Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Criteria II

Teaching-Learning Evaluation

2024-25

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Criteria II

Teaching-Learning Evaluation

Key Indicator: 2.6

Students Performance and Learning Outcomes

2.6.1 Program Outcomes [POs] and Course Outcomes [COs] for all programs offered by the institution are stated and displayed on website.

INDEX

Dr. GHALI COLLEGE Estd. 1984 GADHINGLAJ

Program Outcomes [POs]

and

Course Outcomes [COs]

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes [POs], Programme Specific Outcomes and Course Outcomes [COs]

I. PREAMBLE:

Dr. Ghali College, Gadhinglaj has clear vision about outcome-based education process in accordance with UGC guidelines. Learning Outcomes of the Programs and Courses are highlighted and made aware to the students in the induction ceremony-cum-orientation programme at the beginning of the session. Moreover, it inculcates employability and entrepreneurial skills in the students. The importance of the learning outcomes has been discussed and communicated to the teachers. The curricula under NEP 2020 have been strengthened with the introduction of OBE and the courses have been reinforced with desirable outcomes. Course Outcomes are assessed at the completion of each course and the Programme Outcomes are measured at the time of completion of the programme. OBE enriches the courses offered in each programme, equips the teachers with knowledge and skill, and, empowers the learners with attainable outcomes of the programme. It develops the optimistic attitude in the learners towards vertical development in their future endeavours.

Dr. GHALI COLLEGE Estd. 1984 GADHINGLAJ

II. Graduate Attribute:

The graduate attributes of Dr. Ghali College, Gadhinglaj are aimed at the 'holistic development' of graduates and post-graduates. Our graduates have the features including knowledge, skills, attitude and values which are acquired by them through college. Students develop capability for widening current knowledge base and skills, gaining new knowledge and skills, undertaking future studies, performing well in a chosen career and playing a constructive role.

These attributes are aligned with the program specific outcomes, program outcomes and content, teaching methods and assessment.

1. Educational Excellence

- Students in the College are equipped with the skills, motivation and confidence to engage in continuous learning to meet the personal, professional and vocational challenges of an ever changing world.
- Intellectual Capacity which includes domain knowledge, critical thinking, digital literacy, problem solving skills, research skills, analytical thinking, reasoning, innovation, self-learning, entrepreneurial skills.
- Ability to apply knowledge to the real word problems.

- Capacity to participate in collaborative learning and to deal with unfamiliar problems.

2. Personality and Leadership

- Every effort is made to equip the students with confidence, capability, assurance, independence and enterprise so as to enable them to fulfil their personal and career aspirations.
- Capacity for self-reflection, self-discovery and personal development.
- An awareness of personal strengths and weaknesses.
- Confidence in taking risks and challenges.

3. Communication Skills

- Ability to use proper communication skills for successful interaction in personal and public life.
- Ability to participate in constructive discussions and debates.
- Ability to express thoughts and ideas effectively in writing and orally.
- Ability to use appropriate style, methods and resources in communication.

4. Global Citizenship:

- It is our goal to make the students accustomed to contemporary, social and cultural issues so that they make meaningful contributions to local, national and global communities.

- Various seminars and discussions organized by the college and different associations in the college ensure that students of our College fulfil the role of a good and engaged citizen.
- Students are expected to be aware of generally accepted norms of ethical behaviour and are encouraged to act in a socially responsible manner both in the campus and other settings.
- Ability to think globally about issues in their profession.

5. Intellectual Competencies

- Graduates of GCC have a comprehensive and incisive understanding of their domain of study as well as the capability for cross-disciplinary learning.
- They have the ability to apply the knowledge acquired through the curriculum as well as self-directed learning to a broad spectrum ranging from analytical thinking to synthesise new knowledge through research.
- Forming independent individual opinions regarding academic cores and socially relevant issues

6. Professional Ethics

- Graduates of GCC develop ethical and professional behaviour, which will be demonstrated in their chosen careers and constructive citizenship roles.
- They imbibe intellectual integrity and ethics in scholarly engagement and develop a spirit of inclusiveness through interactions with people of special needs and diversity.

7. Holistic Skill Development

- Graduates of GCC develop critical thinking, problem-solving, effective communication, emotional and social skills
- They develop digital competency to live, learn and serve in society.

8. Service-Oriented Focus

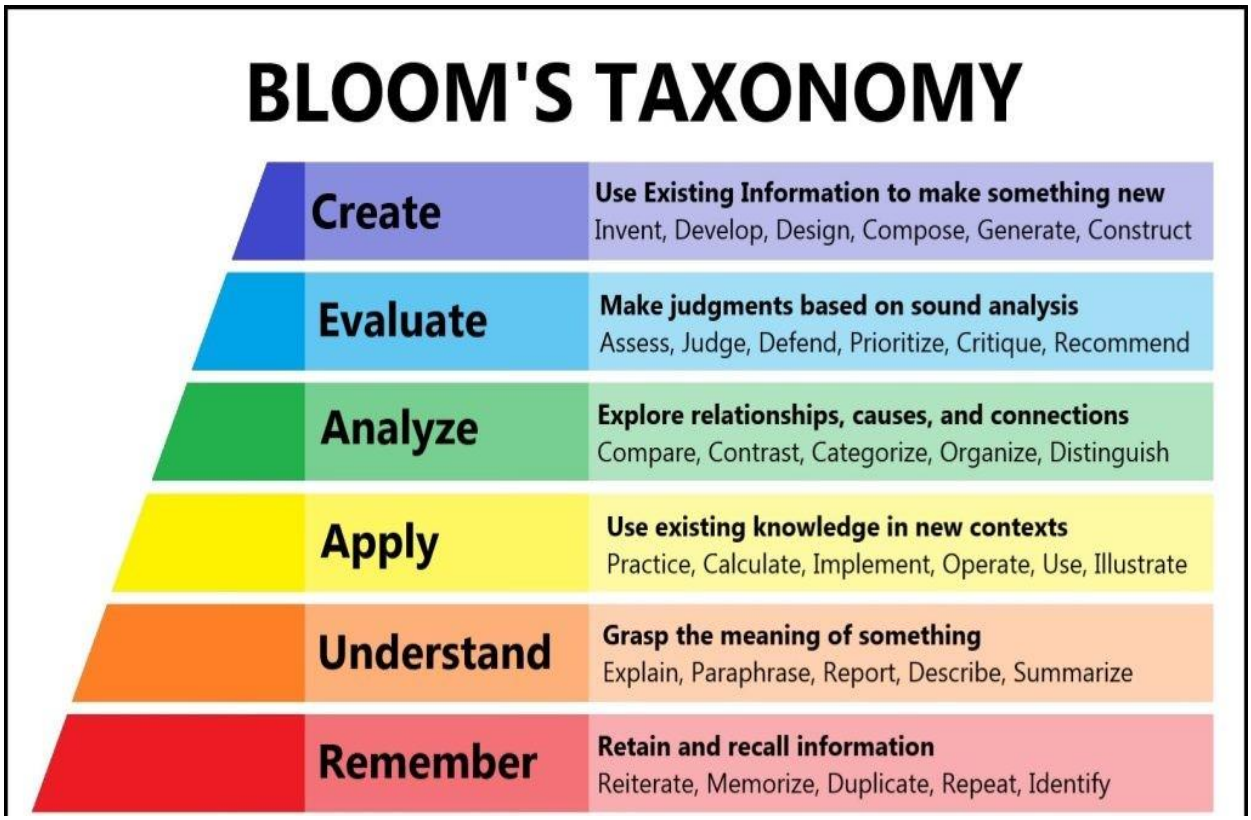
- Graduates of GCC have sensitivity to social concerns and a conviction toward social justice through a commitment to active social engagement.
- They are endowed with a strong sense of environmental awareness through the curriculum and campus eco-system.

9. Information/digital literacy:

- Capability to use ICT in a variety of learning situations
- Demonstrate ability to access, evaluate, and use a variety of relevant information sources
- Use appropriate software for analysis of data.

10. Lifelong learning:

Ability to acquire knowledge and skills, including learning how to learn, that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/re-skilling.



Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

PROGRAMME OUTCOMES [POs]

Programme Outcomes M.Sc.	
After the Completion of two years post-graduation programme, students will be able to acquire the following Attributes	
PO 1	Knowledge of the concepts through theoretical understanding of the principles of Chemistry and Microbiology.
PO 2	Basic understanding in the major area(s) of research and acquire basic tools needed to carry out minor research projects.
PO 3	The ability to implement chemistry in an integral activity of social, economic and environmental problems.
PO 4	Skills in problem solving, critical thinking and analytical reasoning in designing problems in research.
PO 5	Knowledge of for safe handling of chemicals in research and applied chemical laboratory.
PO 6	Inculcate the scientific temperament in the students and outside the scientific community.
PO 7	Employ critical thinking and the scientific knowledge to design, carryout, record and analyze the results of chemical reactions.
PO 8	Solve the problem and also interpret methodically, independently and draw a logical conclusion.
PO 9	Prepare students for pursuing research or careers in industry in sciences and allied fields.
PO 10	Create awareness to become an enlightened citizen with commitment to deliver one's responsibilities.

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes B.Sc.

After the Completion of three years graduation programme, students will be able to acquire the following Attributes:

PO 1	Gain the knowledge of fundamentals, models, the basic scientific principles and methods.
PO 2	Inculcating scientific thinking and awareness among the student.
PO 3	Able to use proper communication skills for successful interaction in personal and public life.
PO 4	Ability to handle the unexpected situation by critically analyzing the problem.
PO 5	Understanding the issues related to nature and environmental contexts and sustainable development.
PO 6	Provide practical experience to the students as a part of the course to develop scientific ability to work in the field of research and their own interest and to make them fit for society.
PO 7	Respond effectively to unfamiliar problems in scientific contexts.
PO 8	Able to work both as an individual and to get her with people of different socio-cultural backgrounds.
PO 9	Able to acquire emerging knowledge and skills and adapt to the changing needs of the times.
PO 10	The student will learn professionalism, including the ability to work in groups and in society and apply basic ethical principles.

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes M.Com.

After the Completion of two years post graduation programme, students will be able to acquire the following Attributes:

PO 1	To acquaint the learners with skills and capabilities to handle managerial and administrative responsibilities.
PO 2	To demonstrate the decision-making ability by application of theories in real life business situations.
PO 3	To imbibe entrepreneurial temperaments, skills and capabilities among the learners.
PO 4	To demonststrate the knowledge of commerce and industry in business applications.
PO 5	To acquaint the knowledge of accounting, costing, taxation and administration.
PO 6	To acquaint with conventional and contemporary thoughts, ideas and practices.
PO 7	Able to use various costing tools for decision making.
PO 8	Understand and use sense of corporate, social responsibilities and area of expenditure. E.g. education, Poverty education etc.
PO 9	Able to plan and implement tasks independently by project management skill.
PO 10	Acquire advanced knowledge of principles, theories and standard in commerce and management.

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes B.Com.	
After the Completion of three years graduation programme, students will be able to acquire the following Attributes:	
PO 1	Excel in the field of Accounting, Finance, Auditing, Taxation, Information Technology and related areas of Commerce
PO 2	Possess with good administrative and managerial skills to succeed in the competitive world
PO 3	Analyze and evaluate the possible opportunities in business environment and to excel in the field of entrepreneurship globally
PO 4	Prepare for post graduate studies and professional courses to achieve success in their career.
PO 5	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 6	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 7	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 8	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 9	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 10	Obtain proficiency in fundamentals of Law, relating to Business

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes M.A.	
After the Completion of two years post-graduation programme, students will be able to acquire the following Attributes:	
PO 1	Able to use knowledge of the disciplines concerned.
PO 2	Able to identify, analyze and find solution to real life problems.
PO 3	Able to develop critical and creative thinking.
PO 4	Able to feel accountable, accommodative and committed to team/organization.
PO 5	Able to understand social challenges, contemporary issues (political, social, economic, linguistic and cultural) and appreciate diversity in the world.
PO 6	Able to identify, analyse and find solutions to real life problems.
PO 7	Develop an urge to engage in the process of new learning beneficial to self and society.
PO 8	Able to follow ethical principles and display a sense of human values (truth, honesty, integrity, etc.).
PO 9	Able to undertake environmentally sustainable practices and minimize threat to ecological balance.
PO 10	Able to feel accountable, accommodative and committed to team/organization.

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes B.A.	
After the Completion of three years graduation programme, students will be able to acquire the following Attributes:	
PO 1	Motivation to learn and use new and beneficial things for personal and societal benefit.
PO 2	Able to practice ethics in public life and demonstrate adherence to human values.
PO 3	Able to use natural and community resources with a sense of responsibility and engage in environmentally sustainable practices.
PO 4	Able to understand and interact with people belonging to diverse backgrounds (social, cultural, economic, religious and linguistic) and use culture-specific norms.
PO 5	Effective speaking, active listening, giving and receiving feedback, empathy and respect for others.
PO 6	Able to use appropriate individual and group behaviour in real life situations.
PO 7	Able to use skills acquired during the programme in real life situations.
PO 8	Able to analyse problems objectively and find solutions.
PO 9	Able to apply techniques, skills and tools in new contexts.
PO 10	Acquire knowledge of fundamentals, principles and methods.

Dr. GHALI COLLEGE Estd. 1984 GADHINGLAJ

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes BBA

After the Completion of three years graduation programme, students will be able to acquire the following Attributes:

PO 1	Acquire fundamental education in management and business principles.
PO 2	Acquire professional skills as a management profession.
PO 3	Deep understanding and development of important business skills such as leadership communication skills, critical thinking and decision making.
PO 4	Build up self-confidence and competency to take up self-employable business ventures.
PO 5	Inculcate Entrepreneurship skills.
PO 6	Identify the different functional aspects of business world and recognize different opportunities of business
PO 7	Acquire the different employability skills, entrepreneurial skills necessary for the professional attitudes
PO 8	Recognize and solve business problem in an ethical manner.
PO 9	Analyze the importance of innovation and research, tackle the contemporary needs and accordingly grab the opportunities.
PO 10	Develop effective and oral communication especially in business applications, with the use of appropriate technology.

Dr. GHALI COLLEGE Estd. 1984 GADHINGLAJ

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes B.Com.IT	
After the Completion of three years graduation programme, students will be able to acquire the following Attributes:	
PO 1	Excel in the field of Accounting, Finance, Auditing, Taxation, Information Technology and related areas of Commerce
PO 2	Possess with good administrative and managerial skills to succeed in the competitive world
PO 3	Analyze and evaluate the possible opportunities in business environment and to excel in the field of entrepreneurship globally
PO 4	Prepare for post graduate studies and professional courses to achieve success in their career.
PO 5	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 6	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 7	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 8	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 9	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities
PO 10	Obtain proficiency in fundamentals of Law, relating to Business and commercial activities

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Outcomes BCA	
After the Completion of three years graduation programme, students will be able to acquire the following Attributes:	
PO 1	Appreciate and apply mathematical organization. Computing and domain information for the conceptualization of computing models from clear harms.
PO 2	Talent to classify, significantly evaluate and prepare complex computing problems using fundamentals of computer knowledge and request domains.
PO 3	Apply knowledge of ICT in solving business problems.
PO 4	Learn various programming languages and custom software.
PO 5	Design components, or processes to meet the needs within realistic constraints.
PO 6	Identify, formulate, and solve problems using computational temperaments.
PO 7	Comprehend professional and ethical responsibility in computing profession.
PO 8	Express effective communication skills .
PO 9	Utilize the techniques, skills and modern tools, for actual development process.
PO 10	Recognize the need for interdisciplinary, and an ability to engage in lifelong learning.

Dr. GHALI COLLEGE Estd. 1984 GADHINGLAJ

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Specific Outcomes and Course Outcomes

SCIENCE

Programme Specific Outcomes : M.Sc. Chemistry	
After Completion on the two years' post-graduation programme in M.Sc. Chemistry, Students will able to -	
PSO 1	Apply the knowledge of Chemistry in daily life and job place.
PSO 2	Interpret the structure of the synthesized compounds
PSO 3	Explain good laboratory practices and safety.
PSO 4	Apply the subjected oriented skills to society.
PSO 5	Use of sophisticated instruments/equipment's.

M.Sc. I Semester I (NEP)

Paper I: Inorganic Chemistry–I)

Course Outcomes : M.Sc. Chemistry	
At the end of the course Students will able to	
CO 1	Students will be able to explain the basic chemistry of transition metals and its compounds, nomenclature, reactions and applications.
CO 2	Students will obtain knowledge about Preparation, structure, physical and chemical properties of metal carbonyls of transition metals.
CO 3	Students will be able to understand and the all aspects of synthesis, bonding, structure and reactivity of organometallic compounds and their applications in homogenous catalysis.
CO 4	Student will be able to determine the stability of the complexes and will be able to explain the nuclear ability and reactions.

Paper II: Organic Chemistry–I

At the end of the course Students will able to	
CO 1	Students will able to differentiate between various organic reactive intermediates.
CO 2	Students can recognize, classify, explain, and apply fundamental organic reactions.
CO 3	Students will have ability to distinguish between different kinds of isomers.
CO 4	Course will develop interest in writing and finding mechanisms of new reactions.

Paper III: Analytical Chemistry-I

At the end of the course Students will able to	
CO 1	Students would acquire the knowledge about the fundamentals of Analytical Chemistry including the sampling, sample pre-treatment, basic techniques, methods and data handling, processing and statistical analysis of the same.
CO 2	Students would acquire the knowledge and understand the scope of Analytical Chemistry spanning various fields. The students will earn fundamentals of qualitative analysis using conventional techniques.
CO3	Students will earn the chromatographic techniques, choice of chromatographic techniques and tuning of the chromatographic technique as per the need based on the samples to deal with, learn electro analytical techniques and computation chemistry which would groom them for alternative analytical strategies which form one of the important components of analytical chemistry.
CO 4	Students will learn about refer into the standard reference books and information from the same. Analytical case study problems would be discussed familiarize with the scope and advantages of Analytical Chemistry.

Paper IV: Research Methodology

At the end of the course Students will able to	
CO 1	Students who complete this course will be able to understand and comprehend the basics in research methodology and applying them in research/ project work.
CO 2	This course will help them to select an appropriate research design.

CO 3	With the help of this course, students will be able to take up and implement a research project/ study.
CO 4	The course will also enable them to collect the data, edit it properly and analyse it accordingly. Thus, it will facilitate students' prosperity in higher education.
CO 5	The Students will develop skills in qualitative and quantitative data analysis and presentation.

M.Sc. I Semester II

Paper V: Organic Chemistry-II

At the end of the course Students will able to	
CO 1	Illustration of modern synthetic methods and applications of reagents.
CO 2	Provide knowledge of different organo metallic compounds and various coupling reactions.
CO 3	Understand principle and applications of protection and deprotection of various functional groups.
CO 4	It will elaborate to understand the concept of chemoselectivity, region selectivity and enantioselectivity.

Paper VI: Physical Chemistry–II

At the end of the course Students will able to	
CO 1	Knowledge of the course will form the basis or essential requirement for the course "Advanced Quantum Chemistry"
CO 2	The objective of this course is for students to gain a firm understanding of the mathematical and physical aspects of the behaviour of chemical systems, classical and statistical thermodynamics, chemical kinetics, and the properties of matter.

CO 3	Able to study photochemical and photo physical phenomena
CO 4	Capable of understand the electrochemical aspects of materials, ionic processes and electrochemical sensors, battery materials and characterizations etc.
CO 5	Able to study electro kinetic effects and their applications in the field of protein separation, characterization etc.

Paper VII: Analytical Chemistry-II

At the end of the course Students will able to	
CO 1	Students will acquire the knowledge of spectroscopic tools/instruments used in chemical analysis and interpretation of the data. The scope and limitations of the spectroscopic tools would be discussed so that the students learn about the type of samples which could be analyzed by these tools of faring choices among the spectroscopic tools.
CO 2	Students will learn about the simple and advanced instruments used for analysis like NMR, MS, AAS, ICP and thermal analysis (TGA, DTA, DSC etc.) techniques spanning wide variety of samples to be considered for analysis.
CO 3	Students will learn about the instrumentation, sample preparation and handling of sample, analysis and data interpretation and structural elucidation.
CO 4	Learning about different instruments will give them idea about appropriate choice of the instrument for analysis based on the source and type of analyse(s) in the sample under consideration.

Paper VIII: On Job Training

At the end of the course Students will able to	
CO 1	When new employees learn applicable skills for their role while in the workplace.
CO 2	It's a practical training method focused on a hands –on approach in

	a live or simulated training environment, typically under the guidance of a supervisor or mentor.
CO 3	Trainees start learning the easier parts of their job first. As such, they can take on small responsibilities before they even complete training.
CO 4	Employee retention is crucial in any industry. However, employees aren't as effective if they are unsure of what exactly their job details.

M.Sc. II Semester III

Paper IX: ACH-3.1 Advanced Analytical Techniques

At the end of the course Students will able to	
CO 1	Develop knowledge of fundamental, instrumentation and working of state of art instrumental analytical techniques, effective use and choice of technique, written and/or oral communication of the concepts of analytical chemistry which will be useful as analytical chemist and R&D.
CO 2	Acquire knowledge of mass spectrometry, type of MS, ionization type's and specific practical applications of MS.
CO 3	Acquire knowledge of basics of nanochemistry, nonmaterial's and nanotechnology and application orientated synthesis and characterization of nonmaterial's.
CO 4	This course gives wide understanding about the instrumental analytical techniques (SEM, TEM, EDS, STM, AFM, Raman, XFS, ESR, XPS, AES, SIMS etc.) Employed for qualitative and quantitative analysis for contemporary research.

Paper X: ACH-3.2 Organic Analytical Chemistry

At the end of the course Students will able to	
CO 1	Students will gain knowledge of the instruments used at the

	interface of Analytical-Organic chemistry useful for R&D and structural elucidation using-Visible, IR, 1H & 13CNMR, Mass spectrometry data and Interpretation of the same.
CO 2	Students will acquire knowledge about the drug, their classification, sources of impurities (chemical, atmospheric and microbial contamination) in pharmaceutical raw materials and analysis of the same.
CO 3	Students will gain knowledge about the conventional and advanced analytical approaches for analysis of Drug, vitamin, body fluids and clinical samples.
CO 4	Students will have an Idea of commonly used pesticides and their analysis and also about forensic Science and forensic sample analysis.

