



RASHTRIYA CHARITABLE TRUST

College Code No.306

RASHTRIYA ARTS, COMMERCE & SCIENCE COLLEGE, NAGAD

Tal. Kannad , Dist. Chhatrapati Sambhaji Nagar, Mobile No.8888120082

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Ref.No.

Date :

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes Offered by the institution are stated and displayed on website

Response:

The Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes Offered by the institution are attached herewith and displayed on website.


IQAC
Co-Ordinator




Principal
Rashtriya Arts Comm. & Science College
Nagad, Tal. Kannad, Dist. Chh.Sambhaji Nagar

RASHTRIYA CHARITABLE TRUST'S
RASHTRIYA ARTS, COMMERCE AND SCIENCE COLLEGE
NAGAD.TAL-KANNAD DIST – CHHATRPTI SAMBHAJINAGAR

PROGRAMME OUTCOMES

INDEX

S. N.	Programme Code	Programme Name	Page No
1	RCPR01	Bachelor of Arts (BA)	2
2	RCPR02	Bachelor of Science (B.Sc.)	3
3	RCPR03	Bachelor of Commerce (B. Com.)	4
4	RCPR04	Master of Arts in Marathi	5
5	RCPR05	Master of Arts in Political Science	6
6	RCPR06	Master of Science in Chemistry (M.Sc.)	7
7	RCPR07	Master of Science in Zoology (M.Sc.)	8
8	RCPR08	Programme Outcomes: NSS	9
9	RCPR09	Programme Outcomes: Sports	10

Bachelor of Arts (BA)

RCPR01

Bachelor of Arts (BA)

PO 01: The students get familiar with the basic concepts and fundamental ideas of social sciences and humanities.

PO 02: The students understand the local, national and global contexts of issues emerging in social sciences and humanities.

PO 03: The student gets acquainted with the social, historical, economic, political and cultural traditions and also communicate them effectively.

PO 04: The students acquire the professional, ethical and human values and life skills in theory and practice.

PO 05: The students become conscious of various cross cutting issues and become responsible and dutiful citizens.

PO 06: The students develop analytical skills, critical temper, creative abilities, research aptitude by undertaking debates, group discussions, seminars, projects etc. so that they conduct research on issues of interest.

PO 07: The students are able to apply the concepts learnt in the classrooms in real life situations.

PO 08: The students acquire necessary skills and competencies thus becoming eligible to avail to various employment opportunities.

Bachelor of Science (B.Sc.)

RCPR02

Bachelor of Science (B.Sc.).

- PO 01: The students get familiar with the basic concepts and fundamental ideas of in puresciences such as Physics, Chemistry, Botany, Zoology, Mathematics etc. (BL2)
- PO 02: The students understand various scientific theories and phenomena and relate it to theday-to-day life. (BL2)
- PO 03: The students are able to deal use the theoretical knowledge in real life situations. (BL3) PO 04: The students are able to perform scientific experiments, data analysis so as to arrive toconclusions (BL4)
- PO 05: The students develop the skill of observation, critical thinking leading to resolution of theproblems (BL6)
- PO 06: The students develop, research aptitude by undertaking debates, group discussions,seminars, projects etc. so that they conduct research on issues of interest. (BL6)
- PO 07: The students are able carry our interdisciplinary research so as to tackle the problem andissues in a better and concerted manner. (BL6)
- PO 08: The students acquire necessary skills and competencies thus becoming eligible to avail tovarious employment opportunities. (BL5)
- PO 08: The students are encouraged to make discoveries and inventions so as to add to theexisting scientific knowhow (BL6)
- PO 09: The students acquire moral, ethical and social values for seeking the right application ofscientific principles in human life (BL6)

Bachelor of Commerce (B. Com.)

RCPR03

Bachelor of Commerce (B. Com.)

PO 01: The students get theoretical exposure to the branches like accounts, Human resource management, trade and commerce, marketing, management, environment, finance etc.

PO 02: Enable students to become competitive in the areas of computer applications in accounting, group activities and presentations, class discussions and e-learning within the classroom.

PO 03: Students get a solid foundation to pursue professional careers and take up higher learning courses.

PO 04: The students develop entrepreneurial skills to start business ventures

PO 06: The students develop decision making at personal and organizational level

PO 06: Students are able to carry out research, data analysis so as to arrive to conclusions

PO07: Students develop observation, critical thinking for resolution of the problems.

PO 08: The students develop, research aptitude by undertaking debates, group discussions, seminars, projects etc. so that they conduct research on issues of interest.

Master of Arts in Marathi

RCPR08

Master of Arts in Marathi

- PO 01: बी.ए.झालेल्या विद्यार्थ्यांच्या ठिकाणी भारताचा सुजाण नागरीक असल्याची जाणीव होते.
- PO 02: भारतीय स्वातंत्र्य , प्रजातंत्र व घात्तेबाद्दलचा आदरभाव तयार होतो.
- PO 03: भाषाप्रेम व देशप्रेम वाढीस लागते
- PO 04: सभोवतालच्या वास्तवाचे भान येते.
- PO 05: व्यक्ती , समाज आणि देशासमोर कोणती आव्हाने वर्तमानकाळात उभी राहिली आहेत ते समजते .
- PO 06: अन्न ,वस्त्र ,निवारा या माणसाच्या मुलभूत गरजा आहेत आणि या गरजा सनदशीर मार्गाने पूर्ण केल्या पाहिजेत याची जाणीव होते.
- PO07: भारतीय नागरिक असण्याचा अभिमान व कर्तव्याची जाणीव होते.

Master of Arts in Political Science

RCPR09

Master of Arts in Political Science

- PO 01: The students get familiar with the basic concepts and fundamental ideas of socialsciences and humanities.
- PO 02: The students understand the local, national and global contexts of issues emerging in social sciences and humanities.
- PO 03: The students get acquainted with the social, historical, economic, political and cultural traditions and also communicate them effectively.
- PO 04: The students acquire the professional, ethical and human values and life skills in theory and practice.
- PO 05: The students become conscious of various cross cutting issues and become responsible and dutiful citizens.
- PO 06: The students develop analytical skills, critical temper, creative abilities, research aptitude by undertaking debates, group discussions, seminars, projects etc. so that they conduct research on issues of interest.
- PO 07: The students are able to prepare and get through various competitive examinations in order to lead the society.
- PO 08: The students acquire necessary skills and competencies thus becoming eligible to avail to various employment opportunities

Master of Science in Chemistry (M.Sc.)

RC Master of Science in Chemistry (M.Sc.)

PO 01: Students are able to apply knowledge in various fields of Chemistry

PO 02: Students get awareness and sense of responsibilities towards environment and apply knowledge to solve the issues related to Environmental pollution.

PO 03: Students are able to apply knowledge to build up small scale industry for developing endogenous product.

PO 04: Students are able to develop interdisciplinary approach of the subject collaborate effectively on team-oriented projects in the field of Chemistry or other related fields.

PO 05: Students are able to communicate scientific information in a clear and concise manner.

PO 06: Students are able to develop logical thinking to address a problem and become result oriented with a positive attitude.

PO 07: Students are able to explain environmental pollution issues and the remedies thereof.

PO 08: Students are able to apply the knowledge to develop the sustainable and eco-friendly technology in Industrial Chemistry

PO 09: Have developed critical reasoning, judgment and communication skills.

PO 10: Students are able to trace the recent developments in the field of green and eco-friendly reactions, pharmaceutical, Bioinorganic Chemistry and relevant fields of R&D.

PO 11: Students develop scientific temper and research aptitude for finding solutions to the burning local and global issues.

Master of Science in zoology (M.Sc.)

Programme specific outcomes of MSc Zoology

1. Understand the biological diversity and grades of complexity of various animal forms through their systematic classification and comparative structural studies.
2. Learn how earth was formed and how life started and evolved on the planet through process of organic evolution.
3. Understand the roles of plants, animals and microbes in the sustainability of the environment and their interaction among themselves and deterioration of the environment due to anthropogenic activities.
4. Understand the concepts and principles of biochemistry, immunology, physiology, ethology, endocrinology, developmental biology, cell biology, genetics, molecular biology and microbiology.
5. Develop technical skills in biotechnology, bioinformatics and biostatistics.
6. Delve into the wonderful world of insects, their success on the planet and their diversity .
7. Acquire knowledge on harmful and beneficial insects, their adaptations for life and control measures.
8. Perform laboratory procedures as per standard protocols in the areas of animal diversity, systematics, cell biology, genetics, biochemistry, molecular biology, microbiology, physiology, immunology, developmental biology, environmental biology, ethology, evolution and Entomology.

Programme Outcomes: NSS

Programme Outcomes: NSS

- 1) To uphold The value system based on the cultural, social , Political and moral based of Indian Society .
- 2) Identify and solve the mahir social and environmenta issues \ challenges and equip the class room learning to face those challenges.
- 3) Develop teacher competence, sentivity and teacher motivation.
- 4) Get ready for professionmal preparation .
- 5) Become technolocally competent and realise the importance of ICT and e-Learning.

Programme Outcomes: Sports

Programme Outcomes: Sports

- 1) Self – confidence and self – esteem . Several studies suggest playing sports develops a child’s self – confidence and self- esteem ..
- 2) Manage Emotions we know how emotions run high in sports whether watching a sport or playing it.
- 3) Discipline
- 4) Social skill
- 5) Patience
- 6) Perseverance
- 7) Accept defeat
- 8) Teamwork

Rashtriya Arts, Commerce and Science College
Nagad.Tal kannad Dist – Chhatrapati Sambhaji Nagar

COURSE OUTCOMES

INDEX

Sr. No.	Name of Department	Page No
1	Hindi	2 to 4
2	English	5
3	Economics	6 to 10
4	Political Science	11 to 13
5	Sociology	14 to 16
6	History	17 to 18
7	Physics	19 to 24
8	Chemistry	25 to 29
9	Botany	30 to 33
10	Zoology	34 to 38
11	Mathematics	39 to 44
12	Commerce	45 to 49
13	M.Sc. Chemistry	50 to 55
14	M.Sc.Zoology	
15	MA Political Science	56 to 58
16	Marathi (UG)	59 to 62
17	MA Marathi	63 to 66
18	Public Admistration	67 to 71

Course Outcome B.A. Hindi

F.Y.B.A

After Completion of these courses students should be able to:

हिंदी सामान्य

हिंदी विभाग बी .ए .ऐच्छिक और द्वितीय भाषा हिंदी यह दो प्रोग्राम छात्रों के लिए उपलब्ध कराता है। भाषा और साहित्य के अध्ययन के माध्यम से छात्रों की समझ विकसित करना, उनके व्यक्तित्व का विकास करना, उन्हें साहित्य का महत्त्व समझाना, उनमें साहित्य की संवेदना विकसित कर संवेदनशील समाज की निर्मिती करना, छात्रों में संवाद कौशल की वृद्धि करना, मौखिकी परीक्षा के लिए उन्हें योग्य बनाना, उनमें विश्लेषण क्षमता का विकास करना और उन्हें लेखन कौशल सिखाना हिंदी के इस प्रोग्राम का उद्देश है। हिंदी विषय का प्रोग्राम आउटकम इस तरह।

PO 1: साहित्य की समझ और मानवी संवेदनाएँ निर्माण करना।

PO 2: छात्रों में भाषिक कौशल का विकास करना, जिस से छात्र आवश्यक संवाद कौशल सिख सकें।

PO 3: छात्रों में विश्लेषण क्षमता का विकास करना इस पाठ्यक्रम का उद्देश है। इस से छात्रों को उनके भविष्य में किसी विषय का विश्लेषण विवेचन करने की योग्यता प्राप्त होती है।

PO 4: साहित्यिक अभिरुचि निर्माण करना जिससे मानवी जीवन में आनंद की अनुभूति होने और सहृदय को आनंद देने का कौशल अर्थात साहित्य कला निर्माण का गुण विकसित हों।

PO 5: अनुसन्धान में रूचि, शब्द संपदा, भाषिक संपदा का संवर्धन और विकास यह गुण छात्र में निर्माण करना।

S.Y.B.A

हिंदी सामान्य

PSO 1: अध्ययन पूरा करने के बाद छात्रों में साहित्य की अच्छी समझ विकसित होगी और उसमें मानवी संवेदनाएँ विकसित होगी. साहित्य की समझ और संवेदनाओं के विकास से

