

ANJUMAN KHAIRUL ISLAM'S **POONA COLLEGE** OF ARTS, SCIENCE & COMMERCE CAMP, PUNE-411001

A.K.I's

POONA COLLEGE

OF ARTS SCIENCE & COMMERC

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PROGRAMME OUTCOMES AND PROGRAMME SPECIFIC OUTCOMES

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UNDERGRADUATE PROGRAMME OUTCOMES

| P01 | Disciplinary Knowledge: Good knowledge and understanding of major concepts, theoretical principles and experimental findings of the subject and its different subfields. |
|------|---|
| PO2 | Skills: Ability to use modern instrumentation and laboratory techniques to design and perform experiments. |
| PO3 | Critical thinking: Ability to engage in reflective and independent thinking by understanding the concepts in every area of the subject. |
| PO4 | Problem solving: Capability to deduce a problem associated with subject and applies the class room learning into practice to offer a solution for the same. |
| PO5 | Sense of inquiry: Capability for asking relevant/appropriate questions relating to the issues and problems and planning, executing and reporting the results of a theoretical or experimental investigation. |
| P06 | Communication Skills: Ability to share thoughts, ideas and applied skills of communication in its various perspectives like written communication, oral communication etc. |
| P07 | Lifelong learners: Capable of self-paced and self-directed learning aimed at personal development and for improving knowledge/skill development and reskilling in all areas of respective subjects. |
| P08 | Digitally literate: Adequate training in the application of digital knowledge in higher education and workplace. |
| PO9 | Ethics: Recognize different value systems including one's own, understand the moral dimensions of one's decisions, and accept responsibility for them. |
| P010 | Environment and Sustainability : Understand the issues of environmental contexts and sustainable development. |

POSTGRADUATE PROGRAMME OUTCOMES

| PO1 | Disciplinary Knowledge: Demonstrate comprehensive knowledge and understanding of one or more disciplines that form a part of a programme of study. |
|-----|---|
| PO2 | Critical Thinking: Apply analytic thought to a body of knowledge, analyses and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence, identify relevant assumptions or implications, formulate coherent arguments, critically evaluate practices, policies and theories by following scientific approach to knowledge development. |
| P03 | Analytical Reasoning: Demonstrate the ability to evaluate the reliability and relevance of evidence, identify logical flaws and holes in the arguments of others, analyses and synthesize data from a variety of sources, draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints. |
| P04 | Problem Solving: Demonstrate capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge and apply one's learning to real life situations. |
| PO5 | Research-related Skills: Demonstrate a sense of inquiry and capability for asking relevant/appropriate questions, problematizing, synthesising and articulating, demonstrate the ability to recognize cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships, plan, execute and report the results of an experiment or investigation. |
| P06 | Scientific Reasoning using Quantitative/Qualitative Data: Demonstrate the ability to understand cause-and-effect relationships, define problems, apply scientific principles, analyse, interpret and draw conclusions from quantitative/qualitative data, and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective. |

| P07 | Communication Skills: Ability to share thoughts and ideas effectively in writing and orally, communicate with others using appropriate media, confidently share one's views and express herself/himself, demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups. |
|------|---|
| PO8 | Collaboration/Cooperation/Team work: Demonstrate ability to work effectively and respectfully with diverse teams, facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team. |
| PO9 | Information/Digital Literacy: Demonstrate capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources and to use appropriate software for analysis of data. |
| P010 | Self-Directed Learning: Demonstrate ability to work independently, identify appropriate resources required for a project, and manage a project through to completion. |
| P011 | Moral and Ethical Awareness/Reasoning: Demonstrate the ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Demonstrate the ability to identify ethical issues related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights, appreciate environmental and sustainability issues, and adopt objective, unbiased and truthful actions in all aspects of work. |
| P012 | Lifelong learners: Capable of self-paced and self-directed learning aimed at personal development and for improving knowledge/skill development and reskilling in all areas of respective subjects. |