Paper XI: ACH-3.3 Electro analytical Techniques in Chemical Analysis

At the end of the course Students will able to	
CO 1	Fundamental knowledge of electrochemistry, electrodes, types of electrodes, its construction will lay foundation for the course.
CO 2	Students will gain knowledge and skill in electro analytical techniques like cyclic voltammeter and its types, palaeography, coulometer and dynamic light scattering technique for qualitative and quantitative analysis.
CO 3	Students will be familiar with the advanced electrodes used for chemical analysis, liquid-liquid membrane electrodes, enzymes and gas electrodes.
CO 4	Students will earn about electrophoresis techniques, advances in electrophoresis techniques and its analytical applications.

Paper XII: ACH-3.4 Environmental Chemical Analysis & Control

At the end of the course Students will able to	
CO 1	Students will acquire knowledge about sampling, criteria of good sampling, handling, preservation and storage of the samples, pre-treatment and post treatment of samples.
CO 2	Students will acquire knowledge of conditions and strategies required during sampling and Electrochemical and spectral methods for analysis of environmental samples.
CO 3	Students will earn about the air and water pollution, Sources of pollution, typical parameters and properties (physical, chemical and biological) to be measured in Air and water pollution with relevance to specific case Studies.
CO 4	Students will be acquainted with organic pollutants and their analysis with special reference to pesticide Analysis.

M.Sc.II Semester IV

Paper XIII: 4.1 (Modern Separation Method in Analysis)

At the end of the course Students will able to	
CO 1	Students will learn about modern separation and chromatographic used for analysis of different type of samples
CO 2	The student will understand instrumentation and mechanism of various separation techniques.
CO 3	Student will acquire knowledge regarding various choice of instrument and detectors to be used for analysis depending on the sample and matrix
CO 4	Student will learn fundamentals of extractive chromatography, types of extraction techniques, advances in extraction methods and their hyphenations with chromatography leading to address in challenging problems in analytical chemistry

Paper XIV: Organic Industrial Analysis

At the end of the course Students will able to	
CO 1	Acquire knowledge of handling and investigating the characteristics of the oils, fats, detergents and soap samples and analysis of The same providing opportunity in cosmetic, Pharmaceuticals, dyes and polymers industries.
CO 2	Student will gain knowledge and Importance of food quality, probe for food adulteration and adulterants, food preservative, food flavours and analysis of their components.
CO 3	Students will also gain knowledge about the animal food stuff and the additives added in the animal food stuffs antibiotics, dietary supplements and growth promoting drugs, preservatives etc. and analysis of the same.
CO 4	Student will learn about the analysis of cosmetics, face powder, hair dyes and hair care products, types of cosmetics, precautionary measures and composition of the cosmetics and specific roles of the ingredients. Will acquire knowledge about the paints, pigments and petroleum products, composition and analysis of the same using conventional and instrumental techniques.

Paper XV: Advanced Methods in Chemical Analysis

At the end of the course Students will able to	
CO 1	Students will be skilled in the techniques like fluorescence, phosphorescence, types of quenching, FRET and applications of the same in analytical Chemistry and for addressing research problems.
CO 2	Students will gain knowledge of the kinetic methods of analysis supporting the analysis and data procured in research.
CO 3	The students will acquire the knowledge of advanced method of chemical analysis XPS, XRF, fluorescence and phosphorescence spectroscopy which will be beneficial in research.

CO 4	Students will acquire knowledge of identifying types of plastic and will also be able to and determination of metallic impurities in plastics.

Paper XVI: Industrial Analytical Chemistry

At the end of the course Students will able to	
CO 1	The students will acquire knowledge of analysis of metals, alloys, minerals and ore commonly used in the industry.
CO 2	The students will be acquainted with the analysis of real samples like cement, plaster of Paris, different commercial ores, soil composition, soil fertility, fertilizers etc using conventional and instrumental methods of analysis.
CO 3	Students will also gain the knowledge of analysis of commercial materials, explosives, polymers, resins, rubber, luminescent paints, lubricants and adhesives.
CO 4	These would of opportunity to the students to get employment in industries for quality assurance and quality control (QA-QC) of the product.

Programme Specific Outcomes : B.Sc. Chemistry	
After Completion on the three years' graduation programme in B.Sc. Chemistry, Students will able to -	
PSO 1	Develop ability and to acquire the knowledge of terms, facts, concepts, processes techniques and principles of subjects.
PSO 2	Develop ability to apply the knowledge of contents of principles of chemistry.
PSO 3	Increase working knowledge of instruments and obtaining the knowledge of Pharmaceutical tablets.
PSO 4	To develop skills required in chemistry such as the proper handling of apparatus and chemicals and Social awareness about the quality of water.
PSO 5	Learn laboratory skills and safety to transfer and interpret knowledge entirely in the work in environment.
PSO 6	Awareness about plastic garbage

B.Sc. I Semester I NEP

Paper I: Inorganic Chemistry

Course Outcomes : B.Sc. Chemistry	
At the end of the course Students will able to	
CO 1	The size, shape and electron distribution in shells and sub- shells of an atom.
CO 2	The different types of bonds and nature of bonding in inorganic compound, Calculation of different energies associated with ionic bonding.
CO 3	The properties and uses of the compounds of p-block elements.
CO 4	The role acids and bases in chemistry, the study is useful in all chemical areas.

Paper II: Organic Chemistry

At the end of the course Students will able to	
CO 1	The fundaments and basic principle involved in organic chemistry.
CO 2	The spatial arrangements of atom of organic molecules and type of stereoisomer.
CO 3	The general properties and fundamental reactions of aromatic compounds.
CO 4	The basics of heterocyclic compounds along with their physical, chemical and synthetic properties.
CO 5	Fundamentals of Reaction Mechanism.

B.Sc. I Semester II

Paper III: Physical Chemistry

At the end of the course Students will able to	
CO 1	Basic concepts and rules of logarithms, graphs, derivatives and integration.
CO 2	The basic concept in thermodynamics.
CO 3	Basic concept in kinetics and first order, second order reactions with characteristics and suitable examples
CO 4	Basics in surface tension, viscosity and refractive index with examples.
CO 5	Basic concept in electrochemistry, conductors, conductivity cells along with measurement of conductance with examples and numerical problems.

Paper IV: Analytical Chemistry

At the end of the course Students will able to	
CO 1	Analytical procedures and importance of sampling
CO 2	Classical and industrial chemistry with their distinctions and basic concept and concentration term.
CO 3	Chromatography separation technique and terms for paper and thin layer chromatography.

CO 4	Type of titrations, neutralization curves and indicators.
CO 5	The chemical nature and cleaning action of soap.

B.Sc. II Semester III

Paper V: Physical Chemistry

At the end of the course Students will able to	
CO 1	Conductivity and transport number and apply this knowledge to solve numerical problems.
CO 2	Basics in thermodynamics and entropy concept.
CO 3	Meaning of kinetics, order of reaction, third order reaction with respect to its characteristics, examples, methods to determination of order of reaction and numerical problems.
CO 4	Ideal and real gases and their dependence on pressure, temperature and volume.
CO 5	Introductory part about the liquid crystals and their applications.

Paper VI: Analytical Chemistry

At the end of the course Students will able to	
CO 1	Basics in gravimetric analysis.
CO 2	Various analytical techniques for water analysis.
CO 3	Concept of corrosion, electroplating along with their principle and mechanism.
CO 4	Terms in chromatography, details on column and ion-exchange chromatography and their applications.
CO 5	Working of petroleum industries, concept of biofuels, details about copyrights and trademarks.

B.Sc. II Semester IV

Paper VII: Inorganic Chemistry

At the end of the course Students will able to	
CO 1	Basic concepts in coordination complexes.
CO 2	Chelates and their applications in Chemistry.

CO 3	d-block elements and their properties
CO 4	f- block elements, their properties and separation method .
CO 5	Qualitative analysis of inorganic Compounds.

Paper VIII: Organic Chemistry

At the end of the course Students will able to	
CO 1	Organic synthesis, reactivity and applications of carboxylic acids
CO 2	Diazonium salts for their classifications, preparation methods and utilities
CO 3	Carbohydrates – Classification, configuration and structure
CO 4	Aldehydes and Ketones with respect to nomenclature and reactivity
CO 5	Concept of stereochemistry, their terms and conformational analysis of few compounds.

B.Sc. III Semester V

Paper IX: Inorganic Chemistry

At the end of the course Students will able to	
CO 1	Pearson's HSAB Concept &Useful for the study of role of acids and bases in Chemistry.
CO 2	CFT & MOT
CO 3	Semiconductors, Superconductors & their applications.
CO 4	Synthesis and structural study of Organometallic Compounds.
CO 5	Mechanism and applications of catalyst in industrial fields.

Paper X: Organic Chemistry

At the end of the course Students will able to	
CO 1	Understanding of energy associated with electromagnetic radiation and its use in analytical technique.
CO 2	Knowledge of chromospheres, auxochrome and calculation of $\lambda_{max.}$
CO 3	Knowledge of vibrational transitions, regions of IR spectrum, functional group recognition.

CO 4	Understanding of magnetic-nonmagnetic nuclei, shielding-deshielding, chemical shift, splitting pattern
CO 5	Knowledge of molecular ion, fragmentation pattern and different types of ions produced.

Paper XI: Physical Chemistry

At the end of the course Students will able to	
CO 1	To create knowledge regarding Atomic Structure.
CO 2	Enhancement of knowledge on phase diagram.
CO 3	Identification on types of solutions.
CO 4	Determination of type of electrodes.
CO 5	To study the different types of solutions.

Paper XII: Analytical Chemistry

At the end of the course Students will able to	
CO 1	Learning and understanding the techniques of gravimetric analysis.
CO 2	Knowledge of instrumental analysis of alkali and alkaline earth elements.
CO 3	Understanding, working and applications of optical methods as an analytical tool.
CO 4	Understanding theory and applications of potentiometric titrations.
CO 5	Understanding the basics of ion exchange and column adsorption chromatography.

B.Sc. III Semester VI

Paper XIII: Inorganic Chemistry

At the end of the course Students will able to	
CO 1	Different types of Inorganic Reaction Mechanisms.
CO 2	Electronic configuration of 4f/5f series elements and their properties.
CO 3	Nuclear reactions and study of radioisotopes as tracers.
CO 4	Thermodynamic and Kinetic aspects of Inorganic complexes.

CO 5	Biological Role of different elements Na/K/Fe/Ca.

Paper XIV: Organic Chemistry

At the end of the course Students will able to	
CO 1	Learning and understanding applications of Drug.
CO 2	Knowledge about reagent and its applications.
CO 3	To impart knowledge about the reactions and its mechanism.
CO 4	To study reactions of C=C.
CO 5	To study Retrosynthesis Reaction Pattern.

Paper XV: Physical Chemistry

At the end of the course Students will able to	
CO 1	To create interest among the students about Crystal Lattice.
CO 2	To impart knowledge on Adsorption and Absorption.
CO 3	To understand expression on Thermodynamics.
CO 4	Learning and understanding the knowledge of distribution law, its modifications, applications of distribution laws.
CO 5	Learning of kinetics, Simultaneous reactions such as i)opposing reaction ii)side reaction iii)consecutive reactions iv) chain reaction v) explosive reaction

Paper XVI: Analytical Chemistry

At the end of the course Students will able to	
CO 1	Learning and Understanding theory of Tritrimetric Analysis.
CO 2	Introduction of different types of Chromatographic Techniques.
CO 3	Impart knowledge about Colorimetry and Spectrophotometry.
CO 4	Learning and understanding Potentiometric Titrations.
CO 5	Study different principles in Analytical Chemistry.

Programme Specific Outcomes : M.Sc. Microbiology	
After Completion on the two years' post graduation programme in M.Sc. Chemistry, Students will able to -	
PSO 1	It helps in developing competent Microbiologists who can progress to diverse fields of microbiological interests in various fields of industries, research, teaching, medical science and entrepreneurship.
PSO 2	The course is aimed at adding to the knowledge base of Microbiology graduates through significant inputs of latest information on the subject.
PSO 3	It also envisages that the students read original research publications and develop the ability of critical evaluation of the study.
PSO 4	Development of communication skills as well as laboratory work and team work, creativity, planning and execution are also a major objective of this program.
PSO 5	Educational tour to various institutes and or industries provides actual microbiological applications in various fields of Microbiology.

M.Sc. I Semester I

Paper I: MIC -101: Microbial Systematics

Course Outcomes : M.Sc. Microbiology	
At the end of the course Students will able to	
CO 1	To gain knowledge of systematics of Bacteria.
CO 2	To understand new trends in systematics of bacteria
CO3	To learn different approaches of bacterial systematics
CO4	To understand about microbial culture Collection.
CO 5	To understand the advances in chemotaxonomy.

Paper II: MIC-102 Immunology

At the end of the course Students will able to	
CO 1	Understand classes of immunoglobulin, organization and expression of Immunoglobulin gene.
CO 2	Know details of major Histocompatibility complex and disease susceptibility.
CO 3	Understand cytokines and their medical significance.
CO 4	Understand hypersensitivity Reactions.
CO 5	Understand details of transplantation immunology and immunity to cancer.

Paper III: MIC-103 Biochemistry

At the end of the course Students will able to	
CO 1	Understand basic concept in biochemistry.
CO 2	Understand structural features and chemistry of Macromolecules
CO 3	Know membrane transport mechanism in bacteria.
CO4	Understand basics about proteins.
CO5	Understand about the fatty acids.

Paper IV: RM-MIC-106 Research Methodology

At the end of the course Students will able to	
CO 1	Understand the research strategies and planning.
CO 2	Know about research data collection and analysis techniques.
CO 3	Understand the ethics in biological research
CO 4	Understand about research paper writing Skills
CO 5	Understand about Presentation Skills.

M.Sc. I Semester II

Paper V: MIC-201 Genetics and Molecular Biology

At the end of the course Students will able to	
CO 1	To understand about origin of life, evolutionary basis and Molecular basis.
CO 2	To understand about Principles of mendelian inheritance.
CO 3	Know the translation process in eukaryotes.
CO 4	Understand the molecular mechanism of Homologous recombination.
CO 5	Understand about the cancer and oncogenesis.

Paper VI: MIC-202 Fermentation Technology

At the end of the course Students will able to	
CO 1	Basic understanding about fermentation equipment and use.
CO 2	Understand about fermentation media and fermentation economics.
CO 3	Understand about patents.
CO 4	Know the computer applications in fermentation tech enology
CO 5	To study the industrial production of various fermentation products.

Paper VII: MIC-203-A Technique in Microbiology

At the end of the course Students will able to	
CO 1	To understand about enrichment culture techniques
CO 2	Understand good laboratory practices
CO 3	Know about chromatography techniques
CO 4	Understand about spectroscopy
CO5	Understand about electrophoresis.

Paper VIII: On job training

At the end of the course Students will able to	
CO 1	Help student to study Microbiological aspects in the Industry.
CO 2	In On Job Training, the student is to take training in the industry for a period of at least two weeks.
CO 3	Development of communication skill as well as Laboratory work and team work
CO 4	Industries provide actual Microbiological Applications in various fields of Microbiology.
CO5	Develop interest in various fields of Industries.

M.Sc. II Semester III

MMT- 301: Quantitative Biology

At the end of the course Students will able to	
CO 1	Understand the role of statistic in biological field especially in research.
CO 2	Understand application of different statistical parameters.
CO 3	Understand the use of computer software for analysis of biological data.
CO 4	Understand the role of different statistical test for validation of experimental data.
CO5	Understand quantitative methods used in the pharmaceutical and food industry.

MMT- 302: Medical Microbiology and virology

At the end of the course Students will able to	
CO 1	Understand the new ways of microbial colonization during development of disease.
CO 2	Learn the measure of infectivity and virulence.
CO 3	Understand the role of exotoxin in disease development.
CO 4	Understand the cosmetic uses of exotoxins.
CO5	Will know about emerging viral disease.

MMT- 303 C: Agriculture Microbiology

At the end of the course Students will able to	
CO 1	Conduct different practical of agriculture microbiology
CO 2	Estimate different pesticide residues from the soil
CO 3	Learn details about PGPR
CO 4	Understand the bioremediation of soil.
CO 5	Understand about microbial ecology and element cycle.

RP 306: Research Project

At the end of the course Students will able to	
CO 1	Student get the opportunity to apply the knowledge and skills
CO 2	Develop a critically thinking about academic, professional or social issues and to further develop their analytical and ethical leadership skills.
CO 3	To provide students with the opportunity to apply the knowledge and skills acquired in their courses to a specific problem.
CO 4	To allow students to extend their academic experience into areas of interest and working with new ideas.

CO5	To take on the challenges of teamwork, prepare a presentation in a professional manner, and document all aspects of work.

M.Sc.II Semester IV

MMT- 401: Food and dairy Microbiology

At the end of the course Students will able to	
CO 1	Understand different methods of food preservation.
CO 2	Learn different food borne diseases.
CO 3	Acquire knowledge about probiotic and different food safety standards.
CO 4	Commercial values of fermented food.
CO5	Know the enzymes involved in food processing.

MMT- 402: Molecular biology tools and applications

At the end of the course Students will able to	
CO 1	Understand modern tools and techniques in molecular biology
CO 2	Understand methods of cloning and its significance.
CO 3	Learn the role of recombinant DNA technology in industry.
CO 4	Understand the application of r DNA technology.
CO5	Study the cloning in eukaryotic cells.

MET- 403 A: Industrial waste Management

At the end of the course Students will able to	
CO 1	Characterize industrial effluents and their adverse effect on environment.
CO 2	Learn the role of microorganism in treatment of industrial waste.
CO 3	Know about the rules and regulations of waste disposal.
CO 4	Understand the characters of industrial waste.
CO5	Know about the industrial waste management treatment

RP 406: Research Project

At the end of the course Students will able to	
CO 1	Student get the opportunity to apply the knowledge and skills
CO 2	Develop a critically thinking about academic, professional or social issues and to further develop their analytical and ethical leadership skills.
CO 3	To provide students with the opportunity to apply the knowledge and skills acquired in their courses to a specific problem.
CO 4	To allow students to extend their academic experience into areas of interest and working with new ideas.
CO5	To take on the challenges of teamwork, prepare a presentation in a professional manner, and document all aspects of work.

Programme Specific Outcomes : B.Sc. Microbiology	
After Completion on the three years' graduation programme in B.Sc. Chemistry, Students will able to -	
PSO 1	Develop ability and to acquire the knowledge of terms, facts, concepts, processes techniques and principles of subjects.
PSO 2	Develop ability to apply the knowledge of contents of principles of chemistry.
PSO 3	Increase working knowledge of instruments and obtaining the knowledge of Pharmaceutical tablets.
PSO 4	To develop skills required in chemistry such as the proper handling of apparatus and chemicals and Social awareness about the quality of water.
PSO 5	Learn laboratory skills and safety to transfer and interpret knowledge entirely in the work in environment.

B.Sc. I Semester I NEP

(DSC I) Introduction to Microbiology

Course Outcomes : B.Sc. Microbiology	
At the end of the course Students will able to	
CO 1	To develop a good knowledge of the development of the discipline of Microbiology and the contributions made by prominent scientists in this field.
CO 2	To develop a very good understanding of the characteristic of different types of microorganisms, methods to organize/classify these into and basic tools to study these in the laboratory.
CO 3	To explain the useful and harmful activities of the microorganisms and scope of different branches of Microbiology.
CO 4	To describe characteristics of bacterial cells, cell organelles and

	various appendages like capsules, flagella or pili.

(DSC II) Basic Techniques in Microbiology

At the end of the course Students will able to	
CO 1	To study the staining techniques for the observation of bacteria and bacterial cell components.
CO 2	To study the working principle, handling and use of microscopes for the study of microorganisms.
CO 3	To understand the principles of sterilization and disinfection of culture media, glassware and plastic ware and other objects to used for microbiological work.

B.Sc. I Semester II

(DSC III)Bacteriology

At the end of the course Students will able to	
CO 1	Todescribethenutritionalrequirementsofbacteriaandotherm icrobeswhichgrowunderextremeenvironments
CO 2	Tounderstandthebasiclaboratoryexperimentstoisolate,cultivat eanddifferentiatebacteria
CO 3	To study the preservation of bacteria in the laboratory

(DSC IV) Applied Microbiology

At the end of the course Students will able to	
CO 1	To develop a very good understanding of applied branches of Microbiology.
CO 2	To develop the knowledge of how the microorganisms play role in

	Water Microbiology.
CO 3	To make well conversant about food preservation techniques.
CO 4	To develop knowledge of milk processing and milk testing.

B.Sc. II Semester III

Paper V: Microbial Physiology and Metabolism:

At the end of the course Students will able to	
CO 1	Basic knowledge of metabolism and physiology.
CO 2	Basic knowledge about effect environmental Factors on microbial growth.
CO 3	Implement their knowledge in research.
CO 4	Students get aware with applied topics in biochemistry.
CO 5	Understood Microbial Metabolism.

Paper VI: Applied Microbiology

At the end of the course Students will able to	
CO 1	Basic Knowledge regarding air micro flora and its role.
CO 2	Study milk microbiology and quality control of milk.
CO 3	Basic understanding of industrial Microbiology.

CO 4	Students are able to analyze problems and get aware about research.
CO 5	Understood all concepts of microbiology, developed their skills in their course work.

B.Sc. II Semester IV

Paper VII: Microbial Genetics and Molecular Biology

At the end of the course Students will able to	
CO 1	Basic knowledge about microbial genetics.
CO 2	Knowledge Regarding types of mutation.
CO 3	Students can work for enzyme production, production of pharmaceuticals such as insulin, Human growth hormone etc.
CO 4	Able to do transformation, conjugation, transduction like gene transformation procedures.
CO 5	Students are able to understand DNA repair Mechanism.

Paper VIII: Basics in Medical Microbiology and Immunology

At the end of the course Students will able to	
CO 1	Basic concept of Medical Microbiology.
CO 2	Able to analyses & clarify laboratory practices in immunology.
CO 3	Interacts with clinical decisions making in the diagnosis of the diseases & the care of patients.
CO 4	Understood the defence mechanism of body.
CO 5	Students can apply immunology in tissue transplantation and immune therapy to treat diseases of immune system and cancers.