एक संवेदनशील समाज विकसित होगा।

PSO 2: पठन, श्रवण, लेखन और बोलना यह चार भाषिक कौशल विकसित होने के बाद छात्र में

आत्मविश्वास निर्माण होता है। वह पत्राचार, अर्जी से लेकर विभिन्न व्यावहारिक लेखन करने में सक्षम हो जाता है, तथा मौखिकी परीक्षा में मौखिकी देने योग्य बन जाता है।

PSO 3: भाषिक और साहित्यिक अध्ययन से छात्रों में विश्लेषण एवं विवेचन क्षमता का विकास होता है। इस से छात्र अपनी आसपास की स्थितियों का विश्लेषण करना सिख जाते हैं और इससे उस पर योग्य प्रतिक्रिया देने लायक बन जाते हैं।

PSO 4: साहित्यिक अभिरुचि का निर्माण इस पाठ्यक्रम के माध्यम से होता है। समाज में साहित्यिक अभिरुचि का निर्माण होना आवश्यक है। इस पाठ्यक्रम से यह संभव हो जाता है, साथ ही कुछ रचना करनेवाले छात्र भी निर्माण हो जाते हैं।

PSO 5: हिंदी का यह पाठ्यक्रम छात्रों में अनुसन्धान की रूचि निर्माण करता है। हिंदी शब्द संपदा का भाषिक संपदा का संवर्धन करना और उसमें वृद्धि करने का महत्व छात्रों को समझता है।

T.Y.B.A.
सामान्य -3

- १) छात्रो को हिंदी की आत्मकथा विधि का परिचय प्राप्त हुआ ।
- २) छात्रो को हिंदी की दीर्घ कविता और नाटक के विकास का परिचय प्राप्त हुआ ।
- ३) छात्रो को सरकारी पत्रलेखन की विभिन्न पद्धतियाँ का ज्ञान प्राप्त हुआ ।
- ४) छात्रोमें अनुवाद करने का कौशल प्राप्त हुआ ।
- ५) छात्रो को कार्यालयीन हिंदी के स्वरुप का परिचय प्राप्त हुआ ।

काव्य शास्त्र

- १) छात्रो को काव्यशास्त्र के स्वरुप का ज्ञान प्राप्त हुआ ।
- २) छात्रों को काव्य के हेतु तथा प्रयोजनों का परिचय प्राप्त हुआ ।
- ३) छात्रो को काव्य के तत्व तथा शब्द शक्तियों का ज्ञान प्राप्त हुआ ।
- ४) छात्रो को रास के स्वरुप , भेद एवं अंगो का शास्त्रीय ज्ञान प्राप्त हुआ ।
- ५) छात्रो में नाटक और एकंको के रसास्वादन की दृष्टी विकसित हुई ।

ENGLISH B.A, B.SC. B. Com

Compulsory English

CO 01: Strengthens student's ability in listening, speaking, reading and writing both at practical and theoretical level.

CO 02: Students get acquainted to the grammatical properties and enables them to write and speak English consciously.

CO 03: Enable the learners read, write hear and speak clearly to the point of establishing themselves a competent enterpriser of their own field of career.

CO 04: Trains both in precision and in appropriate use of language through prose reading.

CO 05: Students are acquainted with a keen and subtle way in which the English language is used.

CO 06: To encourage face to face communication.

CO 07: To inculcate moral and ethical values and global competencies.

08: To establish culture of leadership, teamwork and dedication to serious pursuit of learning.

CO 09: To promote independent thinking and self-reliance among the undergraduates

ECONOMICS

F.Y. B.A. - Semester – I

ECO 01:01 - Micro Economics

- CO 01: Discuss basic concepts of Economics.
- CO 02: Discuss basic aspects of Demand and Supply Theories.
- CO 03: Analyze consumer's behavior.
- CO 04: Analyze and explain market equilibrium.
- CO 05: Understand concept of Revenues and cost of Production.
- CO 06: Understand Linear & Non- Linear functional relationship.
- CO 07: Understand meaning of social welfare function.

ECO 01:02 - Indian Economy

- CO 01: Understand nature, Basic Characteristics and Major issues of Indian economy
- CO 02: Describe nature and types of unemployment and concept of poverty.
- CO 03: Explain new economic reforms.
- CO 04: Understand population & economic development
- CO 05: Understand Poverty and Unemployment Concepts and their trends in Indian economy
- CO 06: Understand role of agriculture, industrial sector in Indian economy.
- CO 07: Understand economic planning in India.
- CO 08: Understand Regional Imbalance Causes & Preventive Measures.

F.Y. B.A. - Semester - II ECO

01:03 - Price Theory

- CO 01: Discuss concept of Production function.
- CO 02: Analyze cost and Revenue.
- CO 03: Discuss market structure.
- CO 04: Evaluate theories of distribution.

CO 05: Understand price determination of factors (Rent, wages, interest and Profit.)

CO 06: Understand meaning and related concepts of factor pricing

ECO 01:04 - Money, Banking and Finance

CO 01: Create the awareness among the students of Modern Banking System.

CO 02: Explain basic aspect about money.

CO 03: Evaluate principle of Commercial Banks and Banking Structure in India.

CO 04: Discuss New Concepts in banking sector.

CO 05: Understand working & operation of Reserve Bank of India.

CO 06: Understand the Indian money market and capital market.

CO 07: Understand cooperative and rural banking in India.

S.Y. B.A. - Semester - III ECO 01:05 - Macro Economic

CO 01: Understand macro-economic analysis.

CO 02: Understand the concept of national income.

CO 03: Explain theory of money.

CO 04: Explain theories of employment.

CO 05: Understand classical & Keynesian theories of output and employment.

CO 06: Understand consumption & Investment function.

CO 07: Understand various macroeconomic policies & problems.

ECO 01:06 - Economics of Development

CO 01: Discuss concept of economic development and growth.

CO 02: Understand theories and approaches of economic development.

CO 03: Get aware about models of economic growth.

CO 04: Explain role of sector approach in economic development.

CO 05: Understand characteristics of developing Countries.

CO 06: To understand macroeconomic policies, roll of foreign capital and economic planning etc. in developing countries.

Semester - IV

ECO 01:07 - Public Finance

CO 01: Understand functions and role of government in economy.

CO 02: Discuss nature, scope and importance of public finance.

CO 03: Understand concept of public expenditure

CO 04: Understand concept of public revenue

CO 05: Describe concept, source, causes and effects and importance of public debt.

CO 06: Explain meaning, objective and components of Union Budget.

CO 07: Understand incidence & approaches of taxation.

CO 08: Understand taxation & public debt of India

ECO 01:08 - Statistical Methods

CO 01: Analyze collection of data – Primary and Secondary data.

CO 02: Describe types of series – simple, Discrete and continuous series.

CO 03: Discuss Arithmetic mean – its merits and demerits, mode and median.

CO 04: Evaluate Range, mean deviation and standard deviation.

CO 05: Explain variance and Co-efficient of variation

T.Y. B.A. - Semester - V

ECO 01:09 - International Economics

CO 01: Understand nature, scope and importance of international economics

CO 02: Explain basic concept of international economics.

CO 03: Describe Gains from trade.

CO 04: Discuss types of tariffs and quotas.

CO 05: Evaluate concept and components of balance of payment.

CO 06: Discuss Demerits and limitations of devaluation.

CO 07: Understand gains from international trade & their measurements.

CO 08: Understand theories international trade.

ECO 01:10 - Agriculture Economics

CO 01: Discuss the role and importance of agriculture.

CO 02: Describe various technologies used in agriculture.

CO 03: Explain government agriculture policies.

CO 04: Acquire knowledge of Indian agricultural development from last 50 years

ECO 01:11 - History of Economic Thought

CO 01: Explain concept of Mercantilism.

CO 02: Understand the Adam Smith division of labour and theory of value.

CO 03: Understand the Tomas R. Malthus – theory of population.

CO 04: Describe Karl Marks theory of dynamics of social change, theory of surplus value.

CO 05: Explain concept of aggregate economy and the role of fiscal policy

Semester – VI

ECO 01:13 - Research Methodology

CO 01: Discuss meaning, nature, scope and objectives of social science research.

CO 02: Describe Facts – features Primary data collection.

CO 03: Discuss motivating factors of social research.

CO 04: Comprehend meaning and need of research design

ECO 01:14 - Industrial Economics

CO 01: Discuss importance and role of Industries in Economic and social development.

CO 02: Know industrial organization, ownership structure.

CO 03: Analyze location and dispersion of industries.

CO 04: Explain composition of industrial sector

ECO 01:15 - Indian Economic Thinker

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

CO 01: Understand the economics ideas of Koutilaya.

CO 02: Understand the economics thoughts of Mahatma Gandhi.

CO 03: Study the economics thoughts of Dr. B. R. Ambedkar.

CO 04: Understand the economics thoughts of Amartya Sen.

CO 05: Study the economics thoughts of Mahatma Phule.

CO 06: Study the economics thoughts of D. R. Dadgil.

ECO 01:12 & 116 – Project Work

CO 01: To create the project writing skill in student.

CO 02: To use the research methodology technique in research.

CO 03: Understand the skill of prepare project work

Political Science

Pol. 102 & Pol. 104 Government and Politics of Maharashtra

CO 01: Make the students to understand the historical background & establishment of Maharashtra State.

CO 02: The students get information regarding State political machinery; its functions.

CO 03: Familiarize the students about Local issues and problems.

CO 04: Familiarize the students about theoretical and practical aspects of Local and regional politics with the understanding of Political Parties and its ideology.

CO 05: Students may find-out the qualities and ideal of political leadership with the help of local politics.

Pol. 101 & Pol. 103 Basic Concept of Political Science

CO 01: Make the students to get basic knowledge of Political theory, concepts and terminology.

CO 02: Student knows about all concepts of the state, Fundamental rights, liberty, Equality and social justice and welfare state.

Pol. 109 & Pol. 113 Indian Political Thinkers

CO 01: Make the students get acknowledged with Indian Political tradition respectively with the help of Indian political thinkers.

CO 02: Make the students to do comparative study of various political thoughts.

CO 03: Make the students to focus on further development of any thought like Gandhism, Sarvodaya, Panchyat Raj etc.

CO 04: Make the students to do wholehearted study of any Indian political thinker.

CO 05: Make the students to do research work on a specific thought OR thinker.

CO 06: Students get detailed information about formation of Indian political thinking with their respective thinker.

CO 07: Students get line of thinking for further research oriented work like Ph. D. etc.

Pol. 110 & Pol. 114 Western Political Thought

CO 01: Students get familiar with Western political tradition.

CO 02: Students get knowledge about the Western contribution to the Political theory.

Pol. 111 Political Ideology

CO 01: Students familiarize with the Era of political Ideology.

CO 02: Students prepare themselves for further research work.

CO 03: Students make comparative study with the help of various ideologies.

CO 04: Students may expand their self-interest and also likes with the help of particular ideology.

Pol. 401 Western Political Theory

CO 01: Make the students to understand the background of Western Political Thought

CO 02: The students get information regarding western political theory

CO 03: Familiarize the students about important Western Political Thought.

CO 04: Familiarize the students about theoretical and practical aspects of Western Political thought and his Welfare theory

CO 05: Make the students to do research work on a specific thought OR thinker.

CO 06: Students get detailed information about formation of Western political thinking with their respective thinker.

CO 07: Students get familiar with Western political tradition.

CO 08: Students get knowledge about the Western contribution to the Political theory

Pol.402 Theories of International Relation

CO 01: Make the students to get basic knowledge of international politics and policy

CO 02: The students get information regarding international relation theory

CO 03: The student get information of Foreign Policy & Making and change of its Policy

CO 04: The student get information of international relation, international

politics and national, regional origination

CO 05: The student gets information of other countries politics and knows the politics and happening of the nations of the world

CO 06: The student get information of the constitution of a nation is known at the international level

CO7::Student learn about wars, treaties and agreement

Pol.403 Comparative Politics: Theoretical Perspective

CO 01: Make the students to get basic knowledge of Comparative Politics

CO 02: Student knows the information of political system can compared

CO 03: A comparative study of events in different countries is done

CO 04: A comparative study of constitutions is done

CO 05: Awareness of the shortcomings of different regimes in the world

CO 06: TO Information of Constitutionalism was known in different countries of the world

Pol.432 State Politics in India: A Theoretical Perspective

CO 01: Make the students to understand the origin, sources and background of Indian Constitution.

CO 02: Familiarize the students about the Law of the Land with the help of Constitutional Provisions.

CO 03: Familiarize the students about their rights and responsibilities as a citizen.

CO 04: Make the students to understand the Social Welfare State.

CO 05: Make the students to familiarize with the policy issues and structures of government within societies and among nations.