PROGRAMME SPECIFIC OUTCOMES

Name of the Programme: B.A. English

| PSO1 | The students will be acquainted with the basic nuances of language and different genres of literature. |
|-------|---|
| PSO2 | It will also enhance their linguistic and literary competence to the effect of understanding human psyche and developing concern for others. |
| PSO3 | Students will be exposed to the best examples of literature in English which will contribute to their emotional quotient as well as independent thinking. |
| PSO4 | It will instill universal human values through exposure to the best pieces of literature in English. |
| PSO5 | Students will develop effective communication skills by developing ability to use right words in the right context. |
| PSO6 | It will enhance employability of the students by developing their basic soft skills |
| PSO7 | It will revise and reinforce the learning of some important areas of grammar for better linguistic competence. |
| PSO8 | Students will become familiar with some excellent pieces of prose and poetry in English and realize the beauty and communicative power of English. |
| PSO9 | It will enable students to become competent and effective users of English in real life situations. |
| PSO10 | It will contribute to the overall personality development of the students. |
| PS011 | It will instill humanitarian values and foster sympathetic attitude in the students. |
| PS012 | Students will be trained in practical writing skills required in work environment. |
| PS013 | Learners will gain knowledge of some essential soft skills to enhance their employability. |

Name of the Programme: M.A. English

| PSO1 | The rationale for studying Literature in English is that it primarily reinforces the guiding principles for education reform outlined in the UGC guidelines. |
|------|--|
| PSO2 | The Literature component in English Curriculum will provide learners with learning experiences to appreciate and enjoy literature, encourage self-expression and creativity, enhance their critical and analytical skills, improve their competence in the use of English, develop their cultural understanding as well as positive values and attitudes conducive to lifelong learning, and prepare them for further study or work. |
| PSO3 | Learners will be enabled to appreciate and enjoy a wide range of literary or creative texts and to appreciate other related cultural forms. |
| PSO4 | The curriculum will help learners to develop a humanistic outlook of life. |
| PSO5 | Through a close interaction with literary/creative works, which portray a range of human thoughts, emotions and experiences, learners will gain knowledge and an understanding of the nature of human existence and of the world. |
| PSO6 | Through Indian Writing in English students will be exposed to the rich cultural heritage of Indian literary tradition as it adopts various literary forms and also addresses different issues. |
| PSO7 | Applied Linguistics aims to focus on practical aspects of language so students will be enabled to understand the social dimensions of not only English but also their own languages |
| PSO8 | American Literature will provide students a general introduction to the major texts that led to the evolution of American literature as an independent branch of literature in English. |
| PSO9 | World Literature in English will offer students glimpses of the representations of cultural diversities and technical experiments that the authors try to project in the selected works. |

Name of the Programme: B.A. Economics

| PSO1 | After successfully completing the B.A. Economics program students will be able to develop: Communication Skills: A Graduate Students in Arts/Social Sciences /Humanities shall be confident to speak, write, read, listen and understand the English Language and one or more Indian Language. Relate the ideas, knowledge, books, and people. |
|------|---|
| PSO2 | Social Responsibility: Develops an obligation to act for the benefit of society at large. Cultivates the responsibility to maintain a balance between the economy and the ecosystem. |
| PSO3 | Critical, Logical and Rational Thinking: Acquire the ability for objective, rational, sceptical, logical and unbiased analysis of factual evidence to form a judgement or conclusion. Enhance the process of rational thinking, problem solving and analytical evaluation from different perspectives. |
| PSO4 | Enlightened and Effective Citizenship: Cultivates progressive citizenships for a knowledge society for peace and prosperity of nation and the world. Develops clear, rational and progressive thinking. |
| PSO5 | Values and Ethics: Recognizes the importance, worth and usefulness of principles and standards of behaviour, moral dimensions of one's own decisions and judgement of what is important in life. Understand the rules of behaviours based on systematizing, defending and recommending the concepts of right and wrong. |
| PSO6 | Sustainable Development: Understand, organizes and promotes the principle of human development goals by sustaining the ability of naturals resources and ecosystem services upon which the economy and society depends. |
| PSO7 | Life-Long process of learning: Cultivators the proficiency to engage in independent, life-long Learning. |

Name of the Programme: M.A. Economics

| PSO1 | After successfully completing the M.A. Economics program students will be able to:MA Economics Program provides a rigorous approach to the study of economic theory while offering students enough flexibility to take electives in the department in order to tailor their study to their professional goals. |
|------|--|
| PSO2 | The MA program specializes in advance applied economic research and prepares the students for a sound preparation for progression to doctoral study. |
| PSO3 | Take a rigorous quantitative approach to economic problems. Enroll in a doctoral program. |
| PSO4 | Advance professionally and to compete for well-paying jobs across a broad spectrum of industries and sectors. |
| PSO5 | Some of the major areas that will be covered: Microeconomics, Macroeconomics, Econometric methods, Financial Markets and Institutions, Economic growth & Development, Agriculture Economics, International Economics, Monetary Economics, Environmental Economics. |
| PSO6 | Students could analyze and evaluate positions on economic issues, showing that they can break an economic issue down into the various economic principles and concepts that form the basis of the position and identify the competing sides on the issue. |
| PSO7 | Students will critique an economic position in terms of the accuracy of its representations of economic principles and concepts and the soundness of its use of those concepts and principles to make a claim about economics. |
| PSO8 | Students will solve real-world economic problems effectively in the context of an industry or field of study, showing that they can identify |