B.Sc. III Semester V

Paper IX: **Virology**

At the end of the course Students will able to	
CO 1	Educating concepts in the area of Virology.
CO 2	Getting the idea about structure and reproduction of animal, plants and bacterial viruses.
CO 3	Understanding the viral dieses to human animals and plants.
CO 4	Understanding the cause and characteristics of Cancer

Paper X: Immunology

At the end of the course Students will able to	
CO 1	Recall advanced knowledge of the underlying principal of immunology
CO 2	Knowledge of Antigen, Antibody complex formation and its mechanism

Paper XI: Food and Industrial Microbiology

At the end of the course Students will able to	
CO 1	Getting knowledge related to foodstuffs and contamination of food products.
CO 2	Understanding industrial use of microorganisms.
CO 3	Learning different topics of food poisoning, toxication and develop probiotics.

Paper XII: **Agricultural Microbiology**

At the end of the course Students will able to	
CO 1	Developing necessary skills for microbial techniques in agriculture.
CO 2	Awareness about eco-friendly use of microbial source in human society.

B.Sc. III Semester VI

Paper XIII: **Microbial genetics**

At the end of the course Students will able to	
CO 1	Knowledge of microbialtechniques.
CO 2	Knowledge of bacterial genomereplication.
CO 3	Knowledge of creating and recombinantbacteria.
CO 4	Idea to Design the genetically modifiedorganisms

Paper XIV: **Microbial Biochemistry**

At the end of the course Students will able to	
CO 1	Knowledge of basics in microbialbiochemistry.
CO 2	Knowledge about application of enzymes, proteins in industries and pharmaceuticals.

Paper XV: **Environmental Microbiology**

At the end of the course Students will able to	
CO 1	Knowledge of environmental factors and pollutionissues.
CO 2	Recognize the polluted water and treatment using propermethods.
CO 3	Awareness for hygienicpractices

Paper XVI: Medical Microbiology

At the end of the course Students will able to	
CO 1	Students can deal with Medical and emerging areas in Medical microbiology
CO 2	Knowledge of immune mechanism against different pathogens

Programme Specific Outcomes : M.Sc. Computer Science	
After Completion on the two years' post graduation programme in M.Sc. Chemistry, Students will able to -	
PSO 1	Students understand all dimensions of the concepts of software application and Projects.
PSO 2	Students understand the computer subjects with demonstration of all Programming and theoretical concepts with the use of ICT.
PSO 3	Developed in-house applications in terms of projects.
PSO 4	Interact with IT experts & knowledge by IT visits.
PSO 5	o make them employable according to current demand of IT Industry and responsible citizen.

M.Sc. I Semester I

Paper I: CC-101 Design and Analysis of Algorithm

Course Outcomes : M.Sc. Computer Science	
At the end of the course Students will able to	
CO 1	Analyze the asymptotic performance of algorithms.
CO 2	Demonstrate a familiarity with data structures and algorithms.
CO 3	.Employ graphs to model real life problems, when appropriate. Develop algorithms that employ graph computations as key components, and analyze them.
CO 4	Mapping of data structures like Stack, Queue and Linked List to real

	life problems.
CO 5	Master the implementation of linked data structures such as linked lists and binary trees.

Paper II: :CC-102 Advanced Database Management System

At the end of the course Students will able to	
CO 1	Demonstrate an understanding of the relational data model.
CO 2	Formulate, using SQL, solutions to a broad range of query and data update problems.
CO 3	Use PL/SQL for handing data in a database as per the user's requirement using programming features
CO 4	Define various cursors and its implementation along with procedure and functions.
CO 5	To study usage and applications of parallel and distributed databases, object relational database.

Paper III:CC-104 Web Designing

At the end of the course Students will able to	
CO 1	Understand the basics of web design
CO 2	Gain proficiency in HTML and CSS coding languages
CO 3	Understand the importance CSS
CO 4	Utilize the JavaScript with websites

Paper IV : CCS-105 Cyber Security

At the end of the course Students will able to	
CO 1	Realize the need for Cyber Security
CO 2	Understand the need for Security in day to day communications
CO 3	Understand the vulnerabilities in the Network and Computer
CO 4	Understand the cyber law and Cyber Forensics

CO 5	Understand the mobile forensics.

Paper V: CC-106 Research Methodology

At the end of the course Students will able to	
CO 1	Understand the fundamental concepts and principles of research methodology in computer science
CO 2	Identify and select appropriate research methodologies based on the research problem
CO 3	Formulate research questions and hypotheses in the context of computer science research
CO 4	Design and execute research studies using quantitative and qualitative
CO 5	Apply ethical considerations in conducting computer science research

M.Sc. I Semester II

Paper VI: CC -201Advanced Java

At the end of the course Students will able to	
CO 1	To become familiar with the features of Java Language.
CO 2	To become comfortable with concepts such as Classes, Objects, Inheritance, Polymorphism and Interfaces.
CO 3	To understand Database connectivity using JDBC Drivers.
CO 4	To design application using JSP, Servlet and RMI and spring framework
CO 5	To familiar with hibernate, struts and spring framework

Paper VII: CC -202 Artificial Intelligence

At the end of the course Students will able to	
CO 1	Apply problem solving by intelligent search approach

CO 2	Represent knowledge using knowledge representation techniques.
CO 3	Understand working of Artificial Neural Networks.
CO 4	Derive solutions for problems with uncertainty using Fuzzy theory.
CO 5	To develop a good understanding of Natural Language Processing and Genetic algorithm

Paper VIII: CC-204 Angular JS

At the end of the course Students will able to	
CO 1	Understand the fundamental concepts of Angular JS and its role in web development
CO 2	Learn how to set up a development environment for Angular JS projects
CO 3	Gain proficiency in using directives, filters, and expressions to manipulate and display data

Paper IX: CC -205 Image Processing

At the end of the course Students will able to	
CO 1	Understand the basic principles and concepts of digital image processing.
CO 2	Gain knowledge of different image representations and colour models.
CO 3	Learn how to pre-process and enhance images using various techniques
CO 4	Explore image filtering techniques for noise reduction and feature enhancement.
CO 5	Understand the concept of image segmentation and different segmentation algorithms.

Paper X: OJT -206 On Job Training

At the end of the course Students will able to	
CO 1	Students become familiar with industrial environment
CO 2	eligibility for application of theoretical knowledge to industry
CO 3	Rules of auditing and auditing authorities

Programme Specific Outcomes : B.Sc. Computer Science	
After Completion on the three years' graduation programme in B.Sc. Chemistry, Students will able to -	
PSO 1	Proficiency in programming languages: Students should be proficient in at least one programming language and capable of designing, implementing, and debugging software solutions.
PSO 2	Software development lifecycle: Understanding of the software development lifecycle, including requirements analysis, design, implementation, testing, deployment, and maintenance.
PSO 3	Computer systems and architecture: Understanding of computer systems and architecture principles, including memory management, operating systems, networks, and distributed systems.
PSO 4	Data management: Proficiency in database design, implementation, and management, including relational and non-relational databases.
PSO 5	Cyber security: Knowledge of cyber security principles, including encryption, authentication, access control, and secure software development practices.

B.Sc. I Semester I

Paper I: Problem Solving Using Computer

Course Outcomes : B.Sc. Computer Science	
At the end of the course Students will able to	
CO 1	Demonstrate a familiarity of computer programming language concepts.
CO 2	Understand to develop C programs on Linux platform.
CO 3	Apply C programming control structures for problem solving.
CO 4	Understand working and implementation of arrays.

Paper II: Database Management System

At the end of the course Students will able to	
CO 1	Understanding Data Models.
CO 2	Understanding database architecture
CO 3	Getting knowledge about use of database.
CO 4	Handling multiple tables using entities and attributes.
CO 5	Knowledge of constraints over the table.

B.Sc. I Semester II

Paper III: Programming Skills Using 'C'

At the end of the course Students will able to	
CO 1	Understanding concept of Pointer. Understanding concept of Pointer.
CO 2	Understanding for Functional function in c.
CO 3	Learn file handling in c.
CO 4	Understanding concept of Structure and Dynamic Memory Allocation.

Paper IV: Relational Database Management System

At the end of the course Students will able to	
CO 1	Understand the importance and working of database.
CO 2	Demonstrate an understanding of the relational data model.
CO 3	Understand the concept of normalization and apply such knowledge to the normalization of a database.
CO 4	Apply SQL queries for database management.

B.Sc. II Semester III

Paper V: Web Technology

At the end of the course Students will able to	
CO 1	Understand the principles of web design.
CO 2	Construct basic websites using HTML and Cascading Style Sheets.
CO 3	Build dynamic web pages with validation using JavaScript.
CO 4	Develop a modern web application that meets the current industry requirement.

Paper VI: Object Oriented Programming Using C++

At the end of the course Students will able to	
CO 1	Understand how C++ improves C with object oriented features
CO 2	Learn syntax and semantics of C++ programming language
CO 3	Learn how to write inline functions for efficiency and performance.
CO 4	.learn how to overload functions and operators in C++
CO 5	Learn how to design C++ classes for code reuse

B.Sc. II Semester IV

Paper VII: Cyber Security Essentials

At the end of the course Students will able to	
CO 1	Understand the concept of information security management.
CO 2	Learn different access control methods.
CO 3	Understand wireless network security
CO 4	Learn cyber security laws and the importance of security audit.

Paper VIII: **Data Structure Using C++**

At the end of the course Students will able to	
CO 1	Understand the basic concepts such as Abstract Data Types, Linear and Non-Linear Data structures.
CO 2	Choose appropriate data structures to represent data items in real-world problems
CO 3	Analyze the time and space complexities of algorithms.
CO 4	Design programs using a variety of data structures such as array, stacks, queues, and linked list.
CO 5	Analyze and implement various kinds of searching and sorting techniques.

B.Sc. III Semester V

Paper IX: Core Java

At the end of the course Students will able to	
CO 1	Understanding the concepts, vocabulary and techniques currently used in the area of computer networks.
CO 2	Getting known with wireless networking concepts.
CO 3	Understanding classification of network, transmission impairments, Data transmission methods etc.
CO 4	Understanding installation of Windows Server 2008 and managing active directory.
CO 5	

Paper X: C# Programming

At the end of the course Students will able to	
CO 1	This course will cover the practical aspects C#.
CO 2	NET framework.

CO 3	Thegoalofthiscourseistointroducethestudentstothebasicsof OOPsand windowsapplicationprogram.

Paper XI: Linux PartI

At the end of the course Students will able to	
CO 1	Uponcompletionofthis course, students shouldhaveagoodworkingknowledgeofLinux.
CO 2	AllowingthemtoeasilyuseanyLinuxdistribution.
CO 3	Thiscourseshallhelpstudenttolearnadvancedsubjectsincomputerscien cepractically.

Paper XII: Pytho Part I

At the end of the course Students will able to	
CO 1	To understand why Python is a useful scripting language for developers.
CO 2	To learn how to write loops and decision statements in Python.
CO 3	To learn how to use lists, tuples, and dictionaries in Python programs.

B.Sc. III Semester VI

Paper XIII: Advanced Java

At the end of the course Students will able to	
CO 1	Thestudentwillbeabletodevelopdistributedbusinessapplications,devel opweb pages Using advanced server-side programming through servlets and Java server pages.
CO 2	Demonstrate approaches for performance and effective coding.
CO 3	To learn data base programming using Java
CO 4	To study web development concept using Servlet and JSP.

Paper XIV: ASP.NET

At the end of the course Students will able to	
CO 1	Introduction to Asp.Net an server Controls.
CO 2	Understand concept of Asp.Ne State Management

Paper XV: Linux Part II

At the end of the course Students will able to	
CO 1	This course covers design principles of Linux Operating System Memory management.
CO 2	Structure of File system and virtual file system is also elaborated.
CO 3	ThiscoursecontainsdetailsofshellprogrammingandintroducesSystemadministration.

Paper XVI: Python Part II

At the end of the course Students will able to	
CO 1	To learn how to write functions and pass arguments in Python
CO 2	To learn how to build and package Python modules for reusability
CO 3	To learn how to use exception handling in Python applications for error handling.

Programme Specific Outcomes : B.Sc. Mathematics	
After Completion on the three years' graduation programme in B.Sc. Mathematics, Students will able to -	
PSO 1	A student should be able to recall basic facts about mathematics and should be able to display knowledge of conventions such as notations, terminology.
PSO 2	A student should get adequate exposure to global and local concerns that explore them many aspects of mathematical sciences.
PSO 3	Student is equipped with mathematical modelling ability, problem solving skills, creative talent and power of communication necessary for various kinds of employment.
PSO 4	Student should be able to apply their skills and knowledge that is translate information presented verbally into mathematical form, select and use appropriate mathematical formulae or techniques in order to process the information and draw the relevant conclusion.
PSO 5	Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.

B.Sc. I Semester I

Paper I: Calculus

Course Outcomes : B.Sc. Mathematics	
At the end of the course Students will able to	
CO 1	Evaluate the limit and examine the continuity of a function at a point.

CO 2	Understand the consequences of mean value theorems for differentiable functions.
CO 3	Apply Leibnitz theorem to obtain higher derivatives of product of two differentiable Functions.

Paper II: Differential Equations'

At the end of the course Students will able to	
CO 1	Understand types of differential equations.
CO 2	Solve different types of ordinary differential equations.
CO 3	Understand applications of differential equations.

B.Sc.I Semester II

Paper III: Multivariable Calculus

At the end of the course Students will able to	
CO 1	Learn conceptual variations while advancing from one variable to several variables in calculus.
CO 2	Set up and solve optimization problems involving several variables.
CO 3	Learn the concept of Jacobian of a transformation.

Paper IV: Basic Algebra

At the end of the course Students will able to	
CO 1	Use fundamental concepts in Mathematics like sets, relations and functions.
CO 2	Use fundamental concepts in Number theory.
CO 3	Solve examples on congruence.
CO 4	Determine n th roots of unity.

B.Sc.II Semester III

Paper V: Elements of Differential Equations

At the end of the course Students will able to	
CO 1	Identify types of higher order ordinary differential equations.

CO 2	Solve different types of higher order ordinary differential equations.
CO 3	Understand geometrical interpretation of simultaneous and total differential equations.

B.Sc. II Semester IV

Paper VII: Vector Calculus

At the end of the course Students will able to	
CO 1	Understand and evaluate the concepts of gradient, divergence and curl of point functions in terms of Cartesian co-ordinate system.
CO 2	Understand and evaluate different types of line, surface & volume integrals and the two integral transformation theorems of Gauss and Stokes.

Paper VIII: Integral Calculus

At the end of the course Students will able to	
CO 1	Understand special functions.
CO 2	Understand types of multiple integrals.
CO 3	Apply special functions in applications.
CO 4	Apply multiple integrals in real life problems.

B.Sc. III Semester V

Paper IX: **Mathematical Analysis**

At the end of the course Students will able to	
CO 1	The integration of bounded function on a closed and bounded interval

CO 2	Some of the families and properties of Riemann integral functions
CO 3	The applications of the fundamental the ores of integration
CO 4	Extension of Riemann integral to the improper integrals when either the interval of integration is in finite or the integer and has infinite limits at a finite number of points on the interval of integration
CO 5	The expansion of functions in Fourier series and half range Fourier series

Paper X: Abstract Algebra

At the end of the course Students will able to	
CO 1	Basic concepts of group and rings with examples
CO 2	Identify whether the given set with the compositions forming, integral domain or field.
CO 3	Understand the difference between the concepts Group and Ring.
CO 4	Apply fundamental theorem, Isomorphism the of groups to prove these theories for Ring.
CO 5	Understand the concepts of poly nominal rings, unique factorization domain.

Paper XI: Optimization Techniques

At the end of the course Students will able to	
CO 1	Providestudent basic knowledgeof arrange ofoperationresearchmodelsandtechniques, whichcanbeappliedtoavarietyofindustrialandreallifeapplications.
CO 2	Formulateandapplysuitablemethodstosolveproblems.
CO 3	Identifyandselectproceduresforvarioussequencing, assignment, and transportationproblems.
CO 4	Identifyandselectsuitablemethodsforvariousgames

Paper XII: Integral Transforms

At the end of the course Students will able to	
CO 1	Understand conceptofLaplaceTransform.
CO 2	ApplypropertiesofLaplaceTransformtosolvedifferentialequations.
CO 3	UnderstandrelationbetweenLaplaceandFourierTransform.
CO 4	UnderstandinfiniteandfiniteFourierTransform.

B.Sc. III Semester VI

Paper XIII: Metric Spaces

At the end of the course Students will able to	
CO 1	Distinguish between open and closed balls in a metric spaces and be able to determine them for given metric space.
CO 2	State the definition of continuity of a function between two metric spaces.

Paper XIV: Linear Algebra

At the end of the course Students will able to	
CO 1	Understand the combination of important results of linear Algebra
CO 2	Linear Algebra includes the concept of vector spaces and lineartransformations

Paper XV: Complex Analysis

At the end of the course Students will able to	
CO 1	Determine whether a given function is differentiable and if so find its derivative.
CO 2	Use the residue theorem to compute several kinds of real integrals.

Paper XVI: Discrete Mathematics

At the end of the course Students will able to	
CO 1	Useclassicalnotionsoflogic: implications,equivalence,negation,proofbycontradiction,proofbyinduction , andquantifiers.
CO 2	Apply notions in logic in the branchesofMathematics.
CO 3	Know elementaryalgorithms: searchinalgorithms, sorting, greedyalgorithms, andtheircomplexity.
CO 4	Applyconceptsofgraphandtreestotacklerealsituations.

Programme Specific Outcomes : B.Sc. Statistic	
After Completion on the three years' graduation programme in B.Sc. Statistics, Students will able to -	
PSO 1	Application of statistics in various walks oflife.
PSO 2	Ability to apply various statistical tools to researchproblem.
PSO 3	Understanding how to collect, present, analyze and interpret thedata.
PSO 4	Ability to analyze the data by usingMS-Excel.
PSO 5	Knowing the statistical organization in India andAbroad.

B.Sc. I Semester I

Paper I: DESCRIPTIVE STATISTICS-I

Course Outcomes : B.Sc. Statistic	
At the end of the course Students will able to	
CO 1	Acquaintance with some basic concepts in statistics.
CO 2	Making familiar with some elementary statistical methods of analysis of data viz. Measures of Central Tendency, Dispersion, Moments, Skewness, and Kurtosis and to interpret them.
CO 3	Analysis of data pertaining to attributes and to interpret the results.

Paper II: ELEMENTARY PROBABIITY THEORY

At the end of the course Students will able to	
CO 1	Acquainting with some basic concepts of probability.
CO 2	Ability to distinguish between random and non-random experiment.
CO 3	Ability to find the probabilities of various events.
CO 4	Ability to understand the concept of conditional probability and independence of events.
CO 5	Ability to distinguish between univariate and bivariate probability distribution.

B.Sc. I Semester II

Paper III: DESCRIPTIVE STATISTICS-II

At the end of the course Students will able to	
CO 1	Ability to understand the concept of correlation and computation of correlation coefficient.
CO 2	Interpreting the value of correlation coefficient and its use in regression analysis.
CO 3	Understanding the concept of multivariate distributions.
CO 4	Application of correlation and regression theory in various fields viz. Agriculture, Business, Medical Science, Industry etc.

Paper IV: DISCRETE PROBABILITY DISTRIBUTIOS

At the end of the course Students will able to	
CO 1	Applying discrete probability distribution in different situations.
CO 2	Ability to define discrete variable and study their distributions.
CO 3	Understanding some standard discrete probability distributions with real life situations.
CO 4	Understanding concept of bivariate distribution and computation of related probabilities.
CO 5	

B.Sc. II Semester III

Paper V: DSC- 7CPROBABILITY DISTRIBUTIOS -I

At the end of the course Students will able to	
CO 1	Understanding discrete distributions based on countably infinite sample space.
CO 2	Application of various discrete distributions in real life situation.
CO 3	Knowing the difference between univariate and bivariate continuous probability distribution.
CO 4	Understanding transformation of continuous random variables and its application.

Paper VI: DSC- 8CSTATISTICAL METHODS-I

At the end of the course Students will able to	
CO 1	Application of statistical methods in different field's viz. Business, Industry, Medical Science, Government Planning and Policies etc.
CO 2	Knowing the collection of data with respect to time and techniques used in analysis and forecasting of time series.
CO 3	Understanding the notion of quality and its importance in industry.
CO 4	Ability to differentiate between process and product control and plotting of the various charts used in SQC.
CO 5	Ability to understand vital statistics and computation of vital events.

B.Sc.II Semester IV

Paper VII: DSC- 7DPROBABILITY DISTRIBUTIOS -II

At the end of the course Students will able to	
CO 1	Understanding various continuous probability distributions theoretically.
CO 2	Application of normal distribution in different fields.
CO 3	Ability to relate gamma and beta distribution.
CO 4	Ability to relate t, F and chi-square variates.

Paper VIIIDSC- 8DSTATISTICAL METHODS-II

At the end of the course Students will able to	
CO 1	Application of Chebychev's Inequality in finding lower and upper bound of the data.
CO 2	Understanding the life cycle of a component or a unit and finding its reliability.
CO 3	Ability to understand the difference between large and small sample and tests based on it.
CO 4	Ability to understand the concept of hypothesis and its testing and application in various fields.

B.Sc. III Semester V

Paper IX: Probability Distributions

At the end of the course Students will able to	
CO 1	knowledge of important univariate distributions such as Laplace, Cauchy, Lognormal, Weibull, Logistic, Pareto, Power Series Distribution.
CO 2	knowledge of Multinomial and Bivariate Normal Distribution
CO 3	knowledge of Truncated Distributions.
CO 4	information of various measures of these probability distributions.

Paper X: Statistical Inference-I

At the end of the course Students will able to	
CO 1	Knowledge about important inferential aspect of point estimation.
CO 2	Concept of random sample from a distribution, sampling distribution of a statistic, standard error of important estimates such as mean and proportions.
CO 3	knowledge of various important properties of estimator,
CO 4	Knowledge about inference of parameters of standard discrete and continuous distributions.

Paper XI: Design of Experiments

At the end of the course Students will able to	
CO 1	knowledge of basic terms used in design of experiments
CO 2	Concept of one-way and two-way analysis of variance.
CO 3	Knowledge of various designs of experiments such as CRD, RBD, LSD and factorial experiments.
CO 4	Knowledge of using an appropriate experimental design to analyze the experimental data.

Paper XII: R-Programming and Quality Management

At the end of the course Students will able to	
CO 1	importance of R- programming
CO 2	knowledge of identifiers and operators used in R.
CO 3	knowledge of conditional statements and Loops used in R.
CO 4	knowledge of quality tools used in Quality management.