CO 06: Familiarize the students about theoretical and practical aspects of National politics, concern issues with the understanding of national level Political Parties and its ideology.

CO 07: Make the students to acquire the conceptual knowledge of Indian Constitutional Provisions.

CO 08: Familiarize the students with the State machinery, its organization and functions.

COURSE OUTCOMES SOCIOLOGY

Semester I

1. Introduction to Sociology 2. Individual and Society

CO 01: The students understand the origin of sociology and its scientific and professional importance.

CO 02: The students understand the basic concepts like, society, community, social group, culture, values, role and status etc.

CO 03: The students understand the agencies of socialization and social control. CO 04: The students understand the structural, functional and conflict perspective.

Semester II

3. Introduction to Subfield of Sociology

4. Indian Social Composition

CO 01: The student understands the subfields of sociology: Psychology, Social Psychology, Cultural Anthropology etc.

CO 02: The student understands the Indian social compositions

CO 03: The students are able to understand the types of social control.

CO 04: The student understands the types social change.

Semester III

5. Problems of Rural India

6. Contemporary Urban Issues

CO 01: The students understand the major problems facing the rural society.

CO 02: The students understand the health problems of rural women.

CO 03: The student understands the rural problems and the social change within them.

Semester IV

7. Population in India

8. Sociology of Development

CO 01: The students are able to understand the concepts like, development, underdevelopment and sustainable development etc.

CO 02: The students understand the various approaches of development.

CO 03: The students are aware about the problems of Marathwada region.

CO 04: The students the population scenario of worldwide as well as Indian.

Semester V

9. Sociological Tradition

10. Introduction to Research Methodology & Research Project

CO 01: The student understands social thought and sociological theories, sociologists and their contribution.

CO 02: The student understands the concepts like, Positivism, Evolution, Suicide, Bureaucracy, Class and Class Conflict etc.

CO 03: The student develops the ability to apply sociological concepts and theories to the real life situations.

CO 04: The student understands the various perspectives in sociology.

Sociological Tradition

Semester VI

Introduction to Research Methodology & Research Project, Urban sociology

CO 01: The student understands the process of social research and methods of data collection.

CO 02: The student understands report writing methods.

CO 03: The student understands the research method, process and data collection techniques.

CO 04: The students are able to understand how to write a research project.

CO 05: The students understand the process of data analysis.

CO 06: The students understands the scope and importance of urban sociology

CO 07: The students understand the various theories of urban sociology.

CO 08: The student understands the approaches of urban studies.

CO 09: The students are understood the urbanization and industrialization on

Indian society.

CO 01:0: The students are aware about urban social problems.

HISTORY

First Year

Shivaji & His Times (1630 AD 1707AD) and History of Morden Maharashtra (1818 AD 1905AD)

CO 01: The students are able to Time planning in the history of Marathas is very important in the life of students.

CO 02: The basic concepts like, society, community, social group, culture, values, role and status etc.

CO 03: It also helps to understand the agencies of culture, Historical Study .

CO 04: The learner is able to understand basics of structural, functional and conflict perspective.

History of Maratha (1707 AD to 1818 AD) and 20th Century of Maharashtra (1905 AD to 1960)

CO 01: student able to Indies Foreign war policy .

CO 02: It enables the student to understand subfield of History like, Archeology and Tourism, Cultural anthropology etc.

CO 03: The student is able to Right Movement .

CO 04: It helps to know the concept independent .

Second Year

History of Delhi Sultant (1200AD To 1526 AD) and History of Early India (Up to 300 BC)

CO 01: It helps to understand the major problems of rural people.

CO 02: It enables the student to Students feel that Allauddin Khilji's market plan is needed today.

CO 03: It helps to understand the concept of Archaeological, Numismatic Sources .

CO 04: It enables the students to understand the rural community related problems and social change within them

History of Early India (300 BC to 650)and History of Mugal India (1526 AD to 1707)

CO 01: It helps the student to understand the concepts like, development,

underdevelopment and sustainable development.

CO 02: It enables student to understand the approaches of development.

CO 03: The learner is able to Special Traditions .

CO 04: It enables student to Structure of Society .

CO 05: The student is able to Temple Architecture.

Third Year

Historiography and History of Indian National Movement

CO 01: It helps to understand the Understands human history.

CO 02: Knows how to write history. It helps to understand the concept of Archaeological, Numismatic Sources .

CO 03: It helps to understand the concept of Knows how to get your rights.

CO 04: It enables the students to understand the rural community related problems and social change within them.

Field History (Archeology, Tourism, Museums) and History of Morden World

CO 01: It helps the student to understand the concepts like, development, underdevelopment and sustainable development.

CO 02: It enables student to understand the temple architecture.

CO 03: The learner is able to Special Traditions, The effects of the global war on society. CO 04: It enables student to structure of understood capitalism, socialism, liberalism

CO 05: The student is able to temple architecture

PHYSICS

Semester-I

Course Name: Mechanics, Properties of Matter and sound Code:

PHY101

CO 01: Understand the fundamentals of gravitation, Newton's law of gravitation, Compound and Kater's pendulum and their time period calculation

CO 02: Elasticity determination, bending moment, cantilever effective and ineffective case loaded at free end.

CO 03: Apply principles of viscosity with suitable example, determination of viscosity, energy of liquid in motion, Bernoulli's Theorem, practical Applications of Bernoulli's Theorem.

CO 04: Understanding concepts of surface tension, Know the difference of pressure across a curved surface. Example Jaeger's method of S.T. by Jaeger's method

CO 05: Able to understand the different sources of generating waves and their properties with suitable examples

CO 06: Understand the various production methods of ultrasonic waves, their applications. Basics concepts in acoustics,

CO 07: Enhance the knowledge of acoustical design of auditorium and noise reduction factors.

Course Name: Heat & Thermodynamics Paper-II

Code: PHY102

CO 01: Understand the concept of heat transfer, coefficient of thermal conductivity, flow of heat along bar, Methods of radial flow of heat.

CO 02: Enhance knowledge of real gasses and transport phenomena, Van der waals equation, mean free path with temperature and pressure

CO 03: To knows the mechanism of thermodynamics in gases, some processes and indicator diagram. Heat engine, Carnot's heat engine with its cycle

CO 04: Understand the entropy and thermodynamics relations, various laws of thermodynamics

Semester-II

Course Name: Physics Practicals Paper- III Course Code: PHY103

CO 01: To perform experimental determination of acceleration due to gravity

by Kater's pendulum.

CO 02: Able to calculate S.T. by Jaeger's method of liquids.

CO 03: Able to measure the oscillations of cantilever.

CO 04: Evaluate the M.I. by bifilar suspension of the given bar

CO 05: Able to determine of coefficient of viscosity of given liquid

CO 06: Calibrate modulus of rigidity of various materials

Course Name: Geometrical and Physical Optics Paper-IV

Code: PHY104

CO 01: To understand nature of light using optical instruments, focal points, nodal points, various types of eyepieces functioning

CO 02: To understand phenomenon of interference, various films, Newtons rings by reflected light. Michel son's interferometer, R.P. of optical instruments.

CO 03: To know diffraction phenomenon. Thin films, double slit, gratings, R.P. of optical instruments, R.

P. of prism, grating

CO 04: Enable to understand polarization, various theories, Nicol prism, Optical activity, half shade polarimeter, sugar solution.

Course Name: Physics Practicals Paper- V

Course Code: PHY105

CO 01: Y by Searl's method to calculate Young's modulus

CO 02: Enable to calculate M.I. of fly wheel

CO 03: Able to calculate thermal conductivity using Lee's disc method

CO 04: To know field along axis of coil

CO 05: I-H curve measurement

Semester-III

Course Name: Mathematical & statistical Physics & Relativity Paper-

VIII Course Code: PHY201

CO 01: Gain the knowledge of basic of differentiation and its types

CO 02: Explore application of ordinary differential equation, order, degree and solution of second differential equation

CO 03: Understand concept of statistical basis its principal and theory, Basic

terms of classical statics

CO 04: Maxwell's distribution law

CO 05: Evaluate basic concept of quantum statics, Explore the different laws

CO 06: validation of relativity in terms of concept of relativity, suitable examples of relativity

CO 07: Evaluate Einstein's mass energy relation

Course Name: Modern and Nuclear Physics Paper-VIII

Course Code: PHY202

CO 01: Acquire knowledge of Photoelectric effect by means of studying different experimental methods

CO 02: To know mechanism of X-rays with experimental methods

CO 03: To gain knowledge of various spectra

CO 04: Understand nuclear forces & binding energy

CO 05: Evaluate different atoms models

CO 06: Evaluate different types of accelerators and detectors

Course Name: Practical Paper-IX

Course Code: PHY203

CO 01: Determine e/m Thomson's tube method

CO 02: Calculate frequency of A.C. mains using sonometer

CO 03: Determine specific rotation of cane sugar using Laurent's half shade polarimeter

CO 04: Calculate BH and Bv value using earth inductor

Course Name: Practical Paper-X Course Code: PHY203

CO 01: Calculate velocity of sound using Helmholtz resonator

CO 02: Study surface tension by Ferguson's method

CO 03: Determine wavelength of light by Newton's ring

CO 04: Determine R.P. of telescope

Semester-IV

Course Name: General Electronics Paper-XI Course Code: PHY205

CO 01: Gain practical knowledge of semiconductor diodes

CO 02: Uses of transistors in electronic devices

- CO 03: Theoretical insight of amplifiers
- CO 04: Evaluate different types of oscillators & multivibrators
- CO 05: Understand concept of modulation
- CO 06: Determination of A.M. & F.M. modulation

Course Name: Solid State Physics Paper-XII Course Code: PHY206

- CO 01: Study various lattice including one and two dimensional
- CO 02: Gain basic knowledge of different bonding
- CO 03: Evaluate K.P. model
- CO 04: Evaluate thermal properties of solids- concept & models
- CO 05: Enhance knowledge of electrons role in metals with experimental validation

Course Name: Practical Paper-XIII Course Code: PHY207

- CO 01: Calculate I-V characteristics of solar cell
- CO 02: Study full wave rectifier with π filter
- CO 03: Determine viscosity of liquid using Searl's viscometer
- CO 04: Calibration of bridge wire using carry-Foster bridge

Course Name: Practical Paper-XIV Course Code: PHY208

- CO 01: Study transistor characteristics in CE configuration
- CO 02: Study transistor characteristics in CB configuration
- CO 03: Evaluate CE amplifier
- CO 04: Study Hartley oscillator using transistor
- CO 05: Determine self-inductance by Owen's bridge
- CO 06: Study Wein bridge oscillator

Semester-V

Course Name: Classical and Quantum mechanics

Paper-XV Course Code: PHY301

- CO 01: Understand basic concept of classical mechanics
- CO 02: Formulation of Lagranges equation
- CO 03: Enable to insight origin quantum theory
- CO 04: Formulation of Planck's postulates
- CO 05: Validation Einstein's quantum theory of photo electric effect
- CO 06: Core concept of wave particle duality- De-Broglie's hypothesis

CO 07: Evaluation of Heisenberg uncertainty principle its applications
CO 08: Understand the Schrodinger equations

Course Name: Electrodynamics Paper-XVI Course Code: PHY302

CO 01: Concept of electrostatics, Gauss law applications
CO 02: Time varying field
CO 03: Maxwell's derivation
CO 04: electromagnetic waves in different media
CO 05: Poynting Vector
CO 06: Polarization in Electromagnetic waves
CO 07: To enhance knowledge of reflection and refraction in E.M.waves

Course Name: Practical Paper-XXI Course Code: PHY303

CO 01: Measurement of focal length of given convex lens
CO 02: Evaluate diffraction of grating
CO 03: Study e/m Millikan's oil drop method
CO 04: Study of absorption spectra of iodine and determination of its wavelength using grating
CO 05: Determination of constant of B.G. by standard condenser method

Course Name: Practical Paper-XXII Course Code: PHY304

CO 01: Determination of diameter of thin wire using LASER
CO 02: Determination of γ by Koenig method
CO 03: Study Edser's pattern
CO 04: To calculate values of e/m Thomson method using excel

Semester-VI

Course Name: Atomic molecular Physics & LASER Paper-XIX

Course Code: PHY305

CO 01: Basic concept of atom models CO 02: Learning different atom models
CO 03: Spectrum line origin
CO 04: Spectrum of H-atom
CO 05: To enhance knowledge of quantum numbers, couplings
CO 06: Difference of Normal Zeeman Effect and Anomalous Zeeman effect