| | and collect the appropriate economic data, analyze data in terms of costs |
|------|---|
| | and benefits, present economic data and solutions to problems in a way |
| | that is clear and accurate, and come to a reasoned judgment concerning |
| | benefits within the constraints of costs and can express that judgment |
| | convincingly for an audience who must act on it. |
| | Students will explain economics to lay audiences, showing that they can |
| PSO9 | translate economic concepts and principles into terms that can be |
| | understood by both general and specific audiences. |

Name of the Programme: B.A. Hindi

| PSO1 | बी.ए. हिंदी प्रोग्राम पूर्ण करने के पश्चात छात्र हिंदी के गद्य पद्य रचनाकारों, से परिचित हो जाता है। |
|------|--|
| PSO2 | हिंदी साहित्य के प्रति रूचि बढ़ती है तथा हिंदी की विविध विधाओं का परिचय प्राप्त होता है। |
| PSO3 | छात्रों में नैतिक मूल्यसामजिक मूल्य के प्रति आस्था ,राष्ट्रीय मूल्य , निर्माणहोती है। |
| PSO4 | सारांश लेखनकल्पना शक्ति को ,निबंध लेखन के माध्यम से विचार क्षमता , बढ़ावामिलता है। |
| PSO5 | छात्रों में पारिभाषिक शब्द ,विज्ञापन, भेंट वार्तारिपोर्ट लेखन के माध्यम से , हिंदी के व्यावहारिक पक्ष से परिचय होता है। |
| PSO6 | छात्रों में अनुवाद करने की कला का विकास होता है। |
| PSO7 | छात्रों में राष्ट्रीय ऐक्यवैज्ञानिकता के प्रति ध्यान ,सामजिक उत्तरदायित्व , आकर्षितहोता है। |
| PSO8 | छात्रों में राष्ट्र के प्रति प्रेम एवं सामाजिक प्रतिबद्धता की भावना विकसित होती है। |

Name of the Programme: B.A. Politics

| PSO1 | The students will have thorough understanding about theories, principles and basic concepts of Political Science. |
|-------|---|
| PSO2 | Understanding the nature and developments in national and international politics. |
| PSO3 | Analysing the Indian constitutional provisions, major legislations and reforms. |
| PSO4 | Critical evaluation of social, economic and political variables for a proper understanding of the plurality of Indian society |
| PSO5 | Building overall consciousness regarding national political history, international relations and present Indian and Western political thinkers. |
| PSO6 | Encouraging a comprehensive, comparative understanding of specific world constitutions such as UK, USA, China, Russia, Switzerland and France. |
| PSO7 | Developing knowledge of administrative studies with special reference to Indian administrative structures and practices. |
| PSO8 | Examining India's foreign relations with her neighbours and great powers. |
| PSO9 | Use of case study method for analysing the working of important international and regional organisations like UN, EU, ASEAN etc. |
| PSO10 | Demonstrate substantive understanding of governmental and political processes in a global context including mastery of key concepts. |
| PSO11 | Conduct political analysis using a range of qualitative and quantitative tools. |

| PSO12 | Reason analytically to evaluate causal claims in Political Science. |
|-------|---|
| PSO13 | Demonstrate a capacity, in both oral and written communication to present arguments cogently and ground them in empirical evidence. |