B.Sc. III Semester VI

Paper XIII: Probability Theory and Applications

At the end of the course Students will able to	
CO 1	knowledge about order statistics and associated distributions
CO 2	concept of convergence and Chebychev'sinequality and its uses
CO 3	concept of law large numbers and central limit theorem and its uses.
CO 4	knowledge of terms involved in reliability theory as well as concepts and measures.

Paper XIV: Statistical Inference-II

At the end of the course Students will able to	
CO 1	concept of interval estimation.
CO 2	knowledge of interval estimation of mean, variance and population proportion.
CO 3	knowledge of important aspect of test of hypothesis and associated concept.
CO 4	concept about parametric and non-parametric methods.

Paper XV: Sampling Theory

At the end of the course Students will able to	
CO 1	basic knowledge of complete enumeration and sample, sampling frame sampling distribution, sampling and non-sampling errors,

	principle steps in sample surveys, sample size determination, limitations of sampling etc.
CO 2	concept of various sampling methods such as simple random sampling, stratified random sampling, systematic sampling and cluster sampling
CO 3	an idea of conducting sample surveys and selecting appropriate sampling Techniques.
CO 4	Knowledge of comparing various sampling techniques.

Paper XVI: Operations Research

At the end of the course Students will able to	
CO 1	Concept of Linear programming problem.
CO 2	Knowledge of solving LPP by graphical and Simplex method.
CO 3	Knowledge of Transportation, Assignment and Sequencing problems.
CO 4	Concept of queuing theory.

Course Outcomes : B.Sc. Physics

B.Sc. I Semester I

Paper I:MECHANICS-I

At the end of the course Students will able to	
CO 1	Different types of motions in nature.
CO 2	Vector and scalar quantities and their applications in physics.
CO 3	Differential equations and their applications in physics.
CO 4	Momentum and energy conservation rules and their importance

Paper II: MECHANICAS-II

At the end of the course Students will able to	
CO 1	Oscillations and waves with applications in nature.
CO 2	Property of Elasticity and use in different applications.
CO 3	Surface tension its properties and applications.
CO 4	Simple concepts like weightlessness, Geosynchronous satellite and GPS

B.Sc.I Semester II

Paper III:ELECTRICITY AND MAGNETISM-I

At the end of the course Students will able to	
CO 1	All about electrostatics, field, flux, various theorems in dielectrics and their applications in capacitors.
CO 2	Vector analysis, Gauss's, Stokes's and Green's theorems and applications.
CO 3	Concept of energy density in electric field
CO 4	Applying above concepts to Solve numerical exercise in electrostatics

Paper IV: ELECTRICITY AND MAGNETISM-II

At the end of the course Students will able to	
CO 1	LCR circuit and analysis and its use in electrical and electronics devices.
CO 2	Various brides and their applications to determine the unknown values of resistance, capacitance and inductances.
CO 3	Maxwell's equations and applications to solve problems in electromagnetic wave propagation.
CO 4	*State and apply* Network theorems to simple circuits

B.Sc.II Semester III

Paper V: Thermal Physics and Statistical Mechanics-I

At the end of the course Students will able to	
CO 1	Highlight different types of velocities of gas molecules.
CO 2	Acquire Knowledge of Maxwell's distribution of gas molecules.
CO 3	Visualize Merits and drawbacks of thermometers.
CO 4	Apply knowledge of thermodynamic processes in design of heat engine.

Paper VI: Waves and Optics –I

At the end of the course Students will able to	
CO 1	Apply superposition principle to develop mathematical model of harmonic oscillators.
CO 2	To develop the mathematical model for coupled oscillations.
CO 3	Understand the ultrasonic waves and their applications.
CO 4	Use of Basic principles of sound in context of acoustics of buildings.

B.Sc.II Semester IV

Paper VII: Thermal Physics and Statistical Mechanics-II

At the end of the course Students will able to	
CO 1	Develop Conceptual clarity of thermodynamic functions and Clausius- Clapeyron equation.
CO 2	Appreciate the problem associated with the black body radiation spectrum.
CO 3	Know, how the problems can be solved by using Planck's law of radiation.
CO 4	Acquire preliminary knowledge of classical and quantum statistical mechanics.

Paper VIII: Waves and Optics-II

At the end of the course Students will able to	
CO 1	Draw ray diagrams to demonstrate Cardinal points.
CO 2	Determine the resolving power of prism and grating by making use of Rayleigh criterion.
CO 3	Qualitatively study phenomenon of polarization of light.
CO 4	Apply phenomenon of interference of light for determination of its wavelength.

B.Sc. I Semester I

Paper I: Animal Diversity-I

Course Outcomes : B.Sc. Zoology	
At the end of the course Students will able to	
CO 1	Students will understand evolutionary history and relationships of different non- Chordates through functional and structural affinities.
CO 2	Students will learn about importance of systematic, taxonomy, structural organization of the animals and will appreciate diversity of non-Chordates.
CO 3	Students will be able to critically analyze organization, complexity and characteristic features of non
CO 4	Students will understand features, organs, pathogenesity, life history and significance of non

Paper II: Cell Biology & Evolutionary Biology

At the end of the course Students will able to	
CO 1	The present course has been devised to familiarize students with the structural and functional aspects of cell, the basic unit of life, and its different organelles.
CO 2	Students will understand the basics of cell structure and organization cell organelles.
CO 3	Students will demonstrate broad-based knowledge of the fundamentals of Evolution.

CO 4	Evolutionary biology highlights the adaptive value within-species variability.

B.Sc.I Semester II

Paper III: Animal diversity and insect vector

At the end of the course Students will able to	
CO 1	Students will able to understand systematic position, habit and habitat of the animal.
CO 2	They will learn about rat anatomy
CO 3	Students will acquire in-depth knowledge about insect vector biology.
CO 4	The student will gain the knowledge of diseases caused by insects, epidemiology of disease and control measures of diseases.

Paper IV: Genetics

At the end of the course Students will able to	
CO 1	The student has a strong foundation on the Mendelian genetics, their principles and gene interactions.
CO 2	The student will gain a basic understanding on human genetics and hereditary.
CO 3	They will learn about mutation, types of mutations and genetical syndromes.
CO 4	Students will understand the different theories and mechanisms of sex determination.

B.Sc.II Semester III

Paper V: Animal diversity-II

At the end of the course Students will able to

CO 1	Students will understand evolutionary history and relationships of different Chordates through functional and structural affinities.
CO 2	Students will learn about importance of systematic, taxonomy and structural organization of the animals.
CO 3	Students will be able to identify Venomous and non-venomous snakes; will be understand Biting mechanism in snakes.
CO 4	Students will understand and analyze diversity of Chordates.

Paper VI: Cell Biology & Evolutionary Biology

At the end of the course Students will able to	
CO 1	The present course has been devised to familiarize students with the structural and functional aspects of cell, the basic unit of life, and its different organelles.
CO 2	Students will understand the basics of cell structure and organization cell organelles.
CO 3	Students will demonstrate broad-based knowledge of the fundamentals of Evolution.
CO 4	Evolutionary biology highlights the adaptive value within-species variability.

B.Sc.II Semester IV

Paper VII: Reproductive physiology

At the end of the course Students will able to	
CO 1	Students will understand functional anatomy of male & female reproduction.
CO 2	The student will gain the knowledge of reproductive health.
CO 3	Students will learn about causes of infertility in male and females of human.
CO 4	The student will gain the knowledge of contraceptive technologies.
CO 5	Students will learn about assisted reproductive technology (ART)

Paper VIII: Applied Zoology

At the end of the course Students will able to

CO 1	The student will able to analyze host-parasite relationship
CO 2	The student will gain the knowledge of epidemiology, Transmission, prevention and control of infective diseases.
CO 3	The student understands the control of pests that damages the field crop & stored grains.
CO 4	Students will understand the economic importance of insect.
CO 5	Students will gain the knowledge of poultry farming

B.Sc. I Semester I

Paper I:

Course Outcomes : B.Sc. Botany	
At the end of the course Students will able to	
CO 1	To understand distinguishing characters of Viruses, Bacteria, Algae.
CO 2	To understand economic and commercial importance of Viruses, Bacteriophages.
CO 3	To understand various mode of reproduction and classifications in viruses, Bacteria and Algae.
CO 4	To gain the knowledge about production of Biofertilizers& their applications in agricultures.

Paper II:

At the end of the course Students will able to	
CO 1	Students will understand the structure and purpose of basic component of prokaryotic and eukaryotic cell especially macromolecules, membranes &organelles.
CO 2	Students will understand the stages of mitosis and meiosis highlighting similarities and differences.
CO 3	Students will gain knowledge about principles of microscopy and basics of light microscopy, fluorescent microscopy & electron microscopy.
CO 4	Student will understand about principles, process and basics of paper chromatography & Thin Layer Chromatography.

B.Sc.I Semester II

Paper III:

At the end of the course Students will able to	
CO 1	Students will gain basic understanding of classification & economic and ecological importance of Fungi.
CO 2	Students will learn about various types of Lichens and their economic importance.
CO 3	To study representative plant diseases such as viral, Bacterial, Fungal and mycoplasma plant diseases.
CO 4	To develop skills of Mushroom cultivation and its marketing.

Paper IV:

At the end of the course Students will able to	
CO 1	To understand classification & economic importance of Bryophytes
CO 2	To learn methods of reproduction in Bryophytes
CO 3	To distinguish characteristics of Bryophytes
CO 4	To understand classification & economic importance of Bryophytes

B.Sc.II Semester III

Paper V: Embryology of Angiosperms

At the end of the course Students will able to	
CO 1	To know the scope and importance of the plant systematics.
CO 2	2. To understand plant morphology, nomenclature and classification
CO 3	3. To prepare and demonstrate herbarium and to understand importance of Botanical gardens.
CO 4	4. To differentiate and understand plant tissue systems.

Paper VI: Plant Physiology

At the end of the course Students will able to	
CO 1	To understand the principles of Mendelian inheritance and gene interaction.
CO 2	To differentiate between structural and numerical variations in chromosomes.

CO 3	To analyze and solve genetic problems on linkage and crossing over.
CO 4	To know the composition and significance of nucleic acids.

B.Sc.II Semester IV

Paper VII: Plant Anatomy

At the end of the course Students will able to	
CO 1	To gain and insight in to the diverse ecosystem, related food web and ecological pyramids.
CO 2	To prepare map of Phytogeographical regions of India.
CO 3	Know importance of plants and plant products and their utility.
CO 4	To understand importance and conservation of Germplasm.

Paper VIII: Plant Metabolism

At the end of the course Students will able to	
CO 1	To understand significance and mechanism of photosynthesis.
CO 2	To know the process of respiration in higher plants.
CO 3	To design outlines of landscaping and home gardening.
CO 4	To propagate plants by seed and vegetative

B.Sc. I

Ability Enhancement Compulsory Course

Course Outcomes : B.Sc. English	
At the end of the course Students will able to	
CO 1	Acquaintance with four skills of language
CO 2	Knowing basic structure of English Grammar
CO 3	Developing interest among students towards spoken English
CO 4	Creating Positive approach towards Communicative English
CO 5	Developing personality of students with knowledge of English language

B.Sc. III

At the end of the course Students will able to	
CO 1	Spoken communication and written communication.
CO 2	Writing of Resume, letters of application, business letters.
CO 3	Writing News-report, Essay, paragraph, reviewed.
CO 4	Narration of experience, daily routine.
CO 5	Understanding and interpretation of poem, prose, essay, short stories etc.

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Specific Outcomes and Course Outcomes

COMMERCE

Programme Specific Outcomes : M.Com Accountancy	
After Completion on the two years' post graduation programme in M.com. Accountancy, Students will able to -	
PSO 1	In depth understanding of core areas of accounting-financial accounting, cost accounting, management accounting, management accounting ,investment security and tax planning, business research methods
PSO 2	Application of knowledge in problem solving, decision making
PSO 3	Working in teams as well as taking imitative and leadership responsibilities.
PSO 4	Applying internal personal communication skills.

PSO 5	Ability to handle different functional areas of accounting, finance, taxation and administration

M.Com. I Semester I

Paper: MMA-I Adv. Accountancy Paper-I

Course Outcomes : M.Com	
At the end of the course Students will able to	
CO 1	Understanding concept of accounting standards and practical implication of AS-1 and AS-2
CO 2	Familiarity with preparing final accounts of service industries.
CO 3	Perfection in preparing the consolidated financial statements of holding company and its subsidiaries.
CO 4	Understanding of preparation of financial statements of insurance companies with schedules.

Paper MMA-II: Adv. Accountancy Paper-II

At the end of the course Students will able to	
CO 1	Unde4rstand the Fundamental of management Accounting.
CO 2	Explain the Analysis and Interpretation of financial statements.
CO 3	Demonstrate the estimation of working capital requirements.

Paper MMA-III: Adv. Accountancy Paper-III

At the end of the course Students will able to	
CO 1	Compute Income from salary.
CO 2	Compute Income from Business or Profession and House

	Property.
CO 3	Compute total income and tax Liability.
CO 4	File E-Return and make E-Payment of tax.

Paper MMA-IV: Adv. Accountancy Paper-IV

At the end of the course Students will able to	
CO 1	Know the basic information related to income tax.
CO 2	Know important terms and how to determine Resdential Status of an Assessee.
CO 3	Understand procedure of assessment and income tax Athorities.

Paper:EBM-I Business Management

At the end of the course Students will able to	
CO 1	Understand the theoretical aspects of management and strategic management
CO 2	Describe the theoretical aspects of management and strategic management
CO 3	Understand the contemporary issues in management.

Paper: EME-I Research Methodology

At the end of the course Students will able to	
CO 1	Familiarity with basics of research.
CO 2	Designing research protocol for research problem.
CO 3	Prepration of the instruments for the data collection.
CO 4	Ability of analysis and interpretation of data.

M.Com. I Semester II

Paper MMA-V: Adv. Accountancy Paper-V

At the end of the course Students will able to	
CO 1	Accounting of business combination of companies.
CO 2	Accounting of consumer co-operatives societies.

CO 3	Understand the accounting for lease
CO 4	Understand the accounts of Electricity Companies.

PaperMMA-VI: Adv. Accountancy Paper-VI

At the end of the course Students will able to	
CO 1	Understand the basic concepts of cost accounting
CO 2	Classify the costs and apply the same for cost determination
CO 3	Apply the cost accounting principles in cost accounting of materials
CO 4	Know the application of cost accounting in calculation of labour cost and overheads

Paper MMA-VII:Adv. Accountancy Paper-VII

At the end of the course Students will able to	
CO 1	Understand the basic concepts and objectives of audit
CO 2	Gain working knowledge of generally accepted auditing procedures
CO 3	Identify the skills and techniques of conducting audit of various entities.
CO 4	Know the recent trends in practice of audit

Paper MMA-VIII: Adv. Accountancy Paper-VIII

At the end of the course Students will able to	
CO 1	Understand the basic concepts and objectives of audit
CO 2	Gain working knowledge of generally accepted auditing procedures
CO 3	Identify the skills and techniques of conducting audit of various entities.
CO 4	Know the recent trends in practice of audit

Paper :EBM-II OrganizationBehaviour

At the end of the course Students will able to	
CO 1	Describe theoretical concepts of OB.
CO 2	Classify types of personalities.
CO 3	Summarize types of conflicts.
CO 4	Summerizeadfopation of organizational culture.

Paper EME-IIOn the Job Training

At the end of the course Students will able to	
CO 1	Expose the students to the real life situation.
CO 2	Develop on ability of critical thinking.
CO 3	Analyse the problem in an organisation and suggest remedial actions.
CO 4	Gain working knowledge of the job/profession to get insights of the business.

M.Com. II Semester III

Paper DSC -4: Management Accounting - I

At the end of the course Students will able to	
CO 1	Understand the Fundamental of Management Accounting.
CO 2	Explain the analysis and interpretation of financial statements.
CO 3	Demonstrate the estimation of working capital requirements.
CO 4	Practice to analyze the changes in financial position.

Paper DSC-5: Business Finance -I

At the end of the course Students will able to

CO 1	Apply fundamental concepts of business fiancé and examine various finance decisions.
CO 2	Compare different types of capital structure.
CO 3	Compare and apprisate various long term and short term sources of finance.
CO 4	Illustrate various components of Working Capital Management.

PaperDSE-A-V: Advanced accountancy Paper- V

At the end of the course Students will able to	
CO 1	Familiarity with accountining of business combination of companies.
CO 2	Perfaction in accounting of different types of co- operatives.
CO 3	Understanding the accounting for lease.
CO 4	Understand the concept of social responsibility of accounting, environment accounting and human resource accounting.

Paper DSE-A-VI: Advanced accountancy Paper- VI (Taxation)

At the end of the course Students will able to	
CO 1	To understand basic elements of computation and tax liability.
CO 2	To analyse various soursesd of bincome and their taxability .
CO 3	To know the deductions from income and their implications on taxability.

M.Com.IISemester IV

Paper DSC -6: Management Accounting - II

At the end of the course Students will able to

CO 1	Understand the fundamentals of Management control system and Reporting.
CO 2	Explain the marginal costing and cost-volume- profit analysis and practise decision making based thereon.
CO 3	Simulate the budgetary control system and demonstrate the budgeting.
CO 4	Practice to analyze the cost variances.

PaperDSC-7: Business Finance -II

At the end of the course Students will able to	
CO 1	Become familiar with practical trading techniques in Indian stock market.
CO 2	Understand how to build and evaluate the portfolio and different facets of portfolio management.
CO 3	Acquire conceptual understanding of corporate Restructuring.
CO 4	Become aware of recent trends in business financesceneries with specific reference to Start-up Funding, Angel Financing and Fin Tech services.

PaperDSE-A-VII: Advanced accountancy Paper- VII (Cost accounting)

At the end of the course Students will able to	
CO 1	Students will acquire the knowledge of elements of cost and cost sheet.
CO 2	Students will acquint the knowledge and skill to prepare job cost sheet and contract account.
CO 3	Students will explain the coasting process for processing units and service orgnaizations.
CO 4	Students will understand to reconcile the cost and fiancial accounts.

PaperDSE-A-VIII: Advanced accountancy Paper- VIII (Contemporary Issues in Accounting)

At the end of the course Students will able to	
CO 1	Students will acquire the knowledge of contemporary issues in accounting.

Programme Specific Outcomes : B.Com	
After Completion on the three years' graduation programme in B.Com. , Students will able to -	
PSO 1	Understanding basic concepts of accountancy, principles of accountancy and accounting cycle to maintain accounts of trading & non-trading organizations.
PSO 2	Getting acquainted with the procedure of preparation of income statements, retained earnings, balance sheet and statement of cash flows which are required for external users and more useful to managers for managerial decision making.
PSO 3	Inculcating different skills for analysis and interpretation of financial data to understand financial health of an organization and ensure that resources are being used to achieve the organizations objectives.
PSO 4	Developing knowledge about cost ascertainment and fixation of selling price and cost control
PSO 5	Obtaining the knowledge of various provisions of Income Tax Act and their applications in computations of taxable income of an individual under different heads of income.

B.Com. I Semester I

Paper: CC-A5Financial Accounting Paper-I

Course Outcomes: B.Com.	
At the end of the course Students will able to	
CO 1	To get an idea about the basic of accounting, accounting concepts and conventions and accounting process.

CO 2	To acquaint with skill of recording transactions related to amalgamation of partnership firm.
CO 3	To apply skills of accounting for consignment transactions
CO 4	To make use of knowledge and skill for accounting of professionals.

Paper: CC-A3Management Principles & Application Paper -I

At the end of the course Students will able to	
CO 1	To get an idea about the basic managerial process and planning works in real life
CO 2	To develop decision making skills to evaluate various Alternatives and situations.
CO 3	To acquaint with the knowledge of organizing various Resources.
CO 4	To understand the concepts of authority and process of Delegation of authority.
CO 5	To understand importance of proper direction and to develop their communication skill.

Paper: CC-A1Micro Economics Paper-I

At the end of the course Students will able to	
CO 1	The student should be able to apply tools of consumer behavior and firm theory to business situation.
CO 2	The students will understand rural market, consumers and 10 for he or she will also enlighten about various recent trends and Internal development in marketing

Paper: GEC-A1Principles of Marketing Paper-I

At the end of the course Students will able to	
CO 1	The students will know various marketing concepts, basics of marketing and he or she will be able to assess for Consumer behavior.

Paper:GEC-B3 Insurance Paper-I

At the end of the course Students will able to	
CO 1	To enable the students to know the fundamentals of Insurance
CO 2	To give exposure to the students about life insurance products, Procedural part and life insurance business in India

B.Com. I Semester II

Paper: CC-A6 Financial Accounting Paper-II

At the end of the course Students will able to	
CO 1	To acquaint with skill of recording transactions related to single entry system.
CO 2	To apply skills of accounting for conversion of partnership firm in to alimited company.
CO 3	To make use of knowledge and skill for accounting of branches.
CO 4	To understand the knowledge about computerized accounting.

Paper: CC-A4 Management Principles & Application Paper -II

At the end of the course Students will able to	
CO 1	To get an idea about motivation concept and theories
CO 2	To develop their leadership skill
CO 3	To understand and utilize techniques of coordination and control
CO 4	To understand various emerging issues in management like green management and to understand concept of Change

Paper : CC-A2Micro Economics Paper-II

At the end of the course Students will able to	
CO 1	The student should be able to apply tools of consumer behavior and firm theory to business situation.

Paper: GEC-A2 Principles of Marketing Paper-II

At the end of the course Students will able to	
CO 1	The students will be aware with four basic elements of marketing i.e.4Ps in detail and he will be armed with various Skills about branding, labeling and advertisement.
CO 2	The students will know about management of retailing operations and changing scenario of retail business in India.

Paper :GEC-B4 Insurance Paper-II

At the end of the course Students will able to	
CO 1	To enables the students to know the fundamentals of General Insurance.
CO 2	To give exposure to the students about general insurance, procedural part, general insurance business and FDI in insurance in India.

B.Com . II Semester III

Paper : CC-B1Corporate Accounting Paper-I

At the end of the course Students will able to	
CO 1	Demonstrate accounting for issue of bonus shares, rights shares and sweat equity.

CO 2	Demonstrate accounting for issue of debentures and redemption of debentures.
CO 3	Explain the accounting of profit/loss prior to and after incorporation.
CO 4	Practice the fundamental accounting process on Tally ERP

Paper :CC-B7 Macro Economics Paper-III

At the end of the course Students will able to	
CO 1	The macro variables and nature and scope of macro economics.
CO 2	The relevance of national income concepts and their applications.
CO 3	Process of value of money determination.
CO 4	Theory of output and employment generation.