CO 07: Formation of molecular spectra, practical applications Raman Effect
CO 08: LASER types, its applications

Course Name: Non-conventional energy sources and Optical fiber Paper-XX
Course Code: PHY306

CO 01: Basic concept of biomass energy
CO 02: Various types of energies solar, wind biomass hydro energy
CO 03: Applications of solar photo voltaic systems
CO 04: Role of photon in solar circuits
CO 05: Understand optical fibers & its practical applications
CO 06: Fiber cables uses for social use
CO 07: CVD method utilization in different fields.
CO 08: Telephonic use optical fiber

Course Name: Practical Paper-XVII Course Code: PHY307

CO 01: Determination of Rydberg constant
CO 02: Calculation of B-H curve using magnetometer
CO 03: Determination of I-H Curve by Excel
CO 04: Investigation of Rydberg constant Excel
CO 05: Determination of dielectric constant of liquid/solid

Course Name: Practical Paper-XVIII Course Code: PHY308

CO 01: Study of Hartmann's dispersion formula
CO 02: Maxwell's bridge (measurement of inductance using impedance at different frequency)
CO 03: Determination of λ by grating (normal incidence)
CO 04: Study of Transistorized Regulated power supply using Zener diode
CO 05: Study of Bridge Rectifier
CO 06: Study of Hartmann's dispersion formula

CHEMISTRY

B. Sc. First Year (Sem-I)

Paper-I: Inorganic Chemistry

CO 01: To understand structure of atom, periodic properties

CO 02: To understand periodic properties and S and P-block elements

Paper-II: Organic Chemistry

CO 01: To understand structure and bonding in compounds

CO 02: To understand mechanism of organic reactions

CO 03: To understand the concept of stereochemistry

CO 04: To understand chemistry of hydrocarbons

CO 05: To understand the concept of aromatic compounds

Paper-III: Lab Course-I

CO 01: To carry out qualitative and volumetric analysis

CO 02: To determine equivalent weight

CO 03: To determine viscosity, surface tension of liquid

CO 04: To verify Lambert Beer's law

CO 05: To understand effect of acid strength on the hydrolysis of ester

CO 06: To determine specific reaction rate of hydrolysis of ester

B. Sc. First Year (Sem-II) Paper-IV: Physical Chemistry

CO 01: To understand mathematical concepts

CO 02: To understand about different states of matter like gaseous, liquid, solid and colloidal state

CO 03: To understand concept of chemical kinetics and catalysis

Paper-V: Inorganic Chemistry

CO 01: To understand concept of chemical bonding and shapes of inorganic molecules

CO 02: To understand chemistry of noble gases

CO 03: Concept of primary concepts of nuclear chemistry

CO 04: To understand the theory of volumetric analysis

Paper-VI: Lab. Course-II

CO 01: To carry out qualitative analysis of organic compounds

CO 02: To carry out organic estimation

B. Sc. Second Year (Sem-III) Paper- VII: Organic Chemistry

CO 01: To understand the methods of preparation, physical and chemical properties of various organic compounds having different types of functional groups like alcohols, phenols, aldehydes, ketones, carboxylic acids and organic compounds of nitrogen

Paper-VIII: Physical Chemistry

CO 01: To understand the thermodynamic terms, concept of maximum work, first law of thermodynamics and heat capacities

CO 02: To understand the second law of thermodynamic, concept of entropy as well as free energy

CO 03: To understand the concept of chemical equilibrium along with some laws, principles and equations

Paper-IX: Lab. Course-III

CO 01: To perform non instrumental experiments like determination of critical solution temperature, solubility of benzoic acid and heat of neutralization of acid and base

CO 02: To carry out inorganic gravimetric estimation CO 03: To perform the complex metric titration

B. Sc. Second Year (Sem-IV) Paper- X: Inorganic Chemistry

CO 01: To understand the chemistry of elements of d-block

CO 02: To understand chemistry of lanthanides

CO 03: To understand chemistry of actinides

CO 04: To understand chemistry of co-ordination compounds

CO 05: To understand about various theories of acids and bases

CO 06: To understand the physical properties of solvents, their types and general characteristics and reactions in non-aqueous solvents

Paper-XI: Physical Chemistry

CO 01: To understand phase equilibrium dealing with terms of phase rule its derivation. Phase equilibria of one component and two component systems, solid solutions, liquid –liquid mixtures, ideal and non-ideal solutions and partially miscible liquids

CO 02: To understand the various types of conductance its measurement and its variation. Kohlrausch's law and its application, Arrhenius Theory of Electrolyte Dissociation, Ostwald's Dilution Law, Transport Number and Conductometric titration

Paper-XII: Lab. Course-IV

CO 01: To determine normality and strength of acids and bases conductometrically and pH-metrically

CO 02: To determine refractive index and indicator constant

CO 03: Preparation, crystallization and physical constant of some organic compounds Estimation of some organic compounds

B. Sc. Third Year. (Sem-V) Paper- XIII: Physical Chemistry

CO 01: To understand various aspects of elementary Quantum Mechanics including black body radiation, Planck's radiation law, photoelectric effect, Bohr's modes of hydrogen atom and its defects. Compton effect, De Broglie Hypothesis, the Heisenberg's uncertainty principles, Schrödinger wave equation and its importance, physical interpretation of the wave function, postulates of quantum mechanics, Schrödinger wave equation for H-atom, separation into three equations, quantum numbers and their importance

CO 02: To understand various aspects of Introduction - Electromagnetic radiation, regions of the spectrum, basic features of different spectrometers, Rotational Spectrum- Diatomic molecules, energy levels of a rigid rotor, selection rule, rotational spectra of rigid diatomic molecule, determination of bond length

CO 03: To understand various aspects of photochemistry like interaction of radiation with matter, difference between thermal and photochemical processes. Laws of photochemistry, Jablonski diagram qualitative description of fluorescence, phosphorescence, non-radiative processes, quantum yield, photosensitized reactions

CO 04: To understand physical properties like optical activity, dipole

moment, magnetic

CO 05: To understand about nanomaterial and its various methods of preparation

Paper-XIV: Organic Chemistry

CO 01: To understand the details of NMR, UV, IR and can solve problems based on it

CO 02: To understand the organometallic compounds its preparation and reactions

CO 03: To understand the synthesis of organic compounds via enolates

CO 04: To understand the details of fats, oils and detergents

Paper-XV: Lab. Course-V

CO 01: To perform semi micro and also can separate metal ions and their and estimate them

volumetrically and gravimetrically

CO 02: To separate and identify both the components of organic binary mixture

B.Sc. Third Year (Sem-VI) Paper- XVI: Inorganic Chemistry

CO 01: To understand the Metal - Ligand bonding in transition metal complexes
CO 02: To understand the details of electronic spectra of transition metal complexes

CO 03: To understand the definition, nomenclature, classification, preparation, properties and applications of Organometallic Compounds

CO 04: To understand the bioinorganic chemistry consisting of essential and trace elements in biological processes, metalloporphyrins and biological role of alkali and alkaline earth metals

CO 05: To understand the definition and classification of chromatography and details of paper and thin layer chromatography

Paper-XVII: Organic Chemistry

CO 01: To understand the details of heterocyclic compounds

CO 02: To understand the definition, introduction and classification of carbohydrates

CO 03: To understand the details of synthetic polymer

CO 04: To understand the definition, colour and constitution and classification of dyes, and also definition, introduction, classification of synthetic drugs

Paper-XVIII: Lab. Course-VI

CO 01: To estimate the Organic compounds by various methods

CO 02: To prepare organic and test its purity by TLC

CO 03: To perform the conductometric titrations of mixed acids and diprotic acids, redox titrations on potentiometer and can determine refractive index.

CO 04: To determine the interfacial tension between two immiscible liquids, effect of addition of electrolyte on solubility

CO 05: To determine free energy and equilibrium constant

BOTANY

Semester-I

Course Name: Diversity of cryptogams I. Paper-I Code: BOT 101

CO 01: Students understand the cryptogam plant diversity: virus

CO 02: Students understand the cryptogam plant diversity: mycoplasma

CO 03: Students understand the cryptogam plant diversity: bacteria

CO 04: Students understand the cryptogam plant diversity: lichens

CO 05: Students understand the cryptogam plant diversity: algae

CO 06: Students understand the cryptogam plant diversity: fungi

CO 07: Students understand the cryptogam plant diversity: bryophytes

CO 08: Students understand the cryptogam plant diversity: pteridophyte

Course Name: Morphology of angiosperms, Paper-II Code: BOT 102

CO 01: Students understand morphology of angiosperm plant and its histology

CO 02: Students understand morphology of angiosperm plant and its anatomy and embryology

CO 03: Students understand morphology of angiosperm plant and its Embryology

Course Name: Practical based on Paper - I & Practical based on Paper - II
Practical Paper- III & IV Course Code: BOT 103

CO 01: Students gain practical knowledge of cryptogrammic plant and angiosperm plants.

CO 02: Students understands know the simple and compound microscope

CO 03: Students understand bacteria multiplication and the causing agent

CO 04: Students understand identification and morphology its of Algae: nostoc, chara, botrydium, sargassum, batrachospermum

CO 5: Students understand identification and morphology its occurrence of fungi

a) Albugo b) Mucor, c) Eurotium d) Agaricus e) Cercospora

CO 6: Students understand identification of lichens: crustose, foliose, fruticose, usnea.

Course Name: Diversity of cryptogams II. Paper-V Code: BOT 104

CO 01: Students understand general characters of bryophytes and classification Bryophytes
CO 02: Students understand general characters of bryophytes and classification Pteridophytes:

CO 03: Students understand identification and morphology of bryophytes
hepaticopsida – Marchantia, Bryopsida – Funaria

CO 04: Students understand identification and Morphology of pteridophytes:
psilopsida – Psilotum, lycopsida – Lycopodium, Selaginella, Sphenopsida –
Equisetum, Pteropsida – Marsilea

Course Name: Histology, Anatomy and Embryology. Paper-VI Code: BOT 104

CO 01: Students gain knowledge of plant tissue

CO 02: Students understand the role of meristematic tissue, permanent tissues, epidermal tissues,

CO 03: Students understand histological organization of root

CO 04: Students understand histological organization of Shoot

CO 05: Students understand theories of cellular organization

Course Name: Taxonomy of angiosperms Paper-VII Code: BOT105

CO 01: Students understand taxonomy of angiosperm gymnosperm and utilization of Plants.

CO 02: Students understand taxonomy in relation to anatomy, embryology, palynology, ecology and cytology

CO 03: Students understand the concept of binomial nomenclature and its advantages

CO 04: Students understand polarization, various theories, Nicol prism, Optical activity, half shade polarimeter and sugar solution.

Course Name: Plant Ecology Paper- VIII Course Code: BOT106 Semester-III

CO 01: Students understand plant ecology plant physiology

CO 02: Students understand various theories of cellular organization

CO 03: Students understand climatic factors temperature, water, light

CO 04: Students understand edaphic factor soil formation -soil profile, physicochemical properties of soil, major soil types of India, soil erosion and soil conservation

Course Name: Practical based on Paper VII - Paper-IX Course Code: BOT107

CO 01: Students gain practical knowledge of plant families, gymnosperm and economic importance with plant ecology, physiology etc.

CO 02: Students understand locally available plants information and identification up to the family level

CO 03: Students are able to make a herbarium sheets technique to collected specimen

CO 04: Students are able to cultivate and maintain the plants

Course Name: Practical based on Paper VIII - Paper-X Course Code: BOT108

CO 01: Students understand morphological and anatomical adaptations hydrophytes xerophytes, pneumatophore and epiphytes

CO 02: Students understand Importance Value Index (IVI) of grassland ecosystem on the basis of relative frequency, relative density and relative abundance.

CO 03: Students understand meteorological instruments -rain gauge, hygrometer, barometer

CO 04: Students understand properties of water, salinity of different water samples

CO 05: Students understand gymnosperm plant

CO 06: Students understand cycadales – cycas coniferales – pinus

CO 07: Students understand plants history, origin, cultivation, harvesting, improved varieties and economic importance

Course Name: Diversity of Angiosperms – II & I. Paper-XVI (A) Paper-XX (A) Course Code: BOT118 Course Code: BOT114 Semester-V & VI

CO 01: Students understand angiosperm plant diversity and different plant classification CO 02: Students understand biodiversity, its types and conservation of biodiversit

CO 03:Students understand phytotaxonomy

CO 04:Students understand plant conservation measures

Course Name: Practical based on Paper - XV- Paper-XVII Course Code:
BOT115 Semester-V

CO 01:Students understand preparation of cytological fixatives and stains using different method

CO 02:Students understand electron micrographs

CO 03:Students understand preparation of ideogram from the given micrograph of karyotype

CO 04:Students understand skill develop wool models of mitosis, meiosis, cell structure, chromosome, DNA and RNA.