Name of the Programme: B.A. Statistics

| PSO1 | At the end of B.A. Statistics programme, Students are able: To apply various continuous probability distributions in real life situations. |
|-------|---|
| PSO2 | To apply the appropriate probability model that can be used in real life. |
| PSO3 | To solve the real life situation by using various techniques of Operations Research. |
| PSO4 | To test various hypotheses of significance like means, proportions, independence of attributes, variance etc. included in theory (using calculators, software). |
| PSO5 | To apply the statistical tools in the field of design of experiments, estimations, operations research, etc. |
| PSO6 | To conduct research project by using real field survey based on Statistics. |
| PSO7 | To set the model for population growth, epidemiology, design and analyse clinical trial data. |
| PSO8 | To estimate various effects occurs in time series data using regression analysis. |
| PSO9 | To analyse real life time series data related to Economics, Commerce, Weather etc. |
| PS010 | To analyse data with suitable software and interpret results. |
| PSO11 | To apply data cleaning tools and data mining process. |
| PSO12 | To apply various types of classification techniques. |
| PS013 | To apply Artificial Neutral Network (ANN) and Support Vector Machine (SVM) in real life. |
| PSO14 | To solve the problems of replacement theory, inventory, decision theory, game theory and sequencing. |

Name of the Programme: B.A. Urdu

| PSO1 | After successfully completing the B.A. Urdu program students will be able to:Understand Fundamental knowledge of Origin and Evolutionary development of Urdu Language. |
|-------|--|
| PSO2 | An attitude for working effectively and efficiently in Urdu language and Literature. |
| PSO3 | Understand the History of Urdu short stories, Novel, Drama, fiction writers and the techniques |
| PSO4 | Applying knowledge and skills to sustain in an environment of learning and creativity. |
| PSO5 | Awareness about Literary Criticism, Principles of Literary Criticism and its development. |
| PSO6 | Capable of making decisions at personal and professional level. |
| PSO7 | Understand the different areas of Urdu Prose and Poetry. |
| PSO8 | Students are able to make decisions to undertake higher studies and research in language, literature and allied disciplines. |
| PSO8 | To express their ideas with literary efficiently and effectively |
| PSO9 | Develop the ability to work at individual level as well as at team level. |
| PSO10 | Be able to integrate latest technology and apply techniques. |
| PSO11 | Have skills to develop aesthetic sense and be responsible global citizens who exhibit cross cultural competent behavior, and ethical values. |

Name of the Programme: M.A. Urdu

| PSO1 | After successfully completing the M.A. Urdu program students will be able to:to make decisions to undertake higher studies and research in Urdu and allied disciplines. |
|-------|---|
| PSO2 | Identify, review research literature, and analyses complex situations Of living forms. |
| PSO3 | Provides knowledge and skill required for research methodology in field of Urdu. |
| PSO4 | Students will be able to understand the history of Urdu literature, critic and school of thoughts. Learning of essay writing. |
| PSO5 | Create, select, and apply appropriate techniques, resources, and ICT tools for understanding of the subject. |
| PSO6 | Knowledge about various kind of Urdu Poetry, Ghazal, Naat, Qasida, Marsia, Nazm, Masnavi and their poets and the techniques. |
| PSO7 | Obtaining more information about language and literature; encouraging creative writing and developing self-confidence. |
| PSO8 | Apply ethical principles and commit to professional ethics and responsibilitiesand norms of the work/research practice. |
| PSO9 | Function effectively as an individual, and as a member orleader in diverse teams, and in multidisciplinary settings. |
| PSO10 | They can apply critical frameworks to analyze the linguistic, cultural and historical background of texts written in Urdu. |
| PSO11 | Developing intellectual, personal and professional abilities through effective communicative skills; ensuring high standard of behavioral attitude through literary subjects and shaping the students socially responsible citizens. |
| PSO12 | Students are able to apply for employment as teacher, academics, journalist and translators. |
| PSO13 | Students will be familiar with the conventions of diverse textual genres including fiction, non-fiction, poetry, autobiography, biography, Journal, film, plays, editorials etc. |

Name of the Programme: B.Com.

| PSO1 | By the end of the B.com degree course, the students will have gained knowledge, skills, and attitudes. |
|------|--|
| PSO2 | They can become a Manager, Accountant, Management Accountant, cost Accountant, bank manager, auditor, company secretary, teacher, professor, stock agents, government employment, and so on based on the quality of their preparation. |
| PSO3 | Students will demonstrate their abilities in a variety of professional exams such as the C.A., C.S., CMA, MPSC, and UPSC. As well as other forms of coercion. |
| PSO4 | In the area of communication, problem solving, and decision- making, the students will learn and utilize these concepts, skills, and abilities in their day-to-day business activities. |
| PSO5 | Students will obtain an extensive body of knowledge on accounting, auditing, taxation, management, communications, and computers. |
| PSO6 | In addition to having a firm grasp of financial accounting and tax accounting, students also acquire valuable working experience in the following areas: auditor, audit assistant, tax consultant, and computer operator. In addition to financial support, which includes several other support services. |
| PSO7 | Students will learn advanced accounting skills that will help them as they seek new career opportunities in business. |
| PSO8 | Students will be able to obtain their advanced studies, research in finance and commerce, and participate in academia. |