Paper CC-B3: Fundamentals of Entrepreneurship Paper -I

At the end of the course Students will able to	
CO 1	To impart theoretical knowledge of Entrepreneurship
CO 2	To develop Entrepreneurship qualities and skills
CO 3	To acquaint students with Steps involved in the formation of Small Enterprises
CO 4	To enlighten students with Recent Trends and Concepts in Entrepreneurship

Paper : AECC-C5 Business Statistics Paper-I

At the end of the course Students will able to	
CO 1	To explain the scope of statistics in business and apply sampling techniques in real life.
CO 2	To summarize data by means of measures of central tendency and dispersion.
CO 3	To explain the merits and demerits of various measures of central

	tendency and dispersion.
CO 4	To carryout analysis of bivariate data using simple correlation and simple linear regression.

Paper :CC-B5 Money and Financial System Paper-I

At the end of the course Students will able to	
CO 1	Students explain the concept of money, its new incarnations and flow in to the economy
CO 2	Students understood the financial system and its operation
CO 3	Students understand the nature of banking business and practice

B.Com . II Semester IV

Paper: CC-B2 Corporate Accounting Paper-II

At the end of the course Students will able to	
CO 1	Demonstrate accounting for redemption of Preference Shares.
CO 2	Compute the value of shares as per distinct methods and differentiate between them.
CO 3	Simulate practice of preparing financial statements as per the provisions of Indian Companies Act, 2013.
CO 4	Practice the store accounting through Tally ERP.

Paper:CC-B8 Macro Economics Paper-IV

At the end of the course Students will able to	
CO 1	Theories of trade cycle in connection with business.
CO 2	Theory of Public finance relating to economy, business and citizens.
CO 3	The trade and business practices through international trade theories.
CO 4	The de termination of rate of exchange.

Paper:CC-B4 Fundamentals of Entrepreneurship Paper -II

At the end of the course Students will able to	
CO 1	To acquaint students with family business in India
CO 2	To impart conceptual knowledge of Service and Agro Entrepreneurship
CO 3	To aware students about Business Plan and Project Report
CO 4	To inspire the students through successful stories of Entrepreneur

Paper: AECC-C6Business Statistics Paper-II

At the end of the course Students will able to	
CO 1	Understand discrete and continuous random variables, their respective probability distributions.
CO 2	Identify the applications of Binomial, Poisson and normal distributions.
CO 3	Measure trend and seasonal variations in time series data.
CO 4	Compute and interpret simple and weighted index numbers
CO 5	Construct and apply variable and attribute control charts.

Paper:CC-B6Money and Financial System Paper-II

At the end of the course Students will able to	
CO 1	Students understand the changing nature of financial system
CO 2	Students equipped explain and make use of the E- Banking services
CO 3	Students enable to analyse the stance of RBI's monetary policy

B.Com . III Semester V

Paper:CC-C7Business Environment (Indian EC-ENV.) Paper - I

At the end of the course Students will able to	
CO 1	Student should able to understand the significance and position of

	Indian economy at the world level.
CO 2	Students should study the scenario of agricultural and industrial sectors.
CO 3	Student should aware regarding Indian economy is facing some of the fundamental economic problems.
CO 4	They should able to make plans and solutions to these being as a citizen.
CO 5	Student should understand the correlations between economical and social problems.

Paper:CC-C3 Business Regulatory Framework Paper - I

At the end of the course Students will able to	
CO 1	Introduction to Business Law as well as other Laws.
CO 2	Achieving the knowledge of Law.
CO 3	Knowing the rights and liability of every citizen regarding society.
CO 4	Awareness of legally ability.
CO 5	Acquainting with the latest laws, governing business and commercial transactions.

Paper:CC-C1Modern Management Practices Paper - I

At the end of the course Students will able to	
CO 1	To impart knowledge of modern management
CO 2	To understand concepts of CRM
CO 3	To know the concepts of emotional and social intelligence
CO 4	To understand the concept of lean and talent management

Paper:CC-C5 Cooperative Development Paper - I

At the end of the course Students will able to	
CO 1	To study the meaning and principles of Co-operation.
CO 2	Study the agricultural and Non-agricultural Credit Co-operative institutions.

CO 3	To study the Co-operative credit system
CO 4	To Study the important cooperative organizations

Paper: DSE - A1 Advanced Accountancy Paper - I

At the end of the course Students will able to	
CO 1	Practice the preparation of financial statements of banks.
CO 2	Demonstrate accounting for farms and hire purchase system.
CO 3	Simulate accounting situations of insurance claim.
CO 4	Explain the accounting process on Tally with GST.

Paper: DSE - A2Advanced Accountancy Paper - II

At the end of the course Students will able to	
CO 1	To understand the concept and types of audit
CO 2	To identify the residential status and its implication on tax liability
CO 3	To understand the concept of exemption from income
CO 4	To know the computation of income from various sources as well as total income

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

Programme Specific Outcomes and Course Outcomes

ARTS

Programme Specific Outcomes M.A. Economics	
After Completion on the two years' post graduation programme in M.A. Economics, Students will able to -	
PSO 1	Job opportunity at Junior college/Senior college level lectureship
PSO 2	Career in Banking/Finance/Co-operative sector.
PSO 3	Required minimum qualification for M. Phil. And Ph.D.
PSO 4	Understanding economic activities/planning/budget.

M.A. Economics I Semester I

Paper :MM 1 Micro Economic Analysis

Course Outcomes :	
At the end of the course Students will able to	
CO 1	Understand the methods of elasticity of demand & demand forecasting.
CO 2	Explain production and cost theory.
CO 3	Classify actual market structure
CO 4	Illustrate the value and use of managerial theories of firm.

Paper MM 2Monetary Economics

At the end of the course Students will able to	
CO 1	Understand the significant role of money in the economy.
CO 2	Examine the theoretical aspects of money
CO 3	Aware regarding the role of monetary and fiscal policy
CO 4	Demonstrate money multiplier

Paper MM 3 Agricultural Economics

At the end of the course Students will able to	
CO 1	Learn about the structure and characteristics of the agricultural sector.
CO 2	Understand the various constraints specific to less developed agriculture
CO 3	Understand theories regarding the operation of various institutions within the agricultural sector less developed countries like India
CO 4	Analyze agricultural problems and develop policies to overcome them.

Paper MM 4 Indian Capital Market

At the end of the course Students will able to	
CO 1	Examine Indian capital markets.
CO 2	Understand the capital market and various instruments, organization of securities markets

Paper: ME 3 Principles and Practice of Cooperation

At the end of the course Students will able to	
CO 1	Understand the principles and practice of co-operation.
CO 2	Understand the principles and practice of co-operation.
CO 3	Evaluate co-operatives in India
CO 4	Explain agro-based cooperatives and non agricultural cooperatives.

Paper: RM Research Methodology

At the end of the course Students will able to	
CO 1	Get acquainted with the basic concepts of research and its methodologies.
CO 2	Select and define appropriate research problem and parameters.
CO 3	Use techniques of data analysis in research.
CO 4	Write a research report and thesis
CO 5	Write a research proposal (grants).

M.A. Economics I Semester II

Paper MM 1 Public Economics

At the end of the course Students will able to	
CO 1	Understand the role of government in economic planning and development.
CO 2	Examine the theory of public choice and public policy.
CO 3	Equip with theory of public expenditure and project evaluation.
CO 4	Analyse the theories of taxation and public budget.

Paper MM 2 Ecological and Resource Economics

At the end of the course Students will able to	
CO 1	Equip with the natural resources and the related issues.
CO 2	Analyse the sustainable development in different perspectives.
CO 3	Assess the exploitation of renewable and non-renewable natural resources.
CO 4	Discuss on the externalities and policy thereon.

Paper MM 3 Agricultural Developments in India

At the end of the course Students will able to	
CO 1	Understand the nature, scope, challenges and opportunities in Agricultural Sector.
CO 2	Analyze the causes of agrarian distress and remedies.
CO 3	Elaborate the possible measures to reduce agrarian distress
CO 4	Prepare a plan for reforms regarding the Agriculture sector

Paper MM 4Contribution of Nobel Laureates to Economics

At the end of the course Students will able to	
CO 1	Get acquainted with the ideas and works of Economists and thinkers who received Nobel
CO 2	Memorial Prize in Economics.
CO 3	Analyze the theories and models developed by Nobel Laureates

Paper: ME 5 Financial Markets and Institutions

At the end of the course Students will able to

CO 1	Understand the significant role of financial institutions in the process of growth and development.
CO 2	Analyze financial markets.
CO 3	Explain the role of international financial institutions in the steady growth of the world.
CO 4	Provide practical experience and skill development modules in financial sector

Paper OJ on Job Training

At the end of the course Students will able to	
CO 1	Understand the rules, regulations and the work procedures by adopting them in their day-to-day performance.
CO 2	Learn the practical methods of work by observing and assisting his / her senior.
CO 3	Equip with important skills like adaptability and flexibility and learn to become dexterous in any situation and gain expertise in various domains
CO 4	Develop positive approach towards inevitable changes that occurs in the workplace.

Paper - FP Field Project

At the end of the course Students will able to	
CO 1	To identify the research problems and formulate objectives.
CO 2	To choose appropriate methodology with proper tools and techniques.
CO 3	To analyze and interpret the data collected from different sources.

CO 4	To make decision or find out conclusions on the basis of data analysis.

M.A. Economics II Semester III

Paper STATISTICS IN ECONOMIC ANALYSIS EC -5

At the end of the course Students will able to	
CO 1	To train the students to use the techniques of statistical analysis, which are commonly applied to understand and analyze economic problems.
CO 2	To emphasis of this paper is on understanding economics with the help of quantitative techniques.
CO 3	Students will be initiated into various economic concepts, which are amenable to mathematical treatment

Paper : MACRO ECONOMIC ANALYSIS EC – 6

At the end of the course Students will able to	
CO 1	To study function a relationship between the large aggregates.
CO 2	To equip the students at the post graduate level to understand systemic facts and test theoretical developments for empirical analysis.

Paper: INDIAN PUBLIC FINANCE EO –22

At the end of the course Students will able to	
CO 1	To analyze import an tissues in Indian public finance in the context of the India's economic development
CO 2	It deals with the effectiveness of public finance in India.
CO 3	To provide a detailed treatment of issues in Indian public finance to those intending to specialize in this area.
CO 4	Student will know the public revenue, public expenditure, debt, budgets and federal finance system in India. This paper also

	intends to familiarize students to analyze the issues related with tax system, expenditure programs and debt issues, deficit financing, federal finance and stabilization instruments.

M.Com. II Semester IV

Paper: ECONOMICS OF TRANSPORT AND COMMUNICATION EO–23 (Elective Paper)

At the end of the course Students will able to	
CO 1	To study efficiency, spread and its access to productive agents of such facilities determines the competitiveness of the industrial sector.
CO 2	To study role of communication in economic development is also equally important.
CO 3	To study modern communication means like internet, telephone and TV are now converging in to one mega and multifaceted tool which may have long term impact

Paper: INTERNATIONAL ECONOMICS EC-7 (Compulsory Paper)

At the end of the course Students will able to	
CO 1	Provides a deep understanding about the broad principles and theories, which govern the free flow of trade in goods, services and capital–both short term and long term–at the global level. Besides, preparing the students about the relevance and limitations of these principles.
CO 2	The contents of the paper spread over different units, lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of the trade policies followed both at the national and international levels as also their welfare implications at macro level and the distribution of gains from trade

	to North and South.
CO 3	To train the students about the various issues of trade and likely consequences on income, employment and social standards and possible policy solutions as the world will move into the 21st century.

Paper: ECONOMICS OF GROWTH AND DEVELOPMENT EC -8
(Compulsory paper)

At the end of the course Students will able to	
CO 1	To study theories of growth and development, social and sartorial aspects of development, importance of agriculture and industry, the rationale and pattern of industrialization in developing countries.
CO 2	To study important issues related to development such as policy environment, infrastructure –linkages, role of international trade, role of monetary and fiscal policies, investment criteria and relevance for planning have been included.
CO 3	This paper deals with the theoretical aspects of the process of growth and development including the role of agriculture and industry as well as the role of the state.

Paper: **CO-OPERATIVE THOUGHTS AND ADMINISTRATION EO – 32**
(Elective Paper)

At the end of the course Students will able to	
CO 1	To Study Co-operative movement, now-a-days has become a part of total economic activities.
CO 2	It will study not only an economic movement, but also social, political and ethical movement, enriching total human life.
CO 3	Helps to proper understanding of co -operative thoughts and administration is a pre requisite for study of co-operative

	movement.

Paper: **ADVANCED BANKING EO – 36 (Elective paper)**

At the end of the course Students will able to	
CO 1	This paper provides detailed information about the Advancement in Indian banking system.
CO 2	Though this paper we intended to aware the students about banking technology, recent trends in banking sector.
CO 3	Provided the opportunity to the students to achieve as specific skills which are required for working banking sector.

Programme Specific Outcomes : B.A. Economics	
After Completion on the three years' graduation programme in B.A. Economics , Students will able to -	
PSO 1	Understanding how different degrees of competition in a market affect pricing and output.
PSO 2	Understanding the efficiency and equity implications of market interference, including government policy.
PSO 3	Developing research knowledge in economics.
PSO 4	Developing the skill of data collection & use of sampling techniques in research.
PSO 5	Developing the knowledge about theories of economic growth & Development and issues of economic planning.

B.A. Economics I Semester I

Paper:Indian Economy I

Course Outcomes:

At the end of the course Students will able to	
CO 1	Acquaint the students with Structure of the Indian economy and changes taking place therein.
CO 2	Understanding population Problem of Indian Economy
CO 3	Understanding population Problem of Indian Economy

B.A. Economics I Semester II

Paper:Indian Economy II

At the end of the course Students will able to	
CO 1	Acquaint with the policies and performance of major sectors in Indian Economy.
CO 2	Understanding the nature, scope, challenges and opportunities of economic reforms.
CO 3	Awareness regarding causes of agrarian distress and remedies.
CO 4	Understanding policy reforms regarding the industry and service sector.

B.A. Economics II Semester III

Paper:PRINCIPLES OF CO-OPERATION

At the end of the course Students will able to	
CO 1	Recognize the nature of cooperative movement in India
CO 2	Equip the long history of cooperative movement.
CO 3	Identify the role of registrar and auditor in cooperative movement.
CO 4	Analyze the importance of state aid in Cooperation.

Paper: MACRO ECONOMICS -I

At the end of the course Students will able to	
CO 1	Equip with the macroeconomics.
CO 2	Analyze the concepts, measurement and difficulties in measurement of national income
CO 3	Examine the relationship between supply of money and value of

	money.
CO 4	Assess the theory of employment, consumption and investment function.

Paper: MONEY AND BANKING

At the end of the course Students will able to	
CO 1	Understand the working of banks
CO 2	Examine the role of RBI as a central bank.
CO 3	Analyse the banking practices.
CO 4	Elaborate the Credit (Loan) Appraisal and NPA.

Paper: CO-OPERATIVES IN INDIA Course – II

At the end of the course Students will able to	
CO 1	Understand the nature of cooperative movement.
CO 2	Analyze the Co-Operative Marketing in India
CO 3	Highlight the progress of co-operative processing societies in India.
CO 4	Identify the role of National Institutions in Co-operation

Paper :MACRO ECONOMICS - II

At the end of the course Students will able to	
CO 1	Understand the concept, types, and causes of Inflation.
CO 2	Examine the theory of trade cycles.
CO 3	Learn Concepts and scope of public finance.
CO 4	Get acquainted with the taxation, public expenditure and public debt

Paper: BANK AND FINANCIAL MARKET

At the end of the course Students will able to	
CO 1	Understand the Indian Financial System
CO 2	Examine the performance Indian financial institutions.
CO 3	Analyse the banking reforms in India.
CO 4	Equip with banking services know the cyber-crimes in e-banking

B.A. Economics III

Paper: Principles of Micro Economics I & II

At the end of the course Students will able to	
CO 1	Explain what economics is & why it is important
CO 2	Understand consumer decision making & consumer behaviour
CO 3	Define the concept of utility & satisfaction
CO 4	Understand producer decision making & producer behaviour
CO 5	Identify the market structure and Understand the factor pricing

Paper: Research Methodology in Economics –I& II

At the end of the course Students will able to	
CO 1	Select & define appropriate research problem and parameters
CO 2	Understanding the basic framework of research process.
CO 3	Defining various research designs and techniques.
CO 4	Identifying various sources of information for literature review and data collection.
CO 5	The ethical dimensions of conducting applied research.

Paper : History of Economic Thoughts I & II

At the end of the course Students will able to	
CO 1	Acquaintance with the economic thoughts of Classical, Nationalist and Socialist Thinkers
CO 2	Judging the development of economic thoughts.
CO 3	Realizing the economic concepts and theories of Neo-classical and Indian thinkers.
CO 4	Evaluating the development of Indian economic thoughts.

Paper: International Economics I & II

At the end of the course Students will able to	
CO 1	Understand the measurement of gains from international trade
CO 2	Measure the terms of trade
CO 3	Evaluating various types of exchange rates and its merits and demerits.
CO 4	Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).
CO 5	Realizing the volume, composition and direction of Balance of trade and Balance of payments.

Programme Specific Outcomes : M.A. Sociology	
After Completion on the three years' graduation programme in M.A. Sociology, Students will able to -	
PSO 1	Getting the latest sociological knowledge pertaining to various sub-fields within the discipline of sociology.
PSO 2	Orientation for comprehending, analyzing and critically assessing the social reality from sociological perspective.
PSO 3	Inculcating the analytical ability, research aptitude and relevant skills in the students useful for their social and professional life.
PSO 4	Preparing for undertaking research, jobs in Colleges /Universities /Research Institutions, various Government Departments and Nongovernmental organizations as well as for various competitive examinations.

M.A. Sociology I Semester I

Paper: I Classical Sociological Traditions

At the end of the course Students will able to	
CO 1	To apply the sociological theories to the existing sociological phenomena.
CO 2	To understand the sociological theories of Karl Marx, Emile Durkheim and Weber.
CO 3	To identify the relationships between socio-economic and intellectual factors and sociological theories.
CO 4	To solve the social problems by using sociological theories

Paper :II Understanding Indian Society

At the end of the course Students will able to

CO 1	To understand the historical background of Indian Society.
CO 2	To identify factors affecting the change taking place in Indian Society.
CO 3	To understand the diversity and unity in Indian Society.
CO 4	To familiarize the students about the major segments in Society.
CO 5	To understand the major processes of change in Indian society.

Paper : III Society and Culture in Maharashtra

At the end of the course Students will able to	
CO 1	To understand socio-political history and economic profile of Maharashtra.
CO 2	To know Polity, Education and Cultural life in Maharashtra.
CO 3	To understand the features, changing nature and problems of rural, urban and tribes of Maharashtra.
CO 4	To understand the major social movements in Maharashtra.

Paper : IV Social Movements in India Part-A

At the end of the course Students will able to	
CO 1	To identify Social Movements and their role in the social change and transformation.
CO 2	To summarize all the social movements and their role in the context of Indian society.
CO 3	To evaluate the social movements from sociological perspectives.

Paper :V Rural Society in India

At the end of the course Students will able to	
CO 1	To know the approaches to the study of rural society.
CO 2	To provide sociological understanding of rural social structure,

	change and development in India.
CO 3	To understand the changing nature of rural social institutions
CO 4	To understand agrarian social structure and social change.

Paper: VI Research Methodology

At the end of the course Students will able to	
CO 1	To develop the understanding of social research.
CO 2	To understand the basics of social research methodology.
CO 3	To impart knowledge to the students regarding the fundamentals of methodology of social research.
CO 4	To give practical training of research techniques by assigning project work.

M.A. Sociology I Semester II

Paper: VII Classical Sociological Traditions

At the end of the course Students will able to	
CO 1	To understand Classical Sociological theories of Pareto, Cooley and Mead
CO 2	To understand the later developments in sociological theory.
CO 3	To understand the Sociological perspectives in sociology.

Paper: IX Perspective on Indian Society

At the end of the course Students will able to	
CO 1	To understand interconnections of theoretical perspectives on Indian Society.
CO 2	To study the development of Sociology and Social anthropology in India.

CO 3	To understand the theoretical approaches to the study of Indian society.

Paper: X Sociology of Change and Development

At the end of the course Students will able to	
CO 1	To know the various theories of social change.
CO 2	To understand the concept of social change and various processes of social change in Indian society.
CO 3	To understand the theories of development and underdevelopment.
CO 4	To understand the various paths of development.

Paper: XI Social Movements in India Part-B

At the end of the course Students will able to	
CO 1	To identify Social Movements and their role in the social change and transformation.
CO 2	To summarise all the social movements and their role in the context of Indian society.
CO 3	To evaluate the social movements from sociological perspectives

Paper:XII Urban Society in India

At the end of the course Students will able to	
CO 1	To understand the basic concepts in Urban Sociology
CO 2	To know the theories of urban development.
CO 3	To understand the different urban processes and social consequences of urbanization.
CO 4	To know the various urban problems occurred due to urbanization.

Paper:XIII Field Project

At the end of the course Students will able to	
CO 1	To enhance the ability of the students through practical training.
CO 2	To provide practical field training to the students in order to develop research skills.
CO 3	To develop the students field project skill and to encourage them to pursue career in the field of social research (particularly survey research).

M.A. Sociology II Semester III

Paper:MODERN SOCILOGICAL THEORIES

At the end of the course Students will able to	
CO 1	To acquaint the students with the concept of theory and relationship between theory and research.
CO 2	To introduce the students to the schools of thought that dominated sociology in the latter half of the 20th century.

Paper: METHODOLOGY OF SOCIAL RESEARCH (WITH PRACTICAL)

At the end of the course Students will able to	
CO 1	To impart knowledge to the students regarding the fundamentals of methodology of social research.
CO 2	To give practical training in use of research techniques by assigning project work.

Paper:SOCIOLOGY OF MIGRATION

At the end of the course Students will able to	
CO 1	To orient the students to various aspects of migration.
CO 2	To make the students understand the importance of migration in the process of social change and development.

Paper: HUMAN RIGHTS AND SOCIETY

At the end of the course Students will able to	
CO 1	To acquaint the students with the conceptual, philosophical, theoretical aspects of Human Rights and Duties
CO 2	To familiarize the students with the Human Rights and Constitution of India.