Course Name: Genetics and Biotechnology. Paper-XIX Course Code:
BOT117 Semester-VI

CO 01:Students understand status of biotechnology in India

CO 02:Students understand the field of Genetic Engineering

CO 03:Students learn technique of plant tissue culture

CO 04:Students know about research projects regarding human genome project, plant genome project, DBT ministry of science and technology.

Course Name: Practical based on Paper – XVI - Paper-XVIII Course Code:
BOT116 Semester-VI

CO 01:Students gain practical knowledge genetics and biotechnology process

CO 02:Students know about Principle and working of instruments in biotechnology laboratory

CO 03:Students understand techniques of sterilization of glassware

CO 04:Students understand isolation technique of bacteria and fungi from air

CO 05:Students understand problems based on gene interaction, sex linked inheritance

ZOOLOGY

F.Y. B.Sc. Semester I

Paper I- Protozoa to Annelida

CO 01:Identify animals by observation

CO 02:Describe unique characters of Protozoa, Porifera, Coelenterate, Helminthes and Annelids

CO 03: Explain life functions of Protozoa, Porifera, Coelenterate, Helminthes and Annelids

CO 04:Describe ecological role of phylum Protozoa, Porifera, Coelenterata, Helminthes and Annelida

CO 05:Identify diversity from Protozoa, Porifera, Coelenterate, Helminthes and Annelids

Paper II- Cell Biology

CO 01:Describe in detail the structure of cell

CO 02:Describe function and the composition of the plasma membrane CO

03:Explain principles of the cell theory

CO 04:Differentiate between prokaryotes and eukaryotes

CO 05:Understand importance of the nucleus and its components

CO 06:Understand how the endoplasmic reticulum and Golgi apparatus interact with one another and know with which other organelles they are associated

CO 07: Identify three primary components of the cell's cytoskeleton and how they affect cell shape, function, and movement

Semester II

Paper IV- Arthropoda to Echinodermata and Hemichordata

CO 01:Identify animals by observation

CO 02:Describe unique characters of Arthropods, Molluscs, Echinoderms and Hemichordates

CO 03:Explain life functions of Arthropods, Molluscs, Echinoderms and Hemichordates

CO 04:Explain ecological role of phylum from Arthropoda to Hemichordata

CO 05:Explain in detail diversity from Arthropods to Hemichordate

Paper V- Genetics – I

CO 01:Describe chemical basis of heredity

CO 02:Explain role of genetics in evolution

CO 03:Evaluate conclusions that are based on genetic data

CO 04:Find the results of genetic experimentation in animals

S.Y. B.Sc. Semester III

Paper VII- Vertebrate Zoology

CO 01:Describe unique characters of urochordates, cephalochordates and fishes

CO 02:Recognize life functions of urochordates to fishes

- CO 03: Explain ecological role of different groups of chordates
- CO 04: Explain the diversity of chordates and describe unique characters of amphibians, reptiles, aves and mammals
- CO 05: Describe life functions of amphibians, reptiles, aves and mammals
- CO 06: Explain ecological role of different classes of vertebrates

Paper VIII- Genetics - II

- CO 01: Explain in detail gene expression and its behavior in transformation
- CO 02: Describe the role of genetics in evolution
- CO 03: Evaluate conclusions that are based on genetic data in population genetics
- CO 04: Describe genetic diseases and disorders
- CO 05: Explain the techniques that are used in genetic engineering

Semester IV Paper XI- Animal Physiology

- CO 01: Describe in detail the physiology at cellular and system levels
- CO 02: Explain the role of different bio-molecules
- CO 03: Explain how mammalian body gets nutrition from different bio-molecules
- CO 04: Describe the functions of different systems
- CO 05: Describe the physiology of respiratory, renal, endocrine and reproductive systems to define normal and abnormal functions

Paper XII- Biochemistry and Endocrinology

- CO 01: Describe in detail the metabolism of carbohydrates, proteins, fats
- CO 02: Explain the fundamental biochemical principles
- CO 03: Describe basic laboratory techniques in biochemistry
- CO 04: Explain the role of hormones
- CO 05: Describe the structure and function of endocrine glands

T.Y. B.Sc. Semester V Paper XV- Ecology

CO 01: Describe abiotic and biotic factors that affect, the distribution, dispersal, and behaviour of organisms

CO 02: Identify factors that affect biological diversity and the functioning of ecological systems

CO 03: Use an ecological vocabulary in arguments and explanations of ecological phenomena

CO 04: Apply concepts and theories from biology to ecological examples

CO 05: Analyze and interpret ecological information, research and data

Semester VI Paper XIX- Evolution

CO 01: Describe evolutionary history of man

CO 02: Describe origin of species on earth

CO 03: Have an enhanced knowledge and appreciation of evolutionary biology and behaviour

CO 04: Perform, analyze and report on experiments and observations in whole-organism biology

CO 04: Gain information regarding animal classification and systematic, animal structure and function relationships, evolution between and within major animal groups, human evolution and animal reproduction and development

Semester VI

Paper XVI-D- Parasitic protozoa and helminths- I

CO 01: This course is designed for undergraduate students with a background in microorganisms from group parasitic protozoa and helminths

CO 02: Therefore, this course provides students with a greater understanding of general concepts of parasitology. Initially basic types and concepts of animal associations will be discussed.

CO 03: We then will focus on the major groups of parasites, followed by parasite transmission, pathology Life cycle, and Control measures.

CO 04: Tell the advantages and disadvantages of parasitic life style; discuss the economic consequences of parasitic diseases and difficulties associated with eliminating/controlling parasitic diseases

CO 05: Tell the major types of protozoan parasites, their adaptive strategies and damage; discuss animal parasites

CO 06: Articulate major helminths and arthropod parasites, their taxonomy and harms caused

CO 07: Discuss the major means of transmission of parasites and the factors that influence parasite transmission.

CO 08: Explain the host defense mechanisms against parasitic infections and mechanisms of co-infections.

CO 09: Articulate the types of pathology caused by parasites, pathological mechanism, factors influencing pathology and damage to specific organs.

CO10: Discuss about useful parasites

CO11: Explain the importance of correct parasite identification and methods of identification

CO12: Articulate the major aspects of controlling parasites and treating parasitic diseases.

MATHAMATICS

F. Y. B. Sc. MAT-101 Differential Calculus

CO 01: Understand functions, relations, types of functions, limit & continuity, theorems on limit and types of discontinuity.

CO 02: Work out the problems on partial derivative of a function of more than one variable using Leibnitz's theorem.

CO 03: Apply Rolle's Theorem, Lagrange's mean value theorem and Cauchy's mean value theorem to solve problems of different level.

CO 04: Find expansion of exponential, trigonometric and logarithmic functions using Taylor's and Maclaurin's theorem.

CO 05: Study different differential operators such as gradient, divergence and curl.

MAT-102 Differential equation

CO 01: Form the differential equation by eliminating arbitrary constants and functions.

CO 02: Find the solution of the first-order linear differential equation and exact differential equation.

CO 03: Obtain the solution of linear differential equation with constant coefficient and variable coefficients using general and short methods.

CO 04: Solve the linear homogeneous differential equation and study the formation of partial differential equation by eliminating the arbitrary constants and functions.

MAT-201 Integral Calculus

CO 01: Use reduction formulae to find the integration of some standard trigonometric functions.

CO 02: Determine integration of algebraic rational functions in the case of repeated linear factors, non-repeated linear factors and linear or quadratic non-repeated factors.

CO 03: Employ the fundamental theorem of integral calculus to find definite integrals as a limit sum.

CO 04: Obtain the area bounded by a curve, length of the arc of a curve and line integral and surface integrals.

CO 05: Study the theorems of Gauss, Green's and Stoke's and their applications in vector calculus.

MAT-202 Analytical Geometry

CO 01: Obtain different forms of the equation of a plane and use these equations to solve problems. Also, find the equation of the system of planes and the length of perpendicular to a plane.

CO 02: Derive the equation of the right line, the angle between the plane and line, equation of two intersecting planes.

CO 03: Obtain condition for coplanar lines and the shortest distance between two coplanar lines.

CO 04: Determine the equations of the sphere, cones, cylinder and conicoids and their intersection with the plane.

S. Y. B. Sc. MAT-301 Number theory

CO 01: Apply the division algorithm (Euclidean algorithm) to find the greatest common divisor of two or more than two integers and express it in a linear combination of them.

CO 02: Study method of solving linear Diophantine equation and Chinese remainder theorem to solve linear congruences.

CO 03: Explain Fundamental theorem of arithmetic, Fermat's, Wilson's, Euler's theorem and Mobius inversion formula.

CO 04: Study some number-theoretic functions and their properties.

MAT-302 Integral transforms

CO 01: Study applications of beta and gamma functions in evaluating integrals.

CO 02: Define Laplace transform, inverse Laplace transform for different functions and their properties such as the convolution theorem.

CO 03: Define Fourier transform, Fourier sine and cosine transform and different properties of these transforms.

CO 04: Study applications of Laplace transform to solve ordinary and partial differential equations.

MAT-303 Mechanics: I

CO 01: Study of triangle law of forces, Parallelogram law of forces, resultant of forces, resultant of several coplanar forces, equation of the line of action of the resultant, equilibrium of a rigid body under more than two coplanar forces sine rule and cosine rule, etc.

CO 02: Able to understand the equilibrium of forces acting on the particle, Lammi's theorem and polygon of forces.

CO 03: Understand centroid of weighted point, the centre of gravity, the centre of gravity of some uniform bodies and their applications.

MAT-401 Numerical analysis

CO 01: Able to apply Bisection Method, Method of False Position, Newton-Raphson Method and Newton's generalized method to find the root of linear and non-linear equations.

CO 02: Study definitions of different Finite Differences and interpolation with equally spaced points and unequally spaced points.

CO 03: Understand the Least Square method for fitting a straight line, second-degree polynomial and other non-linear equations.

CO 04: Study of Chebyshev polynomial and economization of Power series.

CO 05: Solve the ordinary differential equation by using Taylor's series Method, Picard's Method, Euler's Method and Runge-Kutta second-order and fourth-order method.

MAT-402 Partial differential equations

CO 01: Form partial differential equation by eliminating arbitrary constants and functions and solve Lagrange's equation.

CO 02: Define complete integral, Singular integral and general integral.

CO 03: Solve partial differential equations using Charpit's Method and Jacobi's method

CO 04: Study Monge's Method to solve an equation $Rr+Ss+Tt=V$, Method of transformation (Canonical Forms)

10 MAT-403 Mechanics: II

CO 01: Study velocity, acceleration, angular speed, angular velocity, radial component transverse component, areal speed and areal velocity.

CO 02: Understand angular momentum, work, energy, vector point function, motion under gravity, projectile, Motion of projectile.

CO 03: State Newton's Law of motion and its applications.

T. Y. B. Sc. MAT-501 Real analysis: I

CO 01: Explain basic concepts such as sets, functions, real-valued functions, countable sets, Least upper Bound and greatest lower bound.

CO 02: Understand the definition of sequence and subsequence, Limit of a sequence, Convergent sequence, Divergent Sequence, Bounded sequences, Monotone Sequences, Operations on Convergent Sequences, Operations on divergent sequences, limit superior and limit inferior and Cauchy Sequence.

CO 03: Study Convergence and divergence, Series with non-negative terms, Alternating series, Conditional convergence and absolute convergence, Case of the function of functions, Jacobian of Implicit functions, Jacobian of Implicit functions and Theorems on Jacobians.

MAT-502 Abstract algebra: I

CO 01: Explain basic concepts such as sets, functions, partial order relations and binary operation.

CO 02: Understand the definition of a group, some examples of groups, some preliminary Lemmas on the group, automorphism, another counting principle, subgroups, cyclic groups, a counting principle, normal and quotient groups, group homomorphisms, group isomorphisms and group automorphisms.

CO 03: Study definition of Ring, special classes of the ring, ring homomorphisms, Ideals & quotient rings, more Ideals & quotient rings and polynomial rings.

MAT-503 Mathematical statistics: I

CO 01: Study frequency distribution, histogram, measures of central tendency.

CO 02: Understand dispersion and Kurtosis, random variables and their characteristics.

CO 03: Apply probability techniques in general problems.