Name of the Programme: M.Com.

| PSO1 | This curriculum aims to prepare students for the modern fields of financial and accounting. Some careers include accounting, marketing and publicity, banking, business administration, management consulting, business development, business analysis, fund management, international business and business analyses, policy creation, portfolio management in the commercial and governmental sectors. |
|------|--|
| PSO2 | Identify knowledge-based accounting principles as well as the most up-to-date application-oriented corporate accounting processes and procedures. |
| PSO3 | Develop decision-making skills via costing strategies and using management accounting principles practically. |
| PSO4 | It makes a student more prepared to face the most recent economic issues, fashion trends, and market conditions. It also assists in comprehending commerce, trade, and business, as well as providing information. |

Name of the Programme: B.B.A.

| PSO1 | Students shall develop knowledge and understanding of importance and functions of Marketing and its theories |
|--------------|---|
| PSO2 | Students shall understand Key features of Sales Promotion activities |
| PSO3 | Students shall develop knowledge and understanding of importance and functions of advertising |
| PSO4 | Students shall understand Key features of Sales Promotion |
| PSO5 | Students shall understand Marketing strategies and Market segmentation |
| PSO6 | Students shall understand and prepared a project report on various topics of Marketing |
| PSO7 | Students learnt the interpretation and analysis of financial statements effectively. |
| PSO8 | The student got well acquainted with current financial practices |
| PSO9 | Students became intensive users of financial statements |
| PSO10 | Students got the capability to make long-term financing decisions. |
| PSO11 | Students got aware of various financial services and financial markets in India. |
| PSO12 | The student understood and prepared a project report on various topics of finance. |
| PSO13 | Student got aware of Recruitment and Selection process ,different types of training methods, development and evaluation system in HR. |
| PSO14 | Student learned how to prepare Personnel records reports and audit. |
| PSO15 | Students got acquainted to Strategic HRM and New trends in HRM. |
| PSO16 | Student got aware of Working Conditions & Welfare facilities at workplace. |
| PSO17 | Students learned different Employee Grievance, Discipline and disputes with machinery of settlement of such disputes. |
| PSO18 | Students are aware of different Labour Laws in India. |

Name of the Programme: BBA-CA

| PSO1 | After successfully completing the BBA-CA program Students will be able to: Understand the fundamental concepts of Computers, Business environment and IT Applications in Business. |
|------|--|
| PSO2 | Understand & analyze technical data to reach actionable conclusions, including technological solutions to the business |
| PSO3 | Learn technologies & IT languages, so the business problems could be addressed. |
| PSO4 | Develop competent technical writing skills so as to enable the graduate to communicate business ideas to senior management and general public. |
| PSO5 | Identify and sharpen their IT/ programming skills. |
| PSO6 | Enhance necessary technical as well as basic managerial and financial procedures to analyze and solve real world problems within their work domain. |

Name of the Programme: B.Sc. Botany

| PSO1 | B.Sc Botany program will equip students with subject domain knowledge and technical skills pertaining to plants in a holistic manner. |
|-------|--|
| PSO2 | Students will be able to understand the diversity in flora using different systems of classification studied during the program. |
| PSO3 | Students will be able to apply cutting-edge technologies such as tissue culture, genetic engineering, etc. in various fields. |
| PSO4 | Students will be able to apply knowledge of internal structure and functions of plant cell and its organelles. |
| PSO5 | Students will be well versed with morphology, anatomical features and life cycles of lower & higher cryptogams. |
| PSO6 | Students will be able to understand the essential metabolic pathways in plants, their significance and applications in industries, horticulture & agriculture. |
| PSO7 | Students will be well versed with morphology, anatomical features and life cycles of phanerogams. |
| PSO8 | The process of fossilization, types of fossils, their importance in phylogeny & classification will be clearly understood by students. |
| PSO9 | Students will have detailed knowledge of structure of biomolecules, their synthesis and applications in human welfare. |
| PSO10 | Physiology of flowering, role of phytohormones and their applications in horticulture & agriculture will be clearly understood. |
| PSO11 | Students will be aware of threats to biodiversity and measures to conserve by <i>in - situ</i> & <i>ex - situ</i> methods. |
| PSO12 | Students will be aware about the social and environmental issues, significance of plants and their relevance to national economy. |
| PSO13 | Detailed knowledge on seed technology will help students apply this in their own agricultural fields, acquire jobs or educate progressive farmers. |
| PS014 | Plant pathological studies will enhance skills of disease identification in the field and application of control measures. |