M.A. Sociology II Semester IV

Paper: RECENT TRENDS IN SOCIOLOGICAL THEORY

At the end of the course Students will able to	
CO 1	To acquaint the students with some of the recent theoretical perspectives in sociology.
CO 2	To develop analytical skills among the students through the study of theoretical perspectives.

Paper: DATA COLLECTION AND ANALYTICAL PROCEDURES

(WITH PRACTICAL)

At the end of the course Students will able to

CO 1	To give knowledge to the students regarding techniques of data collection.
CO 2	To give practical training regarding use of techniques of data collection, analytical procedures, statistical measures and computers.

Paper: RURAL DEVELOPMENT IN INDIA

At the end of the course Students will able to	
CO 1	To enrich students' understanding about the changing nature of rural development in India.
CO 2	To study critically the impact of various developmental schemes/programmes introduced for rural development.

Paper: SOCIOLOGY AND SOCIAL WORK

At the end of the course Students will able to	
CO 1	To orient the students to the field of social work education.
CO 2	To make clear the relevance of sociology to social work practice.

Programme Specific Outcomes : B.A. Sociology	
After Completion on the three years' graduation programme in B.A. Sociology, Students will able to -	
PSO 1	Acquaintance with social transactions, social relations, social formations, social control, social values and culture.
PSO 2	Knowing the significance of social institution, caste system, religion, nationalism, integrity, equality and justice.
PSO 3	Getting the knowledge of the works of social reformers all over the nation.
PSO 4	Ability to follow new stream of thoughts and theories of social thinkers
PSO 5	Getting the deep knowledge about various social groups like tribal community, women bulk etc.

B.A. Sociology I

Paper: I INTRODUCTION TO SOCIOLOGY

At the end of the course Students will able to	
CO 1	The student learns to apply to sociological perspective in understanding how society shapes our individual lives.
CO 2	It also provides a foundation for the other more detailed and specialized course in sociology.
CO 3	The student learns how to read and interpret complex ideas and texts and to present them in a cogent manner.
CO 4	The student can able to understand the concept of culture & socialization.

Paper: II – Principles of Sociology

At the end of the course Students will able to	
CO 1	The course is intended to introduce the student to a sociological way of thinking.
CO 2	It also provides a foundation for the other more detailed and specialized course in sociology.
CO 3	The course provide competitive atmosphere for the student.

Paper: Scientific Method (Compulsory subject)

At the end of the course Students will able to	
CO 1	To implement of the scientific approach in the student.
CO 2	To introduce the various scientific methods in the students.
CO 3	To develop the research attitude in student
CO 4	To enhance scientific attitude among the students.

B.A. Sociology II Semester III

Paper: III SOCIAL ISSUES IN INDIA

At the end of the course Students will able to	
CO 1	To acquaint the students to major social problems & challenges the problem of the Indian society.
CO 2	Awareness created in the student of contemporary social problems in India.
CO 3	To understand the Socio-Legal Issues.

Paper: IV Social Movements

At the end of the course Students will able to	
CO 1	To acquaint the student to concept, element & Importance of Social Movement.
CO 2	To understand the various social movements & its impact on society.
CO 3	To draw attention to the variety of ideas & debates about India.

Paper: IDS PAPER I : SOCIAL REFORMS IN INDIA

At the end of the course Students will able to	
CO 1	Understand the salient features of prominent socio-religious reform movements.
CO 2	Explain the thought and work of Mahatma Phule for radical transformation of Indian Society.
CO 3	Know the measures taken by Rajashri Shah Maharaj for emancipation of lower classes and women.
CO 4	Understand the thoughts of Ambedkar on the annihilation of the caste system and un touch ability in India.
CO 5	Know how the Indian constitution embodies the values of social justice and equality.

Paper: IDS PAPER II : SOCIAL REFORMS IN MAHARASHTRA

At the end of the course Students will able to	
CO 1	Know about the beginnings of social reforms in Maharashtra by the ParamhansaMandali and PrarthanaSamaj.
CO 2	Understand the contribution of women reforms.
CO 3	Explain the contribution of Social reformers in the fight for social justice.
CO 4	Explain the role played by educational reforms in transformation of society.

B.A. Sociology II Semester IV

Paper: VGENDER & VIOLENCE

At the end of the course Students will able to	
CO 1	This course attempts to provide an understanding of the logic of the violence.
CO 2	To acquaint the students awareness of its most common forms &tries to equip the students with a sociologically informed basis for making pragmatic, ethical & effective choices while resisting or intervening in the context of gendered violence.

Paper: VI SOCIOLOGY OF HEALTH

At the end of the course Students will able to	
CO 1	The course introduces students to the sociology of health, illness & medical practice by highlighting the significance of socio-cultural dimensions in the construction of illness & medical knowledge.
CO 2	To understand the theoretical perspectives examine the dynamics shaping these constructions.
CO 3	To understand the Negotiations of health & illness are explored through ethnographies

B.A. Sociology III Semester V

Paper: VII Western Sociological Thinkers

At the end of the course Students will able to	
CO 1	Acquaintance with the sociological thought of the Pioneers of Sociology.
CO 2	Making awareness of the perennial of structure versus agency.

Paper: VIIIMethods Of Social Research (Part I)

At the end of the course Students will able to	
CO 1	Thrust of the course is on empirical reasoning, understanding and analysis of social reality.
CO 2	Introduction to various steps in conducting research.
CO 3	Acquaintance with different types of research and issues in research.

Paper: IX Political Sociology

At the end of the course Students will able to	
CO 1	An ability to comprehend the embeddedness of political and the social in each other.
CO 2	Be able to understand the relationship between state and society in shaping politics in India both historically &analytically

Paper: X Human Rights

At the end of the course Students will able to	
CO 1	Students will be able to conceptual understanding about human rights.
CO 2	Understand the nature and role of human rights in India.

Paper: **XI Sociology of Religion**

At the end of the course Students will able to	
CO 1	Students will be able to make link between texts and paraphrase their arguments & use these to communicate their ideas in research papers, projects & presentations.
CO 2	By encompassing contemporary developments the course enables student to think about linkages between religion & society at various levels.

B.A. Sociology III Semester VI

Paper: XII Indian Sociological Thinkers

At the end of the course Students will able to	
CO 1	Introduction to the diversification in Indian society through the different ideologies given by various Indian Sociologists.
CO 2	Sensitization of the contemporary Indian issues different

Paper: XIII Methods of Social Research (Part-II)

At the end of the course Students will able to	
CO 1	Imparting basic Research Skills
CO 2	Introduction to various steps in conducting research.
CO 3	Acquaintance with different types of research and issues in research.

Paper: XIV Social Anthropology

At the end of the course Students will able to	
CO 1	Understanding the economic and developmental aspects of tribal's in India.
CO 2	Analyzing the tribal problems

Paper:XV Rural Sociology

At the end of the course Students will able to	
CO 1	Introduction the Indian Rural Social Structure
CO 2	Understanding the nature of village studies conducted by different
CO 3	Discussing the changing power structure in rural Community.

Paper: XVI Urban Sociology

At the end of the course Students will able to	
CO 1	To appreciate the significance of the city & the process of urbanization & its consequences across the globe
CO 2	To develop critical thinking among the students.

Programme Specific Outcomes : M.A. Hindi	
After Completion on the three years' graduation programme in M.A. Hindi, Students will able to -	
PSO 1	Job opportunities in language translation
PSO 2	Job opportunities in Radio Jockey &Aakashvani sector as speaker
PSO 3	Opportunities in news channels as anchor
PSO 4	Platform to make career in competitive examinations.

M.A. Hindi I Semester I

Paper:I □□□□□□□□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□□□□□□□□-□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
CO 2	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□,
CO 3	□□□□□□□□□□□□, □□ □□.
CO 4	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□,

Paper: II□□□□□□□□□□□□□□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□□□□□□□□□□□□□,

	□□,
CO 2	□□
CO 3	□□□□□□□□□□□□□□□□□□□□□□, □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO 4	□□□□□□□□□□□□□□□□□□□□□□□□□□, □□,

Paper: III□□□□□□□□□□□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□□ □□,
CO 2	□□□.
CO 3	□□□,
CO 4	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

Paper: IV□□□□□□□□□□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□,
CO 2	□□
CO 3	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□,
CO 4	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

M.A. Hindi I Semester II

Paper: V [illegible]

At the end of the course Students will able to	
CO 1	[illegible]-[illegible]
CO 2	[illegible]
CO 3	[illegible].
CO 4	[illegible], [illegible].

Paper: VI [illegible]

At the end of the course Students will able to	
CO 1	[illegible].
CO 2	[illegible], [illegible], [illegible].
CO 3	[illegible]
CO 4	[illegible],

Paper VII [illegible]

At the end of the course Students will able to	
CO 1	[illegible]
CO 2	[illegible]
CO 3	[illegible].
CO	[illegible]

4	

Paper: VIII □□□□□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□,
CO 2	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□,
CO 3	□□□ □□□□□□□□,
CO 4	□□□ □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

M.A. Hindi II Semester III

Paper: 1 Criticism

At the end of the course Students will able to	
CO 1	To explain the relevance & reality of literature
CO 2	To study literature in contest of society & culture

Paper: 2 History of Hindi Literature

At the end of the course Students will able to	
CO 1	To study the psyche of human beings & explain their forms of sensitivities.
CO 2	To understand & consider changed process of development through history of literature.

Paper:3Translation Theory &Practical

At the end of the course Students will able to	
CO 1	To acquaint the translation to open the various platforms of foreign language.
CO 2	To explain the language of social media for sake of employment

Programme Specific Outcomes : B.A.Hindi	
After Completion on the three years' graduation programme in B.A. Hindi, Students will able to -	
PSO 1	Developing reading, writing, speaking and listeningskills.
PSO 2	Availing the job opportunities intranslation.
PSO 3	Increasing the critical attitude about literarywriting.
PSO 4	Creating an interest inliterature.
PSO 5	Imbuing the literary researchattitude

B.A. Hindi I Semester I

Paper:I□□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ !
CO 2	□□ !
CO 3	□□□□□□□□□□□□□□□□□□□□, □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ !
CO 4	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□!

B.A. Hindi I Semester II

Paper:II □□□□□□□□□□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□!
CO 2	□□!
CO 3	□□□!
CO 4	□□□!

B.A. Hindi II Semester III

Paper:III □□□□□□□□□□□□□□□□□□□□□□□□□-1

At the end of the course Students will able to	
CO1	□□.
CO2	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO3	□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO4	□□ □□□□□□.

Paper:IV□□□□□□□□□□□□□□□□□□□□□□□□□□□□

At the end of the course Students will able to	
CO1	□□.
CO2	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
CO3	□□□
CO4	□□□□□□□□□□□□□□□□□□□□□, □□ □□□□.

B.A. Hindi II Semester IV

Paper:V□□□□□□□□□□□□□□□□□□□□□□-II

At the end of the course Students will able to

CO1	□□.
CO2	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO3	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO4	□□□ □□,

Paper:VI□□□□□□□□□□□□□□□□

At the end of the course Students will able to	
CO1	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□, □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO2	□□□□□□□□□□□□□□□□□□□□□□□□, □□ □□□□□.
CO3	□□
CO4	□□. -

B.A. Hindi III Semester V

Paper:□□□□□□□□□□□□□□□□□

At the end of the course Students will able to

CO 1	[illegible]
CO 2	[illegible]
CO 3	[illegible]

Paper:[illegible]

At the end of the course Students will able to	
CO 1	[illegible]
CO 2	[illegible] / [illegible], [illegible]
CO 3	[illegible] / [illegible]
CO 4	[illegible]

Paper:[illegible]

At the end of the course Students will able to	
CO 1	[illegible]
CO 2	[illegible], [illegible]
CO 3	[illegible],[illegible]

Paper:[illegible]

At the end of the course Students will able to	
CO 1	[illegible]
CO 2	[illegible]
CO 3	[illegible]

CO 4	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

Paper:□□□□□□□□□□□□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
CO 2	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
CO 3	□□
CO 4	□□

Programme Specific Outcomes : M.A. English	
After Completion on the three years' graduation programme in M.A. English Students will able to -	
PSO 1	Deep study of English as language and grammar.
PSO 2	Vast knowledge of English literature
PSO 3	Major and changing trends in world literatures in English language.
PSO 4	Critical interpretation and Analysis of literature.
PSO 5	Scholarship in English language and literature for his /her personality building

M.A. English I Semester I

Paper: I Poetry in English-

At the end of the course Students will able to	
CO 1	Major poet sand their poetic writings with changing trends.

Paper :IIFiction in English

At the end of the course Students will able to	
CO 1	Major novelists and their writings with changing trends of world literature.

Paper: III Modern Linguistics-

At the end of the course Students will able to	
CO 1	. Major Concepts and usages of English language.

Paper: IV British Literature-

At the end of the course Students will able to	
CO 1	Chief Developments of English literature from Renaissance to Romantic Age.

M.A. English II

Paper: Drama in English

At the end of the course Students will able to	
CO 1	Main Dramatists and their contribution to English literature.

Paper: Critical Theories-

At the end of the course Students will able to	
CO 1	Critical Theories and Modern criticism, application of these critical theories to literary writing.

Paper: British Literature from Pope to the end of 19thCentury-

At the end of the course Students will able to	
CO 1	Major features of British literature in the Augustan Age, Neo-classical Age &Romantic Age.

Paper: Modern and post modern British Literature

At the end of the course Students will able to	
CO 1	Main tendencies of British Literature in modern and post modern era.

Programme Specific Outcomes : B.A. English

After Completion on the three years' graduation programme in B.A. English

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

B.A. English I

Paper: I Ability Enhancement Compulsory Course

At the end of the course Students will able to	
CO 1	To acquaint students with four skills of language.
CO 2	To make them know about basic structure of English Grammar.
CO 3	To develop interest among students for spoken English.
CO 4	To create positive approach among students towards communicative English.
CO 5	To develop personality of students.

Paper: II Ability Enhancement Compulsory Course

At the end of the course Students will able to	
CO 1	Acquaintance with four skills of language
CO 2	Knowing basic structure of English Grammar
CO 3	Developing interest among students towards spoken English
CO 4	Creating Positive approach towards Communicative English
CO 5	Developing personality of students with knowledge of English language.

Paper: Modern Indian Writing in English Translation (Sem I & II): Optional English Paper I &II:

At the end of the course Students will able to	
CO 1	Knowledge of Translation literature
CO 2	Knowledge of short story in Translation
CO 3	Creating interest in studying poetry in translation
CO 4	Developing literacy approach
CO 5	Acquainting with literacy forms

B.A. English II

Paper: Literature and Cinema

At the end of the course Students will able to	
CO 1	To know theory of Application, interpretation, Transformation and Transposition.
CO 2	To understand the influential relation between play and film, as well as novel and film.
CO 3	To study play the comedy of Errors and novel five points someone as well their filming into 'Angoor' and 'Three Idiots'

B.A. English III

Paper:(Optional &Special English)

At the end of the course Students will able to	
CO 1	Enjoyment of literature
CO 2	Pleasure of literacy forms such as novel, poem, play, and essay.
CO 3	Critical understanding of literature.
CO 4	Relation between literature and real life.
CO 5	Emotional development of human mind.

M. Phil English

Paper: Research Methodology (Theory)

At the end of the course Students will able to	
CO 1	Fundaments of research, objectives, process methods and methodology, criterion of good research.
CO 2	Types of research, Research Degree, Presentation.

Paper: RECENT TRENDS IN ENGLISH STUDIES

At the end of the course Students will able to	
CO 1	The student should acquaint with the latest approaches to language and literature.
CO 2	He/she should enable to apply these approaches to literary works and/or language
CO 3	Then the students have to declare the habit of making background reading with the help of various conventional and technological sources.

Paper: ELECTIVE PAPER
Modern British Literature (1980-2000)

At the end of the course Students will able to	
CO 1	study of major trends and literary movements in modern British Literature and in depth study of these major writers- a poet, a novelist and adramatist

Paper: New Literature in English

At the end of the course Students will able to	
CO 1	A study of the major trends and movements in African , Caribbean, Australian, Canadian and Indian Literature.

Programme Specific Outcomes : M.A. Psychology
After Completion on the three years' graduation programme in M.A. Psychology

Students will able to -	
PSO 1	Understand the ideologies, methodologies, values and ethical principles of psychologist's practices working in various settings with individuals and groups.
PSO 2	Strengthen the theoretical understanding, expand knowledge-base, and inculcate relevant values, attitudes and skills required for a professional psychologist through the theory and practical component of the course.
PSO 3	Develop interdisciplinary and specialized professional outlook, upheld the dignity and esteem of the psychology profession and achieve self actualization.
PSO 4	Inculcate the analytical ability, research aptitude and relevant skills for professional life.
PSO 5	

M.A. Psychology I Semester I

Paper: MM –I APPLIED COGNITIVE PSYCHOLOGY

At the end of the course Students will able to	
CO 1	To make the students familiar with the field of cognition in general.
CO 2	To make the students understand the process of memory.
CO 3	To acquaint the students with Problem Solving and Creativity
CO 4	To make the student understand the process of Reasoning and Decision Making.

Paper: MM – II THEORIES OF PERSONALITY

At the end of the course Students will able to	
CO 1	To understand basic concepts in different theories of personality
CO 2	To explore various approaches towards personality development

CO 3	To develop sound knowledge about dynamics of personality through comparative understanding

Paper: MM –III POSITIVE PSYCHOLOGY

At the end of the course Students will able to	
CO 1	Introduce growing fields of positive psychology to students.
CO 2	To acquaint the students with the nature and significance of the emergence area of positive psychology within a life span perspective.
CO 3	To highlight importance of positive emotions, resilience, self-efficacy, optimism and hope processes in the experience of health and well-being.

Paper: COUNSELING SKILLS

At the end of the course Students will able to	
CO 1	To understand the actual process of counselling.
CO 2	To make students familiar with professional skills in counselling.
CO 3	To understand the collaborative working in counselling.
CO 4	To learn to deal with complex situations in counselling.

Paper: RESEARCH METHODS IN PSYCHOLOGY

At the end of the course Students will able to	
CO 1	The basic research concepts, variables and sampling
CO 2	Some commonly used research designs
CO 3	The APA style of preparing research proposal and writing research proposal and writing research report.

M.A. Psychology I Semester II

Paper: MM-V STATISTICS IN PSYCHOLOGY

At the end of the course Students will able to

CO 1	To acquaint and make the students understand with different statistical methods.
CO 2	To develop computational skills among students.
CO 3	To enable students to analyze the data of their practical and project work

Paper: MM-VI THEORIES OF LEARNING

At the end of the course Students will able to	
CO 1	To understand basic concepts in different theories of learning
CO 2	To explore various approaches towards learning and growth
CO 3	To develop sound knowledge about learning principles through comparative understanding

Paper: MM-VII Soft Skills in Psychology

At the end of the course Students will able to	
CO 1	Develop positive psychological and physical outlook
CO 2	Optimize their life skills experience and create a personal growth plan.
CO 3	Conceptually grounded and practically oriented towards interpersonal and group relationships that evolve beyond academic achievement.
CO 4	Strategies their personality traits towards community immersion and ethical behavior.

Paper: Mindfulness for everyday life

At the end of the course Students will able to	
CO 1	To understand the mindfulness and its significance in personal and

	professional contexts.
CO 2	To Utilize the breath as a focal point for developing present-moment awareness.
CO 3	To Apply active listening and non-reactivity in communication to enhance understanding and connection.
CO 4	To Explore advanced mindfulness techniques, including meta-awareness and choiceless awareness.

Paper: On Job Training

At the end of the course Students will able to	
CO 1	To apply theoretical knowledge and skills in a practical setting.
CO 2	To develop and enhance professional skills necessary for a career in psychology
CO 3	To gain exposure to various psychological settings and specialties.
CO 4	To foster professional networking and collaboration opportunities.
CO 5	To reflect on personal and professional growth through the internship experience.

Programme Specific Outcomes : B.A. Psychology

After Completion on the three years' graduation programme in B.A. Psychology Students will able to -

PSO 1	Enhancement of stress management skills.
PSO 2	Enhancement of coping skill with different problems in life.
PSO 3	Enabling to measure attitude, aptitude, interest, adjustment ,skills etc. within the people.
PSO 4	Introduction to counseling process and techniques.
PSO 5	Illustration of mental disorder and treatment.

B.A. Psychology I Semester I

Paper: I Foundations of Psychology

At the end of the course Students will able to	
CO 1	Making familiar with the foundations of Psychology.
CO 2	Acquaintance with cognitive process, states of consciousness and learning.
CO 3	Acquaintance with memory processes.

B.A. Psychology I Semester II

Paper: II General Psychology

At the end of the course Students will able to	
CO 1	Making familiar with the field of general Psychology.
CO 2	Acquaintance with intelligence, motivation and emotions.
CO 3	Acquaintance with Personality.

B.A. Psychology II Semester III

Paper: III PSYCHOLOGY FOR LIVING

At the end of the course Students will able to	
CO 1	To acquaint the students with processesof psychology for living.
CO 2	To Introduce students the concept of Stress
CO 3	To acquaint the students with Understanding mental disorders.
CO 4	To introduce students various Psychotherapies and their uses in day

	to Day life.

Paper: IV SOCIAL PSYCHOLOGY

At the end of the course Students will able to	
CO 1	To acquaint the students with processes of Social Psychology
CO 2	To introduce students the concept of Social Perception.
CO 3	To make aware the students about the Self and self-esteem.
CO 4	To introduce students concept of attitude formation, persuasion and Cognitive dissonance.

B.A. Psychology II Semester IV

Paper: V **MODERN SOCIAL PSYCHOLOGY**

At the end of the course Students will able to	
CO 1	To acquaint the students with processes of liking (attraction) and sources of liking.
CO 2	To make students familiar with the Concept of Social influence, Conformity and Compliance.
CO 3	To acquaint the students with Understanding Prosocial Behaviour.
CO 4	To introduce students the concept of Aggression, its causes and control.

Paper: VI APPLIED PSYCHOLOGY

At the end of the course Students will able to	
CO 1	To make familiar to students with processes of Personal control, Decision Making and Personal growth.
CO 2	To introduce students the work, career, play and using leisure positively.
CO 3	To acquaint the students with Making and keeping friends
CO 4	To introduce students the concept of Love and Commitment.

B.A. Psychology III Semester V

Paper: VII Introduction to Cognitive Psychology

At the end of the course Students will able to	
CO 1	Gain an understanding of key concepts and research techniques in cognitive psychology.
CO 2	Gain an understanding of the basic processes of sensation attention and perception.
CO 3	Gain an understanding of the memory processes.
CO 4	Be able to broadening the horizons of cognitive psychology.