MAT-601 Real analysis: II

CO 01: Study metric spaces, limits in metric spaces and functions continuous on metric spaces.

CO 02: Define Connectedness, completeness, compactness and bounded & totally bounded sets.

CO 03: Prove theorems on connectedness, completeness, compactness and bounded & totally bounded sets.

CO 04: Study continuous functions on compact metric spaces and uniform continuity.

CO 05: Explain sets of measure zero, the definition of Riemann integral, the existence of Riemann integral, properties of Riemann integral, fundamental theorem of calculus and Fourier series.

MAT-602 Abstract algebra: II

CO 01: Study some elementary basic concepts of vector spaces.

CO 02: Study Linear independence, bases and Dual spaces.

CO 03: Understand Inner product spaces, Gram Schmidt orthogonalization and modules.

MAT-603 Mathematical statistics: II

CO 01: Understand mathematical expectation, generating functions and discrete probability distribution.

CO 02: Study different types of distribution such as uniform distribution, binomial distribution, Normal Distribution and Gamma distribution.

CO 03: Employ correlation coefficient and regression analysis to solve different types of statistical problems.

COMMERCE

B.Com First Year

Financial Accounting

CO 01: Equip the students to get an idea on the Accounting terminology

CO 02: Familiarize students to prepare the financial statements of sole

proprietor CO 03: Make the students to understand the single entry system and its preparations

CO 04: Familiarize the students with the theoretical and practical aspects of Hire Purchase Accounting

CO 05: Familiarize the students about the application and importance of Accounting Standards

Business Mathematics & Statistics

CO 01: To understand the different concept of population and sample and to make students familiar with Calculation of various types of averages and variation.

CO 02: To use regression analysis to estimate the relationship between two variables and to use frequency distribution to make decision

CO 03: To understand the techniques and concept of different types of index numbers.

Business Organization & Management

CO 01: To build up the conceptual, analytical, technical and managerial skills of students' efficient office organization and records management

CO 02: Technical skills among the students for designing and developing effective means to manage records , consistency and efficiency of work flow in the administrative section of an organization will be developed.

Business Communication & I.T. Application

CO 01: To make students familiar with computer environment & operating systems.

CO 02: Enable the students to manage the office activities with the help of information technology.

CO 03: Develop skills to analyse data and presentation using Excel , PPT etc.

Entrepreneurship Development

CO 01: To develop entrepreneurial awareness among students.

CO 02: To motivate students to make their mind set for thinking entrepreneurship as career.

CO 03: Students will be able to know the parameters to assess opportunities and constraints for new business ideas.

Business & Industrial Economics

CO 01: To provide students with knowledge of Micro Economic concepts and inculcate an analytical approach to the subject matter.

CO 02: To arouse the student's interest by showing the relevance and use of various economic theories.

CO 03: Explain concepts of industrial economics.

CO 04: Understand relationship between industrial and economic development

B.Com Second Year

1Corporate Accounting

CO 01: Make the students familiarize with corporate accounting procedures

CO 02: To make aware the students about the Issue and Forfeiture of shares and Debentures.

CO 03: To impart knowledge about holding company accounts, amalgamation, absorption and reconstruction of company.

CO 04: Understand the accounting procedure for reconstruction and liquidation of companies.

Cost Accounting

CO 01: To understand Basic Cost concepts, Elements of cost and cost sheet.

CO 02: Understand fundamentals of cost accounting as a separate system of accounting

CO 03: Acquaint the students with different methods and techniques of costing.

GST

CO 01: Familiarize the concepts of Goods and services tax in its technical terms. CO 02: Students are able to understand the calculation in goods and services tax. CO 03: Understanding the different GST Returns

Marketing Management

CO 01: Familiarize the students with the basic principles of marketing management.

CO 02: Acquaint students with the application of principles of marketing management in the business and industry.

CO 03: Familiarize the students with the recent trends in marketing.

I.T. Application in Business

CO 01: Provide complete knowledge of C language and help them to create programs, applications in C

CO 02: Familiarize with the mechanism of E-commerce

CO 03: By learning the basic programming constructs they can easily switch over to any other language in the future.

CO 04: Familiarize the mechanism of conducting business transactions through electronic media

B.Com Third Year

Advanced Financial Accounting

CO 01: Understanding the preparation of Financial Statement s

Management Accounting

CO 01: Understand the importance of management accounting techniques in financial decisions
CO 02: Understand the preparation of cash flow and fund flow statement of a company

CO 03: Understand the importance of management accounting techniques in financial decisions

Auditing

CO 01: Students will be versed in the fundamental concepts of Auditing.

CO 02: To give knowledge about preparation of Audit report.

CO 03: Discuss the various concepts of audit like Types of errors and frauds, Various Classes of Audit, Audit programme, Audit Note Book, Working Papers, Internal Control-Internal Check-Internal Audit.

CO 04: Recognize Company Auditor like his Qualification, Disqualifications, Appointment, and Removal, Rights, Duties and liabilities.

Business Regularity Framework

CO 01: The student will well verse in basic provisions regarding legal frame work governing the business world.

CO 02: To know the students with the basic concepts, terms & provisions of Mercantile and Business Laws.

CO 03: To develop the awareness among the students regarding these laws affecting trade business, and commerce.

Computerized Accounting

CO 01: Provide a practical and theoretical knowledge about the best accounting software Tally ERP 9.

CO 02: Equip the students to understand various usages of the Tally software and its application in business processes for accounting purposes.

CO 03: Develop skills to do various accounting through the Tally ERP software.

Rural Development & Agricultural Business

CO 01: Gain insight into the socio-economic structure of rural India.

CO 02: understand the prospects and problems of rural development in India.

CO 03: Explain the types of agriculture to include, horticulture, dairying and allied rural activities.

CO 04: Define the Agriculture, rural areas and rural families and principles of rural economic development.

M.Sc. CHEMISTRY

M.Sc. Course Outcomes (COs)

M. Sc. First Year: First Semester Paper- CHE-101 Analytical Chemistry

CO 01: To study different methods of solvent extraction

CO 02: To study data analysis

CO 03: To study about principle and application of chromatographic

methods CO 04: To study detail about principle and application of HPLC and GC

CO 05: To possess advance knowledge of chemistry domain

CO 06: To provide the professional services to industry, Research organization, institutes.

Paper- CHE-102 Inorganic Chemistry

CO 01: To visualize molecule in 3-D, understand the concept of symmetry elements and symmetry operations.

CO 02: To know the point groups of molecules and understand symmetry considerations for optical activity and dipole moment.

CO 03: To understand the group multiplication table, character table and representations of group

Paper- CHE-103 Organic Chemistry

CO 01: To understand chemical bonding and reactivity, various effects in organic molecules

CO 02: To understand Acidity and Basicity as well as aromaticity

CO 03: To understand concepts of stereochemistry and will be able to stereochemical aspects in organic chemistry.

CO 04: To develop knowledge of substitution (electrophilic, nucleophilic) reactions

Paper- CHE-104 Physical Chemistry

CO 01: To represent of the rate law of the elementary and chain reaction

CO 02: To understand of the theories for the determination of the rate of

the reactions

CO 03: To understand of the laws of thermodynamics and their applications

CO 04: To know the phase diagram of single component systems and binary mixtures

CO 05: To understand of the applications statistical thermodynamics.

M. Sc. First Year: Second Semester

Paper- CHE-205 Spectroscopic Methods of Analysis

CO 01: To understand of the principle of Microwave, IR, Raman, Electronic and NMR spectroscopy

CO 02: To draw of the schematic Microwave, IR and Raman spectrum of di and triatomic molecules based on the selection rules.

CO 03. To apply the techniques for structure determination of organic molecules

Paper- CHE-206 Inorganic Chemistry

CO 01: To understand the detail chemistry of s- and p- block elements w.r.t. their compounds, reactions and applications

CO 02: To understand the organometallic chemistry of some important elements of s- and p- block.

CO 03. To understand the effect of various ligand field strengths on d-metal ions and find out ground state terms with their energies, microstates, degeneracy and microstate table for different transition metal ions and complexes

CO 04: To Understand of Bioinorganic Chemistry: Use of metals in biological systems, various aspects of coordination chemistry related to bioinorganic research, metallobiopolymers, their structure, function, role of metal ion, etc.

CO 05: To get the knowledge of Biochemistry of metals like Na, K, Fe, Ca and Mn

Paper—CHE-207 Organic Chemistry

CO 01: To develop knowledge of elimination reactions.

CO 02: To understand various reactions and rearrangements

CO 03: To understand how to convert one molecule into another by using oxidizing and reducing, reagents.

Paper—CHE-208 Physical Chemistry

CO 01: To understand of the applications statistical thermodynamics

CO 02: To understand of the quantum chemistry of free electron and H-atom

M. Sc. First Year: Practical Courses Paper- CHE-209 General Chemistry

CO 01: To prepare the solution of the desired concentration and the desired volume

CO 02: To know the principle and handling of pH meter, Potentiometer, conductivitymeter, colorimeter, viscometer, etc.

CO 03. To plot accurate graphs of the desired scale for the calculations

CO 04: To maintain laboratory ethics, safety and cleanliness

Paper-CHE-210: Inorganic Chemistry

CO 01: To prepare the exact solutions for quantitative analysis

CO 02: To synthesize Inorganic complexes and also find their purity

CO 03: To understand the principle and working of different instruments like colourimeter, conductometer, spectrophotometer, etc

Paper-CHE-211: Organic Chemistry

CO 01: To understand different purification techniques in organic chemistry like recrystallization, distillation, steam distillation and extraction.

CO 02: To get awareness of safety techniques and handling of chemicals.

CO 03: To understand how to carry out different types of reactions and their workup methods.

CO 04: To become aware of green chemistry and role of green chemistry in pollution reduction

Paper- CHE-212: Physical Chemistry

CO 01: To prepare the solution of the desired concentration and the desired volume

CO 02: To know the principle and handling of pH meter, Potentiometer, conductivity meter, colorimeter, viscometer etc.

CO 03. To plot accurate graphs of the desired scale for the calculations

CO 04: To maintain laboratory ethics, safety and cleanliness

M. Sc. Second Year: Third semester

Paper-CHEO-313: Structural Elucidation by Spectral Methods

CO 01: To understand how to interpret nuclear magnetic resonance spectrum

CO 02: To know how to solve problems based on H1 and C13 NMR

CO 03. To know applications of mass spectroscopy in determination of structures

CO 04: To understand methods of solving combined problems on all spectroscopic techniques

Paper- CHEO-314: Organic Synthesis

CO 01: To understand how to convert one molecule into another by using oxidizing and reducing reagents.

CO 02: To apply theoretical knowledge in practical for various conversions

CO 03. To develop interest in writing and finding mechanisms of new reactions

CO 04: To understand industrial applications of organometallic compounds in organic reactions

CO 05: To understand the mechanisms of organometallic reactions

Paper- CHEO-315: Asymmetric Synthesis and Bio-Organic Chemistry

CO 01: To understand various ways of attack on electrophilic species by a nucleophile

CO 02: To predict enantioselective product

CO 03. To develop interest in Asymmetric synthesis of naturally occurring essential compounds.

CO 04: To understand nature better by studying mechanisms in biological reactions

Paper- CHEO-316: Photo-chemistry, Free radical and Pericyclic reaction

CO 01: Understand various Pericyclic and photochemical reactions and rearrangements

CO 02: Understand and write mechanism of reactions and their applications.

M. Sc. Second Year: Fourth semester

Paper- CHEO-417: Organic Synthesis, Retro synthesis

CO 01: To understand the concept of synthon and retrosynthesis

CO 02: To understand synthetic equivalent and application

CO 03. To understand different type of disconnection approach

CO 04: To understand the application of various reactions and reagents in synthesis

Paper- CHEO-418: Advanced organic and heterocyclic chemistry

CO 01: To understand how to synthesize five, six and seven-member heterocycles

CO 02: To utilize their knowledge in practical's for various heterocyclic and photochemical Conversions

CO 03. To understand various reactions and rearrangements

Paper- CHEO-419: Chemistry of Natural Product

CO 01: To understand different Secondary metabolites and their importance

CO 02: To become familiar with many reagents used in organic synthesis

CO 03. To understand nature better by studying mechanisms in biological reactions

CO 04: To develop interest in Biogenesis of naturally occurring essential compounds

Paper- CHEO-420: Medicinal Chemistry

CO 01: To understand the synthesis of various drugs

CO 02: To understand the mode of action of different anti-fungal, anti-bacterial and anti-viral drugs.