| PSO15 | Studies in genetics & molecular biology will make students understand the pattern of inheritance to be applied during hybridization and also motivate them towards research. |
|-------|---|
| PSO16 | Knowledge on economic importance of different plant groups will help students apply this in industries such as pharmaceuticals, biofertilizers, fermentation, enzyme production, production of antibiotics, SCP, etc. |
| PS017 | Skill enhancement courses will help students become self employable. |
| PSO18 | Education on medicinal plants & ethnobotany will open avenues for research & entrepreneurship for students. |

Name of the Programme: B.Sc. Chemistry

| PSO1 | The students will understand the existence of matter in the universe as solids, liquids, and gases which are composed of molecules, atoms and sub atomic particles. |
|-------|---|
| PSO2 | Students will learn to estimate inorganic salt mixtures and organic compounds both qualitatively and quantitatively using the classical methods of analysis in practical classes. |
| PSO3 | Students will grasp the mechanisms of different types of reactions both organic and inorganic and will try to predict the products of unknown reactions. |
| PSO4 | Students will learn to synthesize the chemical compounds by manoeuvring the addition of reagents under optimum reaction conditions. |
| PSO5 | Gain the knowledge of Chemistry through theory and practical. |
| PSO6 | To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions. |
| PSO7 | Identify chemical formulae and solve numerical problems. |
| PSO8 | Use modern chemical tools, Models, Chem-draw, Charts and Equipment. |
| PSO9 | Know structure-activity relationship. |
| PSO10 | Understand good laboratory practices and safety. |
| PS011 | Develop research-oriented skills. |
| PSO12 | Make aware and handle the sophisticated instruments/equipment. |

Name of the Programme: M.Sc. Organic Chemistry

| PSO1 | Understanding the principles and rules used in Chemistry. |
|------|---|
| PSO2 | Advanced physical, inorganic and organic chemistry. |
| PSO3 | Become a skillful and research oriented chemist. |
| PSO4 | Build up the knowledge of multidisciplinary subject i.e. Chemistry biology interface. |
| PSO5 | Knowledge of advanced instruments used in research and development |
| PSO6 | Knowledge of natural products and synthesis of carbohydrates |
| PSO7 | Innovations and creativity. |

Name of the Programme: B.Sc. (Computer Science)

| PSO1 | B.Sc. (Computer Science) is systematically designed three year course that prepares the student for a career in Software Industry. |
|------|--|
| PSO2 | The Syllabus of computer Science subject along with that of the three allied subjects (Mathamatics, Electronics & Statistics) forms the required basics for pursuing higher studies in computer science. |
| PSO3 | The syllabus also developed requisite professional skills and problem solving abilities for pursuing the career in Software Industy. |
| PSO4 | To build the necessary skill set and analytical abilities for developing computer based solution for real life problems. |
| PSO5 | To imbibe quality software development practices. |
| PSO6 | It creates awareness about process and product standards. |
| PSO7 | It prepares necessary knowledge base for research and development in computer science. |
| PS08 | It develops skill set for solving computational problems. |

Name of the Programme: M.Sc. (Computer Science)

| PSO1 | M.Sc. (Computer Science) credit base system will bring a qualitative change in the students. |
|------|--|
| PSO2 | It offers a more enriched learning experience. |
| PSO3 | It aims to provide technology- oriented students with the knowledge and ability to develop creative solutions. |
| PSO4 | To better understand the effects of future developments of computer systems and technology or people and society. |
| PSO5 | It is about developing skills to learn new technology, grasping the concepts and issues behind its use and the use of computers. |

Name of the Programme: B.Sc. Electronics

| PSO1 | To provide in depth knowledge of scientific and technological aspects of electronics |
|-------|--|
| PSO2 | To familiarize with current and recent technological developments |
| PSO3 | To enrich knowledge through programmes such as industrial visits, hobby projects, market survey, projects etc. |
| PSO4 | To train students in skills related to electronics industry and market. |
| PSO5 | To create foundation for research and development in Electronics |
| PSO6 | To develop analytical abilities towards real world problems |
| PSO7 | To help students build-up a progressive and successful career in Electronics |
| PSO8 | To equip student with necessary fundamental concepts and knowledge base. |
| PSO9 | To develop specific practical skills. |
| PSO10 | To impart training on circuit design, analysis, building and testing. |
| PSO11 | To prepare students for demonstrating the acquired knowledge. |
| PSO12 | To encourage student to develop skills for accepting challenges of upcoming technological advancements. |