Paper: VIII Cross Cultural Psychology

At the end of the course Students will able to	
CO 1	To acquaint students with emerging field of Cross-Cultural Psychology.
CO 2	Tomakestudentsawareofglobalv/srelativisticapproachestostudyhumanbehavior.
CO 3	To sensitize students recognize cultural aspects of individual development and socialization.
CO 4	To understand socio-cultural influences in development of abnormality and its treatment.

Paper: IX Introduction to Psychopathology

At the end of the course Students will able to	
CO 1	To make the students familiar with the field of Psychopathology.
CO 2	To acquaint students with various perspectives of Psychopathology.
CO 3	To make the students understand Anxiety and Obsessive Compulsive Disorder.
CO 4	To acquaint students with Mood Disorders and Suicide.

Paper: X Current Trends in Psychology

At the end of the course Students will able to	
CO 1	To acquaint students with emerging new trends in Psychology.

CO 2	To make students aware of health risk behavior and their causes
CO 3	Tosensitizestudentsrecognizedevelopmentalfactorsrelatedtocriminal behaviour
CO 4	To understand psychological, amily and social influences in development of criminality.

Paper: XI Practical-Experiments

At the end of the course Students will able to	
CO 1	Introducing Psychological experiments.
CO 2	Imparting the knowledge and skills for conducting experiments and writing their reports.
CO 3	Introducing some statistical methods

B.A. Psychology III Semester V

Paper: XII Psychological Testing

At the end of the course Students will able to	
CO 1	Introduction to the field of psychological testing in general.
CO 2	Acquaintance with the nature and uses of psychological test
CO 3	Understanding the nature and other description of intelligence test, ability tests and personality tests.

Paper: XIII Counselling Psychology

At the end of the course Students will able to	
CO 1	Introduction to the field of counseling Psychology.

CO 2	Comprehending the applications of counseling Psychology in the fields of career, marriage, couple and family Counseling

Paper: XIV Personal Psychology

At the end of the course Students will able to	
CO 1	Introducing the field of personal Psychology.
CO 2	Acquaintance with study of communicating effectively valuing diversity and goal achievement.

Paper: XV Psychology of Organizational Behavior.

At the end of the course Students will able to	
CO 1	Introducing the field of organizational Behavior.
CO 2	Introducing study of personality, values, group Processes and changes in organization settings.

Paper: XVI Practical: Psychological Tests

At the end of the course Students will able to	
CO 1	Introduction to Psychological tests.
CO 2	Imparting the knowledge and skills for administering psychological tests and writing their reports.
CO 3	Getting acquainted with some statistical methods.

Programme Specific Outcomes : B.A. Marathi

After Completion on the three years' graduation programme in B.A. Marathi

Students will able to -	
PSO 1	Creating an interest in literature.
PSO 2	Availing the job opportunities in translation, transformation and media.
PSO 3	Developing language.
PSO 4	Increasing the critical attitude about literary studies.
PSO 5	Imbuing the literary research attitude.

B.A. Marathi I Semester I

Paper: Shabda Sanhita

At the end of the course Students will able to	
CO 1	To create the interest among the students about Marathi literature and Language
CO 2	To aware students about national unity, mother tongue, higher human values and ethics
CO 3	To develop their conversation skills through essay competition
CO 4	To avail the opportunities of employment by developing skills of listening, reading, speaking and writing
CO 5	To develop the skills of event management

B.A. Marathi I Semester II

Paper: Aksharbandh

At the end of the course Students will able to	
CO 1	To familiar with Marathi literature Authors and Poets
CO 2	To prepare students for competitive exam and personality development
CO 3	To inculcate skill of film production profession

B.A. Marathi II Semester III

Paper: □□□□□□□□

At the end of the course Students will able to	
CO 1	[illegible].
CO 2	[illegible], [illegible].
CO 3	[illegible].
CO 4	[illegible].
CO 5	[illegible].

Paper: [illegible]

At the end of the course Students will able to	
CO 1	[illegible].
CO 2	[illegible]..
CO 3	[illegible].
CO 4	[illegible], [illegible].
CO 5	[illegible].

B.A. Marathi II Semester IV

Paper: [illegible], [illegible]!

At the end of the course Students will able to	
CO 1	[illegible].
CO 2	[illegible].
CO 3	[illegible].
C	[illegible]

CO 4	□□□□□□□□□□□.
CO 5	□. □. □□□□□□□□□□□□□□□□□□□□□□□□□□□, □□□□□□□□□□□, □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

Paper: □□□□□□□□□

At the end of the course Students will able to	
CO 1	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO 2	□□□□□□□□□□□□□□□□□□□□□, □□□□□□, □□□□□□□□□, □□□□□□□□□□□□□□□□□□□□□.
CO 3	□□□.

Marathi B.A. III

Paper: □□□□□□□□ □□□□□□

At the end of the course Students will able to	
CO 1	□□□□□□□□□□, □□ □□□□□□□□.
CO 2	□□.
CO 3	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO 4	□□□ □□□□□□□□.

Paper: □□□□□ □□□□ □ □□□□□□□□□□□

At the end of the course Students will able to	
CO 1	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO 2	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.
CO 3	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

Paper: □□□□□□□□□□□ □□□□□□ □□□□□□□□□□ □□□□□□□

At the end of the course Students will able to	
CO 1	□□.
CO 2	□□.
CO 3	□□□, □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

Paper: □□□□□ □□□□ □ □□□□□□□□□□□□□□ □□□□

At the end of the course Students will able to	
CO 1	□□.
CO 2	□□.
CO 3	□□.
CO 4	□□.

Paper: □□□□□□ □□□□□□□□□ □□□□□□ :□□□□□□□□□□

At the end of the course Students will able to	
CO	□□□ □□.

1	
CO2	[illegible].
CO3	[illegible].
CO4	[illegible].

Programme Specific Outcomes : B.A. Political Science	
After Completion on the three years’ graduation programme in B.A. Political science Students will able to -	
PSO 1	Knowledge about political system of the nation.
PSO 2	Study of national and international political affairs.
PSO 3	Study from competitive examination point of view.
PSO 4	Understanding the government mechanism, its functions, duties and responsibilities.

PSO 5	Creating appropriate and efficient political leaders.

B.A. Political science I Semester I

Paper: **Paper-I Introduction to Political Science**

At the end of the course Students will able to	
CO 1	Student become familiar with fundamentals of Political Science
CO 2	Helps to develop civic sense among students

B.A. Political science I Semester II

Paper: **II Indian Constitution**

At the end of the course Students will able to	
CO 1	Students become aware about fundamental rights and duties.
CO 2	Aware about Political System and Governmental Machinery
CO 3	Develop inertest in Law and Legal System

B.A. Political science II Semester III

Paper: III Political Process in India

At the end of the course Students will able to	
CO 1	Imparting knowledge of Political Process in India.
CO 2	Understanding of approaches in Political Process of India.
CO 3	Understand Voting Behaviour.
CO 4	Getting knowledge about Election Commission, Party System, Communalism, Regionalism and Language.

Paper: -IV Indian Political Thought Part-I

At the end of the course Students will able to

CO 1	Understand the historical development of Indian Political Thoughts.
CO 2	Understand the relevance of ancient ideas with present time.
CO 3	Understand the trajectory of ideas on key Political questions and institutions of ancient Indian as developed by Kautilya.
CO 4	Understand renaissance and reformation in India and the role of Mahatma Phule and RajarshiShahuChhatrapati in it.
CO 5	Understand the ideas of nationalism of LokmanyaTilak.

Paper: CGE Paper-I Public Administration

At the end of the course Students will able to	
CO 1	To impart knowledge about the nature, scope importance of Public Administration.
CO 2	The student will get knowledge about making theoretical clarity of basic concepts and dynamics relating to Public organizations.
CO 3	To familiarise the students with Changing Perspectives of Public Administration.
CO 4	The student will get knowledge about contemporary concepts of Public Administration.

B.A. Political science II Semester IV

Paper: V Local- Self Government in Maharashtra

At the end of the course Students will able to	
CO 1	To Develop local leadership.
CO 2	To create awareness of the local- self government as well as developmental measures.
CO 3	It will provide knowledge of the local - self government in Maharashtra.
CO 4	To understand the role of local-self government as instrument to achieve rural and urban developmental goals.
CO 5	Understand the Constitutional Provision of Local - Self Government.

Paper: VI Indian Political Thought - II

At the end of the course Students will able to	
CO 1	The student will get knowledge about the development of Indian Political thoughts.
CO 2	Build up basic concepts like -Satya, Ahimsa, Satyagraha, Trusteeship and Sarvodaya of Mahatma Gandhi.
CO 3	Students can understand about Secular Nationalism and Internationalism, Democratic Socialism and Mixed Economy of Jawaharlal Nehru.
CO 4	Students will get ideas about critique of caste system, state socialism &Parliamentary democracy for Social and economic democracy of Dr. B. R. Ambedkar
CO 5	Students can understand the different thoughts of M. N. Roy.

Paper: CGE Paper-II Public Administration

At the end of the course Students will able to	
CO 1	Get information about Personnel Administration.
CO 2	Get acquainted with the budgetary process in India.
CO 3	Get knowledge about Delegated Legislation
CO 4	Understand New Trends in Public Administration

B.A. Political science III Semester V

Paper: Public Administration

At the end of the course Students will able to	
CO 1	Study of the administrative system of the nation.
CO 2	Getting information about various concepts in Public

	Administration.
CO 3	Study of the mechanism for the solution of problems in Public Administration

Paper: Political Theory

At the end of the course Students will able to	
CO 1	Getting basic knowledge of political theory.
CO 2	Understanding of approaches of political theory.
CO 3	Knowing behavioral movement in Political science.

Paper: Western Political Thoughts I & II

At the end of the course Students will able to	
CO 1	Getting information about western thinkers and their political thoughts.
CO 2	Comparative study of the ancient thoughts and modern thoughts from Plato & Rousseau.
CO 3	Understand political view of J. S. Mill, Karl Marx, Gramsci & Hannah Arendt.

Programme Specific Outcomes : BBA

After Completion on the three years' graduation programme in BBA Students will able to -

PSO 1	Acquire fundamental education in management and business principles.
PSO 2	Acquire professional skills as a management profession.
PSO 3	Deep understanding and development of important business skills such as leadership communication skills, critical thinking and decision making.
PSO 4	Build up self confidence and competency to take up self employable business ventures.
PSO 5	Inculcate Entrepreneurship skills.

BBA I Semester I

Paper: CC-A1Fundamentals of Business Management

At the end of the course Students will able to	
CO 1	Develop a working knowledge of fundamental terminology and frameworks in the four functions of management: Planning, Organizing, Leading and Controlling.
CO 2	Analyse organizational case situations in each of the functions of management.
CO 3	Identify and apply appropriate management techniques for managing contemporary organizations
CO 4	Understand skills, abilities, and tools needed to obtain a job on a management track in an organization of their choice

Paper: CC-A2 Principles of Marketing

At the end of the course Students will able to	
CO 1	Understand the fundamentals of marketing.

CO 2	Aware of the 4P's & 4C's of marketing mix.
CO 3	Understand the consumer behaviour and importance of market segmentation

Paper: CC-A3 Micro Economics

At the end of the course Students will able to	
CO 1	Explain meaning and scope of business economics
CO 2	Apply the concept and theories of demand and consumer behaviour.
CO 3	Apply concepts of factor pricing and production function in business practices
CO 4	Understand different markets and its pricing practices.

Paper: Information Technology in Business Management

Course Code: GEC-G1

At the end of the course Students will able to	
CO 1	Understand basics of computer technology.
CO 2	Identify software and networking technology for business.
CO 3	Prepare documents, files and folders with the help of Ms-Words
CO 4	Prepare documents, files and folders with the help of Ms-Words
CO 5	Analyse Business data using MS – Office.

Paper: Insurance and Banking GEC-G1

At the end of the course Students will able to	
CO 1	Understand insurance concept and development in insurance sector

CO 2	Know the relevance of Banking Sector in India
CO 3	Differentiate different types of insurances
CO 4	Understand different E-Banking and Legal Framework for Banking Sector

Paper: Accounting for Managers CC-A4

At the end of the course Students will able to	
CO 1	Understand the concepts in accountancy.
CO 2	Prepare ledger accounts, subsidiary books and trial balance.
CO 3	Demonstrate calculations of depreciation.
CO 4	Prepare statements of accounts.

Paper: Business Communication AECC-C1

At the end of the course Students will able to	
CO 1	Apply business communication skills.
CO 2	Develop vocabulary skills.
CO 3	Develop effective writing skills.
CO 4	Learn effective reading skills.

BBA I Semester II

Paper: Human Resource Management CC-A5

At the end of the course Students will able to

CO 1	Understand the basic concepts of HRM and its functions.
CO 2	Gain the insight of Job Analysis concepts and writing job description and job specification
CO 3	Develop an understanding of human resource planning at different levels and benefits of HR Planning
CO 4	Develop the knowledge to identify effective recruitment sources.

Paper: Accounting for Managers

At the end of the course Students will able to	
CO 1	Understand the basic concepts & principles of Financial Accounting.
CO 2	Learn Depreciation Method.
CO 3	Understand preparation of Final Accounts for sole proprietorship and partnership firm.

Paper: Macro Economics CC-A7

At the end of the course Students will able to	
CO 1	Understand concepts of national income and demand of supply of money.
CO 2	Apply the principles and theories of inflation and business cycle
CO 3	Understand different concepts of public finance

Paper: Business Environment CC-A8

At the end of the course Students will able to

CO 1	Understand the concept of Business Environment and its elements.
CO 2	Analysis Economic Environment and Technological Environment
CO 3	Compare Social and Cultural Environment and Natural Environment
CO 4	Analysis Political ,legal environment and Global Environment

Paper: Management Information System GEC-G2

At the end of the course Students will able to	
CO 1	Understand basics Information System.
CO 2	Understand working and applications of different information systems.
CO 3	Learn study system development lifecycle.
CO 4	Learn analyse the system requirement.

Paper: Soft Skills and Personality Development

At the end of the course Students will able to	
CO 1	Understand the basics of soft skills.
CO 2	Understand how to develop personality traits and Self-Management.
CO 3	Improve critical thinking skills.
CO 4	Learn about problem management and conflict resolution skills

BBA II Semester III

Paper: Fundamental of Entrepreneurship CC-B1

At the end of the course Students will able to	
CO 1	Explain about different aspects of entrepreneurship development, entrepreneurial skills
CO 2	Illustrate and make use of different theories of entrepreneurship in practical manner.
CO 3	Explain the concept and role of woman entrepreneurs and also to examine their problems and remedial measures
CO 4	Compare and evaluate rural, social, digital, and technological entrepreneurship
CO 5	Discuss success stories and elaborate about start-ups, eco-system and Unicorn.

Paper: Cost Accountancy CC-B2

At the end of the course Students will able to	
CO 1	Explain concepts in Cost Accountancy
CO 2	.Apply methods of Costing and able to choose methods of pricing material issues for material management
CO 3	.Solve inventory control problems by using inventory control techniques
CO 4	Utilize marginal costing technique in decisionmaking
CO 5	Compare and discuss cost audit techniques for effective cost control

Paper: Service Marketing CC-B3

At the end of the course Students will able to	
CO 1	Illustrate Services- it's concept, classification and importance
CO 2	Demonstrate and experiment with 7 P's of service marketing
CO 3	Apply 7 P's for various service organizations

CO 4	Analyze financial services and discuss their functioning
CO 5	Discuss application of 7 P's in different service sector

Paper: E-Commerce CC-B4

At the end of the course Students will able to	
CO 1	Understand the concept of E-Commerce, EDI.
CO 2	Know different applications of E-Commerce, E-Banking & E-Trading
CO 3	Identify the key security threats in the E-commerce environment
CO 4	Learn how to design E-Commerce website using HTML

Paper: Forms of Business Organization CC-B5

At the end of the course Students will able to	
CO 1	Explain different forms of business organization
CO 2	Classify different sources of finance available and analyze influence on business decisions.
CO 3	. Illustrate and examine different combinations of business and their performances
CO 4	Discuss new trends in management and its recent scenario in market

Paper: Statistical Techniques AECC-C3

At the end of the course Students will able to	
CO 1	Define Descriptive Statistical techniques
CO 2	Apply applications of statistical techniques.
CO 3	Utilize suitable statistical formula and analyze result
CO 4	Conclude degree of relationship of two variables and estimate unknown variable

BBA II Semester IV

Paper: Entrepreneurship Project Management CC-B6

At the end of the course Students will able to	
CO 1	. Explain and illustrate process of project identification
CO 2	Examine institutional support and schemes for entrepreneurship development.
CO 3	Assess and utilize different methods of project appraisal.
CO 4	Design business plan with the help of incubation centers/ED centers

Paper: Management Accounting CC-B7

At the end of the course Students will able to	
CO 1	Explain Management Accounting concept and difference between Financial Accounting and Management Accounting
CO 2	Utilize different reports to management
CO 3	Make use of different Financial Statement analysis tools

Paper: Rural and Retail Marketing CC-B8

At the end of the course Students will able to	
CO 1	Develop understanding of concepts of rural and retail marketing
CO 2	Assess the current situation of rural marketing.
CO 3	Analyze the rural marketing of agricultural inputs and products.
CO 4	Evaluate retail formats, retail buying behaviour and retail marketing mix.

Paper: Production and Operations Management CC-B9

At the end of the course Students will able to

CO 1	Demonstrate fundamentals of production and operations management in a firm.
CO 2	Take decisions related to facility locations and layout.
CO 3	Analyze different aspects relating to designing and developing processes.
CO 4	Apply various aspects in production planning and control.
CO 5	Evaluate various modern practices in production and operations management.

Paper: Research Methodology CC-B10

At the end of the course Students will able to	
CO 1	Explain fundamentals of research and describe research design
CO 2	Illustrate sample design and sampling methods
CO 3	Experiment with appropriate methods for data collection for research work
CO 4	Apply statistical tools for data analysis and interpretation

Paper: Statistics for Business AECC-C4

At the end of the course Students will able to	
CO 1	Define tools Statistics used for decision making
CO 2	Describe applications of statistics for decision making.
CO 3	Apply suitable statistical formula and estimate trend.
CO 4	Analyze Construct control charts

BBA III Semester V

Paper: Fundamentals of Business Laws CC-C1

At the end of the course Students will able to

CO 1	Have a fair idea about aspects of different business laws in India
CO 2	Understand the salient features & importance of different business laws.
CO 3	Get acquainted with different provisions of business laws.

Paper: Human Skills CC-C2

At the end of the course Students will able to	
CO 1	Develop different human skills among students
CO 2	Enhance quality behavior.
CO 3	To increase Emotional Quotient by learning values.
CO 4	Understand about conflict management and stress management
CO 5	Beneficial to cultivate professional skills among the management students and make them persons with empathy.

Paper: Management Historians CC-C3

At the end of the course Students will able to	
CO 1	Understand evolutionary phases of management approaches
CO 2	Understand contribution of management historians
CO 3	Evaluate role of historian in developing science of management

Paper: Digital Marketing DSE-A1

At the end of the course Students will able to	
CO 1	Learn the applications of Digital Marketing
CO 2	Analyze the different digital marketing avenues.
CO 3	Examine digital marketing tools.
CO 4	Build real life problems in the domain digital marketing.

Paper: Financial Management DSE B1

At the end of the course Students will able to	
CO 1	To understand the basic concepts Financial Management

CO 2	To know about components of Working Capital Management
CO 3	To understand Capital Structure ,Cost ofCapital and Leverage

Paper: Human Resource Planning DSE-C1

At the end of the course Students will able to	
CO 1	Understand the various functions of HRM
CO 2	Describe the Human Resource Planning Process.
CO 3	Understand the Recruitment function in detail.
CO 4	Describe the Selection process
CO 5	Analyze the employee separation method.

Paper: Mini-Project /Field Report DSE-A2/ DSE-B2/ DSE-C2

At the end of the course Students will able to	
CO 1	To identify the research problem and formulate objectives
CO 2	To choose appropriate methodology with proper tools and techniques.
CO 3	To analyze and interpret the data collected from different sources.
CO 4	To make decision or find out conclusions on the basis of data analysis.

BBA III Semester VI

Paper: Fundamental of Taxation

At the end of the course Students will able to	
CO 1	To understand the basic concepts in Taxation
CO 2	To demonstrate the computation of income and tax liability
CO 3	**To understand concept of GST and its mechanism**

Paper: ORGANIZATIONAL BEHAVIOURCC-C6

At the end of the course Students will able to

CO 1	Understand the basic concepts of OB
CO 2	Understand the principles of learning
CO 3	Describe the importance of attitude and values
CO 4	Implement the theories of Motivation and Personality.
CO 5	Understand and implement causes of stress and coping strategies

Paper: International Marketing

At the end of the course Students will able to	
CO 1	Understand basics of international marketing.
CO 2	To provide students with a perspective of International Marketing management, its environment and complexities.
CO 3	Study international marketing strategies.
CO 4	Study functions of international trade.

Paper: Business Finance

At the end of the course Students will able to	
CO 1	To understand the basic concepts Business Finance
CO 2	To recognize Financial Markets , Mutual Funds, Portfolio Management and Micro Finance
CO 3	To understand Corporate Restructuring and its ways.

Paper: Human Resource Development

At the end of the course Students will able to

CO 1	Understand the difference between HRM & HRD Concepts.
CO 2	Understand the various subsystems involved in Human Resource development.
CO 3	Describe and differentiate Training & development function.
CO 4	Understand the methods of performance appraisal
CO 5	Analyze the career development techniques.

Paper: **Major Project**

At the end of the course Students will able to	
CO 1	To identify the research problem and formulate objectives.
CO 2	To choose appropriate methodology with proper tools and techniques.
CO 3	To analyze and interpret the data collected from different sources.
CO 4	To make decision or find out conclusions on the basis of data analysis.

Programme Specific Outcomes : B.Com.IT

After Completion on the three years' graduation programme in B.Com. IT Students will able to -	
PSO 1	Acquire the managerial professional attributes and be able to understand Financial Accounting, Corporate accounting and Cost Accounting.
PSO 2	To impart the basic knowledge of various IT Concepts and application software as well as technical capabilities required for IT industries.
PSO 3	Design, implement and evaluate a computer-based system, or process component, to meet the desired need of business applications.
PSO 4	Apply the knowledge of Commerce and Information Technology principles to manage business processes effectively in diverse environments as a member or a leader in the team.
PSO 5	Develop effective and oral communication and technical writing especially in business applications, with the use of information technology.