M. Sc. Second Year: Practical Courses Paper-CHEO-421, CHEO-422, CHEO-423 CO 01: To synthesize organic molecules.

CO 02: To maintain reaction conditions

CO 03. To arrange the assembly of reaction

CO 04: To follow reaction by using thin layer chromatography

CO 05: Methods of purification of samples.

Paper-CHEO-424: Project

CO 01: To develop research skills through dissertation/Project work in different fields of chemistry

CO 02: To develop analytical skills such as synthesizing, separating, characterizing chemical compounds and chemical reaction with the help of sophisticated instruments

CO 03. To acquire deep knowledge of the topic which can develop the problem solving skills using chemical principle

M. A. POLITICAL SCIENCE

First Year (Political Science)

Pol. 401 Western Political Theory

CO 01: Make the students to understand the background of Western Political Thought

CO 02: The students get information regarding western political theory

CO 03: Familiarize the students about important Western Political Thought.

CO 04: Familiarize the students about theoretical and practical aspects of Western Political thought and his Welfare theory

CO 05: Make the students to do research work on a specific thought OR thinker.

CO 06: Students get detailed information about formation of Western political thinking with their respective thinker.

CO 07: Students get familiar with Western political tradition.

CO 08: Students get knowledge about the Western contribution to the Political theory

Pol.402 Theories of International Relation

CO 01: Make the students to get basic knowledge of International Politics and Policy.

CO 02: The students get information regarding International Relation theory

CO 03: The student gets information of Foreign Policy & Making and change of its Policy

CO 04: The student gets information of International Relation, International politics and National, Regional origination

CO 05: The student get information of other country's Politics and knows the politics and happening of the nations of the world

CO 06: The student get information of the constitution of a nation is known at the international level

CO 07: Student learn about wars, treaties and agreement

Pol.403 Comparative Politics: Theoretical Perspective

CO 01: Make the students to get basic knowledge of Comparative Politics

CO 02: Student knows the information of political system can compared

CO 03: A comparative study of events in different countries is done

CO 04: A comparative study of constitutions is done

CO 05: Awareness of the shortcomings of different regimes in the world

CO 06: TO Information of Constitutionalism was known in different countries of the world

4 Pol.432 State Politics in India A Theoretical Perspective

CO 01: Make the students to understand the origin, sources and background of Indian Constitution.

CO 02: Familiarize the students about the Law of the Land with the help of Constitutional Provisions.

CO 03: Familiarize the students about their rights and responsibilities as a citizen.

CO 04: Make the students to understand the Social Welfare State.

CO 05: Make the students to familiarize with the policy issues and structures of government within societies and among nations.

CO 06: Familiarize the students about theoretical and practical aspects of National politics, concern issues with the understanding of national level Political Parties and its ideology.

CO 07: Make the students to acquire the conceptual knowledge of Indian Constitutional Provisions.

CO 08: Familiarize the students with the State machinery, its organization and functions.

M. A. Second Year (Political Science)

Pol. 407 Research Methodology in Social Science

CO 01: Make the students to understand the background of research methodology

- CO 02: Increase research tendency in students
- CO 03: Familiarize the students about important research.
- CO 04: Physician vision increases in the student
- CO 05: Make the students to do research work on a specific thought
- CO 06: Were aware of various social phenomena

Pol.408 Indian Political Thought

- CO 01: Make the students get acknowledged with Indian Political tradition respectively with the help of Indian political thinkers.
- CO 02: Make the students to do comparative study of various political thoughts.
- CO 03: Make the students to focus on further development of any thought like Gandhism, Sarvodaya, Panchyat Raj etc.
- CO 04: Make the students to do wholehearted study of any Indian political thinker.
- CO 05: Make the students to do research work on a specific thought OR thinker.
- CO 06: Students get detailed information about formation of Indian political thinking with their respective thinker

Pol.409 India's Foreign Policy

- CO 01: The worldview grows in the student
- CO 02: Gets in-depth information on world events to Student
- CO 03: Students learn about global leadership
- CO 04: Global leadership qualities increase in students
- CO 05: Provides information on various international treaties and international organizations
- CO 06: Know about International Pact

Pol.437 Modern Trends in Political Theory

- CO 01: Students aware about the concept of Social Justice and its implications.
- CO 02: Students familiarize with their rights.
- CO 03: Students get knowledge about Liberalism, Communitarilism.
- CO 04: Students get familiar with the Welfare State and it's Utility.
- CO 05: Students get acknowledge with Feminism.

Marathi UG

B.A I,(Marathi) Sem I- B.A.B.Com ,First Year Marathi SL

गद्य पद्य उपयोजित मराठी MAR 001

CO 01: विद्यार्थ्यांना महानुभाव संप्रदाय, वारकरी संप्रदायाचा परिचय होतो.

CO 02: आधुनिक कवी ,लेखकाचा परिचय होतो.

CO 03: पाठातील व कवितेतील आशयाचा माध्यमातून विद्यार्थ्यांमध्ये सामाजिक मानवी मूल्य रुजतात .

CO 04: विद्यार्थ्यांमध्ये मराठी साहित्य आणि मराठी भाषेविषयी आवड निर्माण होतो.

B.A I,(Marathi) Sem II- B.A.B.Com ,First Year Marathi SL

गद्य पद्य उपयोजित मराठी MAR 002

CO 01: वाचन संस्कृती जोपासण्यासाठी विद्यार्थ्यांना ग्रंथालये व ग्रंथ या विषयी माहिती मिळते .

CO 02: विद्यार्थ्यांना नीटपणे लिहिता ,वाचता यावे , उच्चार स्पष्ट करता यावे , वाक्यरचना व्यवस्थित करता यावी यासाठी लेखन विषयक नियम समजतात .

CO 03: विद्यार्थ्यांमध्ये पत्रलेखन , संवाद लेखन,अहवाल लेखन , जाहिरात लेखन , या कौशल्याचा विकास होतो.

B.A I,(Marathi) Sem I- (Opt)

MAR 101 – काव्यात्म साहित्य

CO 01: कविता या वाङ्मय प्रकारचा अभ्यास करता येतो.

CO 02: मानवी मन समजून घेता येते.

CO 03: आनंद प्रबोधन आणि बोध कवितेतून मिळतो.

CO 04: वैशिकबंधुभाव जागृत होतो.

B.A I,(Marathi) Sem II- (Opt)

MAR 103 – काव्यात्म साहित्य

CO 01: माणूस हा गोष्टी वेल्लाळ प्राणी आहे.कथेद्वारे माणसाचा पूर्व इतिहास समजावून घेता येतो.

CO 02: कथात्मक साहित्यातून सामाजिक व सांस्कृतिक पर्यावरण समजता येते.

CO 03: मानवी जीवनाचे सर्वांगीण आकलन आणण्यास कथात्मक साहित्य उपयोगी पडते.

B.A I,(Marathi) Sem I- (Opt)

MAR 102 – नाट्यात्म साहित्य

CO 01: मराठी मधील एकाकीकाचा अभ्यास करून घेता येतो.

CO 02: इंग्रजी मराठीमध्ये आलेल्या नाट्यछटा वाङ्मय प्रकारचा परिचय करून घेता येते.

CO 03:एकाकिका या वाङ्मय प्रकारचे स्वरूप समजून घेता येते.

B.A I,(Marathi) Sem II- (Opt)

MAR 104– मुद्रित माध्यमासाठी लेखन कौशल्ये

CO 01: मुद्रित माध्यमातील लेखन कौशल्ये समजून घेता येते.

CO 02: मराठी मधील लेखक कवीचा परिचय करून घेता येते.

CO 03: मराठी भाषेची आवड निर्माण करता येते.

B.A.B.Sc II,(Marathi) Sem II- (SL)

MAR 04 –गद्य पद्य उपयोजित मराठी

CO 01: विद्यार्थ्यांमध्ये साहित्याचा आस्वाद घेण्याची क्षमता निर्माण होते.

CO 02: विविध प्रसार माध्यमांची ओळख होते.

CO 03: माहिती तंत्रज्ञानाचा परिचय होतो.

CO 04: वाचन संकृती जोपासण्यासाठी विद्यार्थ्यांना ग्रंथाचा परिचय होतो.

B.A.II (Marathi) Sem I (OPT)

MAR 105 – आधुनिक मराठी वाङ्मयाचा इतिहास

CO 01: मराठीवाङ्मयाचा इतिहास परिचय करून घेता येते .

CO 02: १८०० ते १९२० कालखंडांचा वाङ्मय निर्मितीच्या प्रेरणाचा शोध घेता येतो .

CO 03: परिवर्तनवादी विचारांची ओळख करून देता येते .

CO 04: १८०० ते १९२० या कालखंडातील सामाजिक व सांस्कृतिक पार्श्वभूमी समजून घेता येते.

B.A .III (मराठी) Sem I (OPT)

MAR 09 – भारतीय साहित्यविचार

- CO 01: विद्यार्थ्यांना साहित्याच्या स्वरूपाची ओळख करून दिली जाते .
CO 02: विद्यार्थ्यांना साहित्याचे प्रयोजने समजावू घेता येतात .
CO 03: विद्यार्थ्यांना साहित्याची निर्मिती प्रक्रिया मांगता येते.
CO 04: विद्यार्थ्यांना रस विचारांचा अभ्यास करता येतो .
CO 05: संकृत अभ्यासकांनी मांडलेल्या कामाच्या संदर्भातील व्याख्या समजून घेता येतात .

B.A .III (मराठी) Sem II (OPT)

MAR 13 – भारतीय साहित्यविचार

- CO 01: विद्यार्थ्यांना साहित्याच्या स्वरूपाची ओळख करून देता येते .
CO 02: विद्यार्थ्यांना साहित्याचे प्रयोजन समजावू घेता येतात .
CO 03: विद्यार्थ्यांना साहित्याची निर्मिती प्रक्रिया सांगता येते .
CO 04: विद्यार्थ्यांना रसविचारांचा अभ्यास करता येतो.
CO 05:

B.A .III (मराठी) Sem I (OPT)

MAR 10- बी. ए. भाषाविज्ञान

- CO 01: गावा एक संकेतप्रणाली आहे ते समजणे
CO 01: भाषा ध्वनींनी बनली आहे ते समजते .
CO 01: भाषा आणि भाषण यातील फरक समजतो .
CO 01: भाषा प्रागस्कुलाची संकल्पना समजते

B.A.III. (Marathi) Sem II (OPT)

MAR 14- व्याकरण व निबंधलेखन

- CO 01: भाषे संदर्भातील विविध सिद्धांत समजतात .
- Co 02: भाषा आणि बोलीतला फरक कळतो .
- CO 03: इतर भाषेतील मराठीत आलेले शब्द कळतात .
- CO 04: व्याकरणाचे नियम समजतात .
- CO 05: दर्जेदार निबंध कसा लिहावा ते समजते .

B.A.III. (Marathi) Sem I (OPT)

MAR 11- मध्ययुगीन मराठीवाङ्. मयाचा इतिहास (प्रारंभ ते १६००)

- CO 01: मध्ययुगीन मराठीवाङ्. मयाचा इतिहास परिचय करून घेता येते .
- CO 02: प्रारंभ ते १६०० या कालखंडातील वाङ्, मयाच्या रचनेचा परिचय करून घेता येतो .
- CO 03: प्रारंभ ते १६०० या कालखंडातील वाङ्, मनिर्मितीच्या प्रेरणांचा शोध घेता येते .
- CO 4: प्रारंभ ते १६०० या कालखंडातील सांस्कृतिक पाश्र्वभूमीच उलगडा करता येतो .

B . A.III. (Marathi) Sem II (OPT)

MAR 15- मध्ययुगीन मराठीवाद, मयाचा इतिहास (१६०९ ते १८१८)

- CO 01: मध्ययुगीन साहित्य, भाषा व सास्कृतिच्या परिचय करून घेता येतो .
- CO 02: मध्ययुगीन मराठी भाषेतील विविध प्रवाहांचा अभ्यास करता येतो .
- CO 03 १६०१ ते १८१८ या कालखंडातील मराठी भाषेचे स्वरूप लक्षात घेता येते .
- CO 4: १६०१ ते १८१८ या कालखंडातील प्रमुख संप्रदाय व ग्रंथनिर्मितीचा अनुबंध करता येतो .

Marathi PG
Course Outcomes
M.A. I Year Sem I

१०१. आधुनिक मराठी वाड, मयाचा इतिहास १९२०-१९६०.
CO 01: आधुनिक मराठी वाड, मयाचा परिचय करून देता येतो.
CO 02: महत्वाचे समाजसुधारक विचारवंताची ओळख होते.
CO 03: भारताच्या स्वातंत्र्य लढयाला इतिहास समजतो.