Name of the Programme: M.Sc. Electronics

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| PSO1 | The credit system to be implemented through this curriculum, would allow students to develop a strong footing in the fundamentals and specialize in the disciplines of his/her liking and abilities. |
|-------|--|
| PSO2 | The students pursuing this course would have to develop in depth understanding various aspects of the subject. |
| PSO3 | Knowledge of basic/fundamentals of Electronic Science towards the advanced science and technology. |
| PSO4 | Students will understand and able to explain different branches of Electronic Science such as Analog and digital system design, Control System with fuzzy logic and neural network, Internet of Things (IoT), Advanced communication system, Fundamentals and applications of different Microcontrollers, Mechatronics and Robotics. |
| PSO5 | Students are able to design Circuit through different software like Proteus, PSPICE. |
| PSO6 | The detail understanding of programming language such as C, embedded C or C++, Matlab, Verilog. |
| PSO7 | The ability to analyze Electronics and Communication problems. |
| PSO8 | The ability to understand and apply the knowledge in development of various electronics systems such as power electronics, control systems, advanced communication systems, mechatronics and robotics. |
| PSO9 | To become developer or researcher to satisfy the needs of the Electronics industry. |
| PSO10 | To develop innovative electronics systems. |
| PSO11 | The ability to use their skill and knowledge for starting their entrepreneurship |
| PSO12 | Finally students will be able to understand the technical writing, to produce project reports and to present scientific presentations |

Name of the **Programme:** B.Sc. Geology

| PSO1 | The student graduating with the Degree B.Sc. Geology should: Acquire a solid base of knowledge in the science of geology as a whole as well as earth materials, earth history, sedimentation and stratigraphy, deformational processes and structural features, and geomorphic processes and landforms. |
|-------|---|
| PSO2 | Know the geologic time scale and place important geologic events in a temporal framework |
| PSO3 | Use compasses, survey instruments, and images in geological investigations |
| PSO4 | Understand the pathways, fluxes, and influence of water and other fluids at Earth's surface and in the subsurface |
| PSO5 | Interpret topographic maps and terrain models and create profiles |
| PSO6 | Interpret geologic maps and construct cross sections from them |
| PSO7 | Interpret geophysical measurements of subsurface properties |
| PSO8 | Distinguish between various structural features and determine the types of stress responsible for their formation |
| PSO9 | Describe and interpret types of surfacial deposits and landforms |
| PSO10 | Apply principles of mathematics, chemistry, and physics to geologic problems |
| PSO11 | Develop proficiency in conveying complex geologic concepts in clear, technically correct writing. |
| PS012 | Develop proficiency in oral communication of complex geologic concepts |
| PSO13 | Develop the aptitudes and dispositions necessary to help democratize society by obtaining and maintaining employment as a professional geologist. |

Name of the Programme: B.Sc. Mathematics

| PSO1 | Give the students a sufficient knowledge of fundamental principles, methods and a clear perception of innumerous power of mathematical ideas and tools and know how to use them by modeling, solving and interpreting. |
|------|---|
| PSO2 | Reflecting the broad nature of the subject and developing mathematical tools for continuing further study in various fields of science and technology. |
| PSO3 | Enhancing students' overall development and to equip them with mathematical modeling abilities, problem solving skills, creative talent and power of communication necessary for various kinds of employment. |
| PSO4 | Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study. |
| PSO5 | To equip the students sufficiently in both analytical and computational skills in Mathematical Sciences. |
| PSO6 | To develop a competitive attitude for building a strong academic - industrial collaboration, with focus on continuous learning skills |
| PSO7 | Enabling students to Gauge the hypothesis, theories, techniques and proofs provisionally. |