B.Com IT I Semester I

Paper: DSC1 Financial Accounting

At the end of the course Students will able to	
CO 1	: Develop an understanding of understand Financial Accounting
CO 2	Preperation and interpretation of Financial Statements
CO 3	Understand about Cost and Management Accounting
CO 4	Prepare final accounts of limited company

Paper: DSC2 Fundamentals of Information Technology

At the end of the course Students will able to	
CO 1	Understand basic concept of Information Technology
CO 2	Describe Peripheral Devices and Number system
CO 3	Demonstrate different functions of Operating System (OS)
CO 4	Use Internet based applications

Paper: DSC3 Office Automation

At the end of the course Students will able to	
CO 1	Understand basic concept of MS-Office
CO 2	Demonstrate use of MS-Word
CO 3	Build MS-Excel spreadsheet
CO 4	Design Power point presentation

Paper: GEC1 Principles of Management

At the end of the course Students will able to	
CO 1	Understand the basic managerial process
CO 2	Illustrate the planning in real life and understand organisation of resources
CO 3	Use of decision making to evaluate various alternatives and situations
CO 4	Demonstrate the leadership and communication skill

Paper: GEC2 Business Communication

At the end of the course Students will able to	
CO 1	Understand the concept of Business Communication
CO 2	Demonstrate the basic communication skill.
CO 3	Understand the dynamics of group communication
CO 4	Write Business correspondence and business reports.

Paper: AECC1Lab Course Based on DSC2 and DSC3

At the end of the course Students will able to	
CO 1	Understand basic working of Computer
CO 2	Demonstrate functions of Operating System and use internet based applications.
CO 3	Understand and perform word processing operations using MS-Word
CO 4	Analyze data using MS Excel and Create presentations using PowerPoint

B.Com IT I Semester II

Paper: DSC4 Business Economics

At the end of the course Students will able to	
CO 1	Understand the basic concept of Business Economics
CO 2	Understand theories and their applications for managerial decisions.
CO 3	Understand the concept of Business Cycle
CO 4	Understand pricing under different market conditions

Paper: DSC5 Introduction to Programming Using C

At the end of the course Students will able to	
CO 1	Write compile and debug C programs.
CO 2	Design programs involving decision structures, loops and functions
CO 3	Understand the dynamics of memory by the use of pointers
CO 4	Design and develop different data structures and create/update basic data files

Paper: DSC6 Accounting with Tally

At the end of the course Students will able to	
CO 1	Understand the basic features associated with Tally and concept of GST.
CO 2	Identify the key components of Tally package.
CO 3	Analyze financial data and generate financial reports using Tally
CO 4	Demonstrate taxation reports using Tally package

Paper: GEC3 Principles of Marketing

At the end of the course Students will able to	
CO 1	Understand the basic concept of Marketing.
CO 2	Explain the nature, scope of marketing
CO 3	Understand marketing environment and it's role in industry and society.
CO 4	Understand the Marketing Mix

Paper: GEC4 Management Information System

At the end of the course Students will able to	
CO 1	Understand basic information system
CO 2	Understand working and applications of different information systems.
CO 3	Study System development life cycle.
CO 4	Analyze the system requirements.

Paper: AECC2 Lab Course Based on DSC5 and DSC6

At the end of the course Students will able to	
CO 1	Write C programs for mathematical calculations.
CO 2	Design programs using Array Concept
CO 3	Understand Tally features and perform accounting of Company
CO 4	Apply taxation on various transactions using tally

B.Com IT II Semester III

Paper: DSC7Income Tax and GST

At the end of the course Students will able to	
CO 1	To understand the basic concepts of income tax and basis of charge
CO 2	To identify the residential status and it's implication on Tax liability
CO 3	To understand the manner of computation of total income
CO 4	To know the basic concepts of GST

Paper: DSC8 Corporate Accounting

At the end of the course Students will able to

CO 1	Understand basic concept of Information Technology
CO 2	Describe Peripheral Devices and Number system
CO 3	Demonstrate different functions of Operating System(OS)
CO 4	Use Internet based applications

Paper: DSC-10 Database Management System(DBMS)

At the end of the course Students will able to	
CO 1	Understand the concepts of Database Management System.
CO 2	Draw Entity-Relationship diagrams to represent simple data base application.
CO 3	Write SQL queries for a given context in relational database.
CO 4	Implement DML and DCL statements.

Paper: AECC3 Business Statistics

At the end of the course Students will able to	
CO 1	Understand the have the basic knowledge on data collection and various statistical elementary tools.
CO 2	Have the critical thinking in the theory of probability and its applications in real life problems.
CO 3	Made a bridge between the elementary statistical tools and probability theory.
CO 4	Apply the statistical tools in business, economic and commercial areas with the help of time series, index numbers, etc.

Paper: AECC4 Lab Course Based on DSC-9 and DSC-10

At the end of the course Students will able to

CO 1	Describe the object-oriented programming approach in connection with C++
CO 2	Apply the concepts of object-oriented programming
CO 3	Illustrate the Database Management System
CO 4	Illustrate the My SQL concept

B.Com IT II Semester IV

Paper: DSC-11 Business Law

At the end of the course Students will able to	
CO 1	Have a fair idea about aspects of different business laws in India
CO 2	Understand the salient features and importance of different business laws.
CO 3	Get acquainted with different provisions of business laws
CO 4	Students would learn the rules regarding the Contract of Sale, Distinction between Sale & Agreement to sell, Condition & Warranty, Doctrine of Caveat Emptor, Rights of Unpaid Seller and Remedies for Breach of Contract of Sale.

Paper: DSC-13 Web Technology

At the end of the course Students will able to	
CO 1	Understand basics of internet and web development life cycle.
CO 2	Design website using HTML and CSS.
CO 3	Implement client-side scripting for website development using JavaScript.
CO 4	Understand importance and working of HTML5.

Paper: DSC-14 Relational Database Management System

At the end of the course Students will able to	
CO 1	Understand the fundamental elements of relational database management systems.
CO 2	Design Relational model store present simple database application.
CO 3	Improve the database design by normalization.
CO 4	Understand the multiple MySQL tables, sub queries and functions.

Paper: AECC5 Stock Exchange and Share Marketing

At the end of the course Students will able to	
CO 1	To have comprehensive understanding about the stock market operations.
CO 2	To know structure and trading process in the stock exchange and share market.
CO 3	To get knowledge about settlement procedures, processes and regulations
CO 4	To recognise emerging challenges in the Indian Stock market

Paper: AECC6 Foundation of Financial Audit

At the end of the course Students will able to	
CO 1	Understand the basic concepts and objectives of audit
CO 2	Gain working knowledge of generally accepted auditing procedures
CO 3	Identify the skills and techniques of conducting audit of various entities
CO 4	Know how the audit report is prepared

Paper: AECC7 Lab Course based on DSC-13 and DSC-14

At the end of the course Students will able to

CO 1	Design the webpages using HTML tags and CSS.
CO 2	Design the webpages using JavaScript's and HTML5.
CO 3	Illustrate the Relational Database Management System.
CO 4	Illustrate the advanced MySQL concepts.

B.Com IT III Semester V

Paper: 501 Entrepreneurship Developments

At the end of the course Students will able to	
CO 1	To impart theoretical knowledge of Entrepreneurship
CO 2	To develop Entrepreneurship qualities and skills.
CO 3	Students will pick up about Foundation of Entrepreneurship Development and its theories.
CO 4	Students will understand various steps involved in starting a venture and to explore marketing methods & new trends in entrepreneurship.

Paper: 502 System Analysis and Design

At the end of the course Students will able to	
CO 1	Define and use common System Analysis and Design fundamental terminology.
CO 2	Utilize current Analysis and Design tools to graphically characterize processes and flows in a business system.
CO 3	Design and create effective Input/Output including Web pages/forms.
CO 4	Demonstrate the technical and communication skills required for developing a Systems Proposal.

Paper: 503 Enterprise Resource Planning (ERP) (Paper-I)

At the end of the course Students will able to	
CO 1	Demonstrate a good understanding of the basic issues in ERP systems.
CO 2	Analyse the strategic options for ERP identification and adoption.
CO 3	Design the ERP implementation strategies.
CO 4	Understand the need of Business Systems and Processes through strategic analysis of ERP systems

Paper: 504 Application Development Tools (Paper-I)

At the end of the course Students will able to	
CO 1	Understand the concepts of .NET Framework
CO 2	Acquire the skills to edit, test and implement software for a client-server environment.
CO 3	Develop programs to retrieve data from forms and files to produce user displays and reports.
CO 4	Learn programming constructs and develop programs that use strings, dates, arrays, functions, classes and objects

Paper: 505 Web Technology (Part-I)

At the end of the course Students will able to	
CO 1	Understand basics of internet and web development life cycle.
CO 2	Design website using HTML and CSS.
CO 3	Understand importance and working of HTML.
CO 4	Understand importance and working of CSS.

Paper: 506 Lab Course Based on 504 and 505

At the end of the course Students will able to

CO 1	Design the webpages using HTML tags and CSS.
CO 2	Design the webpages using .NET Framework.
CO 3	Understand working of .NET Controls
CO 4	Design And apply various tags to create website

B.Com IT III Semester VI

Paper: 601 Modern Management Practices

At the end of the course Students will able to	
CO 1	Students will familiar with the modern management practices.
CO 2	Students will expose to importance and applicability of varoius modern management practices.
CO 3	Get acquainted with different provisions of business laws
CO 4	Students would learn the rules regarding the Contract of Sale, Distinction between Sale & Agreement to sell, Condition & Warranty, Doctrine of Caveat Emptor, Rights of Unpaid Seller and Remedies for Breach of Contract of Sale.

Paper: 602 Software Engineering

At the end of the course Students will able to

CO 1	How to apply the software engineering lifecycle by demonstrating competence in communication, planning, analysis, design, construction, and deployment
CO 2	An ability to work in one or more significant application domains
CO 3	Demonstrate an understanding of and apply current theories, models, and techniques that provide a basis for the software lifecycle
CO 4	Work as an individual and as part of a multidisciplinary team to develop and deliver quality software

Paper: 603 Enterprise Resources Planning (ERP) (Paper-II)

At the end of the course Students will able to	
CO 1	Make basic use of Enterprise software, and its role in integrating business functions.
CO 2	Analyze the strategic options for ERP identification and adoption.
CO 3	Create reengineered business processes for successful ERP implementation.
CO 4	Design the ERP implementation strategies.

Paper: 604 Application Development Tools (Paper-II)

At the end of the course Students will able to	
CO 1	Understand the Console based programming.
CO 2	Students will get knowledge about eception handling
CO 3	Students will understand Functions concept
CO 4	Develop code to use regular expressions, handle exceptions and

	validate data for file and database storage.

Paper: 605 Web Technologies (Part-II)

At the end of the course Students will able to	
CO 1	Understand the JavaScript Branching and Looping
CO 2	Students will understand JavaScript Concept
CO 3	To get knowledge about Server side scripting
CO 4	To understand the concept of ASP

Paper: 606 Projects (Based on IT Applications in Commerce

At the end of the course Students will able to	
CO 1	To improve practical knowledge about Programming languages.
CO 2	To develop skill of practical Implementation of Programming language.
CO 3	Students will get knowledge about HTML, CSS and JavaScript and Asp.Net Knowledge to develop project
CO 4	Illustrate the advanced ASP concepts.

Programme Specific Outcomes : BCA

After Completion on the three years' graduation programme in BCA Students will able to -	
PSO 1	An ability to enhance the application of knowledge of theory subjects in diverse fields.
PSO 2	Develop language proficiency to handle corporate communication demands.
PSO 3	To enhance logical ability and programming concepts by implementing programming lab and Encouraging students to convert their start up idea to reality by implementing.
PSO 4	Prepare students in various disciplines of techniques such as computer applications, computer networking, software engineering, JAVA, database concepts and programming.
PSO 5	Preparing students for future aspects by building and improving their creativity, social awareness, and general knowledge.

BCA I Semester I

Paper: CC101 Fundamentals of Computer

At the end of the course Students will able to	
CO 1	Understand basic concept of computer.
CO 2	Describe peripheral devices and number system.
CO 3	Understand operating environment.
CO 4	Demonstrate the use of Linux Operating system commands.

Paper: CC102 Introduction to Programming Using C

At the end of the course Students will able to

CO 1	Able to implement the algorithm and draw flowcharts for solving Mathematical problems
CO 2	Ability to design and develop Computer programs, analyse, and interprets the concept of pointers, declarations, initialization, operations on pointers and their usage.
CO 3	Able to define data types and use them in simple data processing applications also he/she must be able to use the concept of array of structures and file handling.
CO 4	Develop confidence for self-education and ability for lifelong learning needed for computer language.

Paper: AEC103 Principles of Management

At the end of the course Students will able to	
CO 1	Understand the influence of historical forces on current practice of management.
CO 2	Understand frameworks in the four functions of management.
CO 3	Understand leadership styles to anticipate the consequences of each leadership style
CO 4	Be able to identify and apply appropriate management techniques for organizations; and understand social responsibility involved in business situations.

Paper: AEC104 Business Communication

At the end of the course Students will able to	
CO 1	Communicate in English in written as well as oral mode
CO 2	Make presentations in English
CO 3	Do effective business correspondence
CO 4	Students will be able to identify key principles in Business Communication

Paper: AEC105 Office Automation

At the end of the course Students will able to	
CO 1	Understand the components of office automation
CO 2	Perform operations using MS Word and PowerPoint
CO 3	Surf details through Internet
CO 4	Understand and discuss about the use of Office Package and internet in daily life

BCA I Semester II

Paper: CC201 DBMS

At the end of the course Students will able to	
CO 1	Describe the basic concepts of DBMS and various databases used in real applications
CO 2	Demonstrate the principles behind systematic database design approaches.
CO 3	Design the database structure by applying the concepts of Entity-relational model and Normalization.
CO 4	Learn MS-Access for database creation and handling transactions.

Paper: CC202 Operating System

At the end of the course Students will able to	
CO 1	Possess knowledge of Operating Systems and their types.
CO 2	Apply the concept of a process and scheduling algorithms.
CO 3	Realize the concept of deadlock and different ways to handle it.
CO 4	Understand various memory management techniques and file system.

Paper: CC203 Web Technology I

At the end of the course Students will able to	
CO 1	Understand basics of website and web development life cycle.
CO 2	Design website using HTML and CSS
CO 3	Implement client side scripting for website development
CO 4	Understand importance and working of HTML5

Paper: AEC204 Financial Accounting with Tally

At the end of the course Students will able to	
CO 1	Use basic accounting terminology, procedures and systems of maintaining accounting records.
CO 2	Understand financial statements
CO 3	Learn to create company, enter accounting voucher entries and also print financial statements, etc. in Tally
CO 4	Demonstrate MIS reports in Tally ERP

Paper: AEC205 Mathematical Foundations for Computer Application

At the end of the course Students will able to	
CO 1	Basic knowledge of set theory, functions and relations concepts, and matrix needed for designing and solving problems.
CO 2	Construct simple mathematical proofs and possess the ability to verify them.
CO 3	Write an argument using logical notation and determine if the argument is valid or is not valid.
CO 4	Use graph algorithms to solve problems.

Vidya Prasarak Mandal's

DR. GHALI COLLEGE

GADHINGLAJ

Affiliated to Shivaji University

CoC/ Certificate Course / Short Term Course / Value Added Course

CoC Course- M.Sc. Chemistry	
Title: Short Term course on Soil & Water Analysis	
Outcomes:	
01	Equip the students with various analytical skills
02	Agriculture & Domestic sector is largely dependent on the results of laboratory tests used to support accurate analysis affect to improve crop yield & health.
03	Skill based knowledge in soil & water analysis
04	Measure salinity & sodicity in irrigated agricultural system

CoC Course-B.Sc. Chemistry	
Title: Short Term Course on Analytical Instrumentation	
Outcomes: At the end of the course students will be able to understand	
01	Student will demonstrate the ability to operate & troubleshoot key analytical instruments through hands on laboratory sessions
02	Students will analyse and interpret data generated from various Analytical techniques, applying statistical methods to assess the reliability and significance of results.
03	Students will understand & implement laboratory safety protocols & regulatory compliance standard relevant to the use of analytical instruments.
04	Students will develop critical thinking and problem- solving skills by designing experiments that utilize appropriate analytical techniques to address specific research questions.
05	Students will explore and articulate the applications of analytical instruments in diverse fields, preparing them for careers in sectors such as pharmaceuticals, environmental science, and material analysis.

COC Course- M.Sc. Microbiology	
Tital: Hazard Analysis And Critical Control Point	
Outcomes:	
01	Improved Food Safety- HACCP plan helps to identify and Control Potential Hazard in Food Production and Consumption which can prevent biological, Chemical and physical Contamination.
02	Increase Customer trust- HACCP plans can help to build Customer trust and confidence in a company's product.
03	Improved Product Quality- HACCP plans can help to Improve Product Quality and Consistency.

COC Course-B.Sc. Microbiology & Zoology	
Tital: Eco-friendly Bio fertilizers Preparation.	
Outcomes:	
01	Students get knowledge about Bio fertilizers.
02	Students become aware about use of Bio fertilizers.
03	Students get idea about Bio fertilizers preparation.

CoC Course : B.Sc. Botany	
Name of Course: Certificate Course in Fundamentals of Gardening	
Outcomes: After the course students will be able to	
01	Make decisions on plants selection based on garden types.
02	Prepare best soil mixture based on specific plant need.
03	Utilize gardening skills for growing healthy & pesticide free vegetables.

CoC Course- B.Sc. Physics	
Tital: Assembling and Repairing of Light Emitting Diode (LED)	
Outcomes:	
01	Students get knowledge of what is Light Emitting Bulb (LED)
02	Construction and working of different LED's
03	Importance of use of LED in House to reduce electric power Consumption.
04	Students can establish a small-scale industry and can be an entrepreneur in future.

CoC Course :B.Sc. Mathematics

Name of Course: SCILAB	
Outcomes:	
01	To provide basic Knowledge of Scilab.
02	To make aware in students about Programming in Scilab.
03	To make aware in students about how to solve mathematical problem using Scilab.
04	Preparing students for future aspects in students by building and improving their creativity, Technical skill and knowledge.

CoC Course :B.Sc. Statistics	
Name of Course: Data Analysis using MS-Excel	
Outcomes:	
01	Improved knowledge & understanding of the MS excel
02	Develop technical analysis skills to analyse charts & identify graphs.
03	To analyse the data using data analysis tools pack of MS-excel

CoC Course :B.Sc. Computer Science	
Name of Course: Hardware & Networking	
Outcomes:	
01	Understanding of Basic Concepts
02	Hardware assembly skills
03	OS familiarity
04	Practical Skills

CoC Course- B.A. Economics

Title: **Research Methodology for Social Science**	
Outcomes: After completion of this course student will	
01	Understand basic concepts of Research
02	Able to make Research Design
03	Able to collect analyse interpret from the data

CoC Course :B.A. Hindi	
Name of Course: [illegible]	
Outcomes:	
01	[illegible].
02	[illegible].
03	[illegible].
04	[illegible].

CoC Course-BBA	
Tital: **Financial Freedom (Fundamentals of Share Market)**	
Outcomes:	
01	Improved knowledge & understanding of the stock market & its mechanism
02	Develop technical analysis skills to analyse charts & identify trends
03	Staying up to date with market trends, news & analysis

CoC Course : Bachelor of Commerce (Information Technology)	
Name of Course: Certificate Course in PHP (Hypertext Pre-processor)	
Outcomes:	
01	Build real-world projects: Apply PHP skills to build practical projects, such as blog
02	Improved problem solving skills: Develop ability to analyse problems, identify solutions & write efficiently.
03	Develop confidence in building dynamic web applications using PHP.

CoC Course : Bachelor of Commerce (Eng. Medium)	
Name of Course: Certificate Course in Digital Marketing	
Outcomes:	
01	Understand digital marketing fundamentals, channels & strategies
02	Develop hands on experience with digital marketing tools & platforms.
03	Pursue roles like Digital Marketing Specialist, SEO Expert, Social Media Manager
04	Enhance your resume & attract potential employers with digital marketing skills.
05	Learn to promote your own business or product online.

CoC Course : Bachelor of Computer Application (BCA)	
Name of Course: Certificate Course in Python	
Outcomes:	
01	Improved problem solving Skills
02	Familiarity with industry standard tools & technologies
03	Enhanced logical thinking

CoC Course : B.A. Marathi	
Name of Course: Certificate Course in Journalism	
Outcomes:	
01	To introduce skills in Newspaper & Media
02	To make aware students about skills & technology of Journalism
03	To provide skilled resource person in journalism to Newspaper & Media organisation.

CoC Course : B.A. Marathi	
Name of Course: Certificate Course in Modi Script (Lipi)	
Outcomes:	
01	Student deciphers Modi script
02	Interprets old Modi documents & transcripts Modi documents

	into Devnagari for research purpose

CoC Course- B.A. English	
Tital: English Grammar for Competitive Examination	
Outcomes:	
01	To enable the students to attend the competitive examination
02	To create job opportunities through the linguistic competency of English language

CoC Course- B.A. Sociology	
Tital: Artificial Intelligence Course	
Outcomes: The students will be able to	
01	Get familiar with Artificial Intelligence, its foundation & Principles
02	Identify appropriate AI methods to solve a given problem
03	Examine the useful search techniques, knowledge, representative techniques, Inference methods & their advantages, disadvantages & comparison.
04	Understand important concepts like Expert System, AI applications etc.

CoC Course- B.A. Psychology	
Title: STRESS MANAGEMENT	
Outcomes: The students will be able to get	
01	Improved Stress Awareness
02	Development of coping strategies
03	Enhanced Emotional Regulation

CoC Course- Skill Development Committee	
Title: Mehandi Course	
Outcomes: The students will be able to get	
01	Business Skills
02	Confidence boost
03	Career Opportunities
04	Personal Growth
05	Networkig opportunities

CoC Course- Skill Development Committee	
Title: Rangoli Course	
Outcomes: The students will be able to get	
01	Acquire skills in creating intricate Rangoli designs using various materials.
02	Understanding of Rangoli's cultural significance & importance in Indian Tradition.
03	Ability to create traditional, modern & geometric Rangoli design.
04	Ability to teach Rangoli art to others.