M.A. 1 Year Sem II

२०१- आधुनिक मराठी वाड, मयाचा इतिहास -१९६१-२०००

CO 01: आधुनिक मराठी कादंबरी कथा कविता नाटक या वाड, मयप्रकाराचा परिचय करून देता येतो.

CO 02: नाट्य सृष्टीचे अंतरंग समजण्यास मदत होते.

CO 03: आधुनिकीकरणाचे समाजावर होणारे परिणाम समजतात.

M.A. 1 Year Sem I

१०२ – साहित्य सामिक्षेची मुलतत्वे

CO 01: सामिक्षेची संकल्पना व स्वरूप समजून घेता येतात.

CO 02: सामिक्षेच्या विविध अभ्यास पद्धतीचा परिचय करून घेता येतो.

CO 03: साहित्य सामिक्षेच्या विविध प्रयोजनाचे अद्धान करता येते .

CO 04: साहित्यांच्या विविध क्षेत्रांचा अभ्यास करून घेता येतो.

M.A. 1 Year Sem II

२०२- समीक्षेच्या विविध अभ्यासपद्धती आणि उपयोजित समीक्षा

CO 01: वाड, मयाचा अध्ययनाचे विविध दृष्टिकोन समजावून घेता येतात.

CO 02: मराठी साहित्य व समीक्षा यांच्या अनुबंधाचे अध्ययन करता येते .

CO 03: साहित्यातील वाड, मयीन मुल्ये जीवनमूल्यांचा परस्पर संबध उलगडून दाखवता येतो.

CO 04: साहित्याच्या शैली संकल्पाना व स्वरूप समजावून घेता येतो .

M.A. I Year Sem I

१०३.१- भाषिक कौशल्ये, प्रसारमाध्यमे व सृजनशील लेखन

CO 01: श्रवण कौशल्याचे स्वरूप समजावून घेता येतात.

CO 02: वाचन कौशल्याचे महत्व सहत्स्थितीचे अवलोकन करता येते .

CO 03: ज्ञानेंद्रिय वनिरीक्षण कौशल्याचा परस्पर संबध समजावून घेता येतो .

CO 04: परिणामकारक संभाषणाचे तंत्र जाणूनघेता येते .

CO 05: सृजनशीललेखनात भाषेच्या वापराचे ज्ञान देता येते .

M.A. I Year Sem II

२०३.१- भाषिक कौशल्ये, प्रसारमाध्यमे व सृजनशील लेखन

- CO 01: वातमी लेखन, स्तब्धलेखन लेखन, मुलाखत परीक्षात्मक लेखनाचे स्वरूप समजावून घेता येते.
- CO 02: द्रुकश्राव्य माध्यमानंसाठी लेखन कौशल्य विकसित करता येते.
- CO 03: मुद्रीतशोधन संकल्पाना व स्वरूप समजावून घेता येते.
- CO 04: जाहिरात चित्रपट, मालिकासाठी पटकथा लेखनाचे स्वरूप समजावून घेता येते.

M.A. II Year Sem III

३०१-वर्णनात्मक भाषाविज्ञान

- CO 01 वर्मनाक भाषाविज्ञानचा परिचय करून घेता येतो.
- CO 02: मराठी भाषेची संकल्पना स्वरूप समजावून घेता येते.
- CO 03: स्वन-स्वनीम-स्वनांतरे ही भाषिक प्रक्रिया समजावून घेता येते.
- CO 04: मराठी भाषेतील वाक्याविचार व अर्थविचार जाणून घेता येतो.

M.A. II Year Sem IV

४०१- मराठी भाषेचा इतिहास व समाजभाषा विज्ञान

- CO 01: अमेरिकन युरोपीयन यांचा सहसंबंध जाणून घेता येतो.
- CO 02 मराठी भाषेची पूर्वपीडीका व उत्पत्तीविषयक अध्ययन करता येते.
- CO 03: मराठी भाषेच्या कालिक भेदाचे स्वरूप समजून घेता येते.
- CO 04: मराठी भाषेवरील इतर भाषेचा पडलेला प्रभावाचा आढावा घेता येतो.
- CO 05 : भाषा आणि समाज परस्परसंबंधाचा अभ्यास करता येतो.

M.A. II Year Sem III

३०३.१-लोकसाहित्य

- CO 01: लोकसाहित्याची संकल्पना व स्वरूप समाजावून घेता येते .
- CO 02: लोकसाहित्याचा हेतू अथवा प्रयोजन जाणून घेता येतो .
- CO 03: लोकसाहित्याच्या विविध अभ्यासप्रदायाचा परिचय करता येतो .
- CO 04: लोकमाणसातील विधी, रूढी, परंपरा , समजूती समाजावून घेता येतात .

M.A. II Year Sem IV

४०३.१- लोकवाङ्मय प्रकार व स्वरूप विशेष

- CO 01: लोकसाहित्याच्या विविध प्रकार समाजावून घेता येतात .
- CO 02: लोकगीतातून व्यक्त झालेल्या लोकमानंच्या अविष्काराचे अध्ययन करता येते .
- CO 03: लोककथाच्या विविध अङ्कांचा परिचय करून घेता येतो .
- CO 04: उखाणे, म्हणी, वाक्यप्रचार विविधता व काल्पशक्तीचा अवकोलन करता येते .
- CO 05: लोकसंस्कृतीच्या विविध अभ्यासाची ओळख करून देता येते .

DEPARTMENT OF PUBLIC ADMINISTRATION (UG)

Program Outcome (POs,)

PUBLIC ADMINISTRATION

This program aims to provide the students an understanding of the various concept of Public Administration as well as the Administrative system of India, their impact and relationship with man. The student should be able to understand, analyze and explain the different impacts of the how man is influenced by the administration. B.A. in Public administration will be able to .

POs 1. Demonstrate an understanding of the basic concepts, nature and scope, principles, approaches and theories in the selected administrative fields in Public Administration.

POs 3. Establish an understanding of the pattern of administrative development through the ages so as to have better perception of both present and future outcomes in administration.

POs 4. Understand the working and functions of various organizations under the Government Administration in India.

POs 5. Exhibit the knowledge of Administration at the Centre, State and Local levels in India and be able to differentiate between administration difference between rural and urban areas.

POs 6. Develop academic, entrepreneurial and material aptitude with professional ethics for employment in public and private sectors.

POs 7. Appreciate the methodological pluralism and synthesizing nature of knowledge in Public Administration;

Program Specific Outcome (PSOs,)

The programme specific outcomes of the Three Year (Six Semesters) B.A. Public

Administration programme are as under:

PSO - 1. Students would be able to know about the research and development opportunities in the field of Administration / policy/ governance studies.

PSO - 2. Students would be able to analyze the effectiveness of governmental policies and programmes.

PSO - 3. Students would be familiar with the issues of human rights, disaster management, governance reforms, information communication technology and public administration etc.

PSO - 4. Students would gain confidence while dealing with administrative officials and political leaders.

PSO - 5. Students would be able to develop their research aptitude and orientation.

PSO - 6. Students would be able to learn about the research papers writing and presenting in seminars/conferences.

PSO -7. Students would be acquainted with the statistics tools involved in the research methodology etc.

Course Outcome (COs)

Semester I

Paper I: Principles & Concepts of Public Administration

At the completion of the B.A.Degree course, student will be able to,

- CO1. Explain the Meaning, Nature & Scope of Public Administration.
- CO2. Differentiate between Public and Private Administration.
- CO3. Explain the Meaning & forms of Organisation.
- CO4. Describe the different Principles of Organisation.
- CO5. Students have understood the Concepts of Public Administration.

Paper II: Public Administration in India

At the completion of the B.A.Degree course, student will be able,

- CO1. To understand the historical evolution & current global scenario of Indian Administration
- CO2. To describe the constitutional framework in which an individual & the state works.
- CO3. To discern and analyse the connects / disconnects between structure, procedure & functions Of government institutions.
- CO4. To understand the form & substance of Indian Administration
- CO5. To acquaint with the changing as well transformative role of Indian Administration

Semester II

Paper III: Maharashtra Administration

At the completion of the B.A.Degree course, student will be able to,

- CO1. Discuss the formation of Maharashtra State and Its administrative features.
- CO2. Describe the structure and functions of the state Executive.
- CO3. Discuss the structure and functions of the state legislature.
- CO4. Understand the structure and functions of the state judiciary.
- CO5. Identify the relevance of Constitutional and Statutory bodies at the state level such as MPSC, MEC, MFC etc.

Paper IV: District Administration

At the completion of the B.A.Degree course, student will be able to,

- CO1. To understand the evolution & importance of District Administration.
- CO2. To understand the changing role of district collector.
- CO3. To identify the various aspects of the concept Law & Order.
- CO4. To comprehend the functioning of revenue administration.
- CO5. To comprehend the functioning and issues of police administration

Semester III

Paper V: Personnel Administration

At the completion of the B.A.Degree course, student will be able to,

- CO1. To become familiar with the personnel administration i.e. public service in India.
- CO2. To identify the role of personnel training institutions such as YASHDA, MPA & LBSNAA.
- CO3. To become familiar with the personnel grievance redressal mechanism in India
- CO4. To comprehend with the problems of personnel administration in India
- CO5. To understand the relevance of administrative tribunal mechanism in India.

Paper VI: Panchayati Raj & Rural Development

At the completion of the B.A.Degree course, student will be able to,

- CO1. To Understand the basic concept of Local Self Government in India
- CO2. To Understand the PanchayatRaj System in Maharashtra.
- CO3. To Understand the Composition and Function of state Rural Development Ministry.
- CO4. To acquaint the concept and Programme of Rural Development.
- CO5. To describe the Problems of Rural area.

Semester IV

Paper VII: Financial Administration

At the completion of the B.A.Degree course, student will be able to,

- CO1. To understand the basics of financial administration and importance of the financeministry.
- CO2. To comprehend with the process & importance of budget.
- CO3. To describe the major accounts and audit mechanism in India.
- CO4. To explain the methods and importance of parliamentary control over financial administration
In a democratic country.
- CO5. To make familiar to students the concept of Liberalization, Privatization & Globalization.

Paper VIII: Urban Local Self Government & Urban Development

At the completion of the B.A.Degree course, student will be able to,

- CO1. To Understand the Basic concept of urban local self Government in India.
- CO2..To Understand the Urban local self Government system in Maharashtra.
- CO3. To acquaint the Urban Development Agencies in Maharashtra.
- CO4. To describe the problems of Urban area.
- CO5. To Identify the Major Urban Development Programmes.

Semester V

Paper IX: Human Resource Development

At the completion of the B.A.Degree course, student will be able to,

- CO1. Explain the nature, scope, structure & processes of human resource development.
- CO2. Understand the changing paradigms of human Resources development.
- CO3. Unravel the varying methods of performance assessment of public institutions.
- CO4. Appreciate the changing paradigms of human resource development
- CO5. Identify the systems and processes of financial and material resource development

Paper X: Educational Administration in India

At the completion of the B.A.Degree course Student will be able to,

- CO1. Discuss the objectives and importance of Education
- CO2. Describe the historical background of Education in the light of various Committee's recommendations and government policies.
- CO3. Identify the role of Quality Control Institutions, such as NAAC and AICTE, in Higher Education.
- CO4. Describe the structure, relevance and the present Scenario of Higher Education in India.
- CO5. Analyse the impact of Globalization on Higher Education in India.

Paper XI : Administrative Thinkers

At the completion of the B.A.Degree course, student will be able to,

- CO1. Discuss the concept of Scientific Management by F. W. Taylor.
- CO2. Write down Max Weber's Ideal Model of Bureaucracy.
- CO3. Explain the elements and Principles of Management.
- CO4. Understand Mary Follet's ideas of Authority, conflict and integration.
- CO5. Describe Elton Mayo's Hawthorn Experiment.
- CO6. Examine the Behavioural approach and Decision-Making approach by H. Simon.
- CO7. Write down the Ecological approach and the concept of Prismatic Society by F. W. Riggs.

Semester VI

Paper XIII: Public Policy

At the completion of the B.A.Degree course, student will be able to,

- CO1. Explain the concept of Public Policy.
- CO2. Discuss the role of internal determinants in the formulation of Public Policy.
- CO3. Discuss the role of Executive and Bureaucracy in the implementation of Public Policy.
- CO4. Explain the concept of Development.