Name of the Programme: B.Sc. Physics

| PSO 1 | After successful completion of B.Sc. Physics programme students will be able to: understand Newton's laws and apply them in calculations of the motion of simple systems. |
|-------|---|
| PSO 2 | Can apply the concepts of surface tension and viscosity and be able to perform calculations using them. |
| PSO 3 | Can explain the atomic excitation and LASER principles. |
| PSO4 | Will be able to differentiate the types and sources of electromagnetic waves and applications. |
| PSO 5 | Quantitative problem solving skills will be developed. |
| PSO6 | Gain the knowledge of the properties of and relationships between the thermodynamic properties of a substance |
| PSO7 | The students will be able to analyze the refrigerators, heat pumps and calculate coefficient of performance. |
| PSO8 | The students will be able to understand the concept of the electric force, electric field and electric potential for stationary charges. |
| PSO9 | The learners will be able to understand vector algebra useful in mathematics and physics |
| PSO10 | Apply different theorems and laws to electrical circuits. |
| PS011 | Will know the parameters, characteristics and working of transistors |
| PS012 | Recognize the principles of oscillations and it's scope in development. |
| PS013 | Explain oscillations in terms of energy exchange with various practical applications. |
| PS014 | To acquire the basic concept of wave optics. |
| PS015 | Use different mathematical methods to solve differential equations related to Physics problems. |
| PS016 | Use the basics of electrodynamics. |
| PS017 | Gain the knowledge of the basic concepts in Classical Mechanics. |

| PS018 | Understand the dynamics of scattering process and planetary motion. |
|-------|--|
| PS019 | Understand the basic concepts and use of different spectroscopy. |
| PSO20 | Able to use different numerical methods used to solve Physics problems. |
| PS021 | The students will be able to understand the basic concepts and syntax of Python programming. |
| PSO22 | The students will be able to use different mechanical and electrical measuring instruments in Physics experiments. |

Name of the Programme: B.Sc. Zoology

| PSO1 | After successfully completing the B.Sc. Zoology program students will be able to: Understand fundamental concepts of taxonomy and diversity of animal life. |
|-------|--|
| PSO2 | Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms. |
| PSO3 | Understand the animal physiology studying the different physiological processes in lower vertebrates. |
| PSO4 | Understand the Systematic position, external morphology and various systems like digestive, respiratory, circulatory, excretory, reproductive, nervous system of different vertebrate and invertebrates representative animals. |
| PSO5 | Understand the types of animal tissue and cellular architecture of different tissues. |
| PSO6 | Understand the biochemical functions and mechanisms of different biomolecules to keep the animal organ and body functional. |
| PSO7 | Understand the environmental conservation processes and its importance, |
| PSO8 | Describe the measures undertaken to control environmental pollution and protect biodiversity and endangered species. |
| PSO9 | Understand the biology of various parasites and pathogens of human and domestic animals. |
| PSO10 | Apply the knowledge of cell biology to explain various types of tumors. |
| PSO11 | Gain knowledge about various tools & techniques used in biological systems and gives them insight about their use in research. |
| PSO12 | By applying the knowledge of metabolic and physiological mechanisms of the animal body, students will be able to identify various diseases and infections. |
| PS013 | Apply the knowledge of genetics in various human welfare programs. |

| PSO14 | Understands the complex evolutionary processes; origin and development of animals. |
|-------|--|
| PSO15 | Understand different developmental processes of animals Gametogenesis, Fertilization and early development. |
| PSO16 | How zoological principles can be applied to problems in public health and Hygiene, conservation and applied biology. |

Name of the Programme: M.Sc. Zoology

| PSO1 | After successfully completing the M.Sc. Zoology program students will be able to: Zoology knowledge: Apply the knowledge of Zoology, Life Sciences and allied subjects to the understanding of complex life processes and phenomena. |
|------|--|
| PSO2 | Problem analysis: Identify, review research literature, and analyse complex situations of living forms. |
| PSO3 | Design/development of solutions: Design processes/strategies that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. |
| PSO4 | Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions in real situations. |
| PSO5 | Modern tool usage: Create, select, and apply appropriate techniques, resources, and ICT tools for understanding of the subject. |
| PSO6 | The Postgraduate and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. |
| PSO7 | Environment and sustainability: Understand the impact of the natural and anthropogenic activities in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. Identify a range of invertebrates and vertebrates and justify their conservation. |
| PSO8 | Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the work/research practice. |
| PSO9 | Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. |

| PSO10 | Communication: Communicate effectively on complex life activities with the scientific community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. |
|-------|--|
| PS011 | Project management and finance: Demonstrate knowledge and understanding of Zoology and management principles and apply these to one's own work, as a member and leader in a team. |
| PSO12 | Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. |