand the nature of mathematical proof and be able to write clear and concise proofs.

CO6: Develop the ability to read, understand, and use basic definitions in linear and abstract algebra and real analysis, and be able to prove simple consequences of these definitions.

CO7: Be able to use standard mathematical techniques to solve elementary problems.

CO8: Be able to communicate effectively in oral and written form.

CO9: Be able to write simple computer programs to perform mathematical computations.

CO10: Gain experience exploring open-ended problems, learn to make conjectures, and gather evidence to support or refute these conjectures.

CO11: Develop the ability to read and to learn mathematics independently.

CO12: Learn about applications of mathematics in other fields and gain experience in mathematical modeling.

Course Out Comes of B.Com:

Commerce and Management

B.Com. or Bachelor of Commerce is undergraduate course and M. Com is postgraduate course. It is modernize type of business administration degree that focuses on the technology and online business practices. It aims to provide students with the knowledge, tools of analysis and skills to understand and participate in modern business and economic world.

Course Outcomes

CO1: Demonstrate knowledge of major theories and models in key areas of organizational behavior.

CO2: Analyze organizational problems and generate solutions based on academic research.

CO3: Demonstrate knowledge of microfinance and microeconomic theory as it relates to markets, firms and government policy.

CO4: Apply basic mathematical and statistical skills necessary for analysis of problems in accounting, marketing, management and finance.

CO5: It is helpful for human issues including project and change management, factors related to computer use, legal and security issues.

CO6: Operate trading activities from any part of the nation and the world and time and distance do not affect the business as online trading is applied.

CO7: Graduates have a high employment rate as there is no business which does not require a commerce specialist to manage the financial aspects.

CO8: A qualified Chartered Accountant (C.A.) also has an option of joining the government services or taking up assignment profitable assignment in private sector.

CO9: With the use of latest technology, there is growing requirement for qualified and trained

Programme Outcomes: (POs)

PO1: Advertising and Sales Management: In this programme students are taught about the important aspects of advertising and Sales management. It is beneficial for those who

want to work in this field. Tally package is helpful for students in marketing strategy.

PO2: Computer Application: Learn about computer application programme and operating procedure along with regular commerce subjects like accounts, statistics, and economics.

PO3: Office Management: Students get knowledge about computer applications, office administration, communication skills and corporate culture. It is useful for those who are interested in managing an office.

PO4: Tax Procedure: In this programme students understand tax procedures and it is beneficial for students who want to work in accounts or tax department or can start their own consultancy.

PO5: Effective Communication: Can speak, read, write and listen clearly in person and through electronic media in English and in one Indian Language.

PO6: Analyze Monetary Policy: Students can analyze macroeconomic policies including fiscal and monetary policies of India.

PO7: Investment Decisions: Understands share market and behavior of financial and money market and perform cost benefit analysis for making investment decisions.

PO8: Project Report and Finance: Demonstrate knowledge of project report and management principles and can apply in their own work and understand procedure of financial services.

PSOs of Commerce:

PSO1: Understand the behavior of Indian and world economy.

PSO2: Determine economic variables including inflation, unemployment, poverty, GDP, Balance of Payment.

PSO3: Have skills related to sectors like financial services, banking, marketing, business management, entrepreneurial venture, law and investment decisions.

PSO4: Understand fiscal budget and can manage how rupee comes and how rupee goes.