

**ISLAMIAH COLLEGE(AUTONOMOUS),  
VANIYAMBADI  
PROGRAMME SPECIFIC OUTCOME (PSO)**

**DEPARTMENT OF BUSINESS ADMINISTRATION (B.B.A)**

- PSO 1 Acquire fundamental education in management and business principles
- PSO 2 Determine the functional areas of management such as Purchasing, Production, Marketing, Advertising, Finance and Human Resources system
- PSO 3 Apply the managerial knowledge in the business for effective decision making
- PSO 4 Analyse the socio-political, economic environment of Business Organisation
- PSO 5 Identify, evaluate, analyse, interpret and apply information to address managerial issues and problems and take appropriate decisions in a business context
- PSO 6 Identify characteristics and role of leader, manager, group roles which help students to possess effective communication skills and to respond appropriately
- PSO 7 Communicate in a business context in a clear, concise, coherent and professional manner
- PSO 8 Formulate the students to acquire employment in various emerging areas of administration
- PSO 9 Build-up self-confidence and competency to take up self-employable business ventures
- PSO 10 Exhibit inclination towards pursuing professional course such as MBA

**DEPARTMENT OF ENGLISH**

**B.A -ENGLISH**

**PSO-1:** Recognize the unique importance of English that has played a crucial role in building the modern India.

**PSO-2:** Revise a social context which in turn helps him to create the team spirit of working.

**PSO-3:** Review the beauty of nature and the quality of natural environment and truly believe

sustainable development.

**PSO-4:** Measure the real meaning and value of intellectual discipline.

## **MA- ENGLISH**

**PSO-1:** Gain the choice of words to suggest a particular message to express and accumulation of ideas.

**PSO-2:** Recognize the exactness of the human problems like personal or professional, instantly without a question.

**PSO-3:** Make self-control, zeal and persistence and the ability to motivate oneself.

**PSO-4:** Enhance to draft, revise and edit the passage and to feel like a Journalist or an art dramatist.

## **DEPARTMENT OF HISTORY**

### **B.A.- HISTORY**

**PSO1:** Enable them to build their careers as administrators, teachers, lawyers, police and defense personnel.

**PSO2:** The students cultivate a craving for historical research which would help them to develop critical thinking and analytical abilities.

**PSO3:** Students develop attitudes and values which help them to take part in the process of Social Progress, Nation Building, promoting National Integration, Harmony and Brotherhood.

**PSO4:** The students develop skills and values to promote the social standard of living.

**PSO5:** The students understand the national and international problems with historical background.

**PSO6:** The students appreciate the diverse nature of the society and respect different ethnicities, language and culture so as to be a global citizen.

## **M.A - History**

PSO1: Enable the students to comprehend the connectivity between the past and the present and stress the need for understanding the past to comprehend the present.

PSO2: Understand the significance of individuals in promotion of an effective state and society.

PSO3: Understand Current Affairs with special reference to international disputes and their impact on the chaotic world.

PSO4: Acquire skills like critical thinking and objective understanding for becoming a scientific historian.

PSO5: The student comprehend the History of the World, Nation and the State in order to have a clear understanding of the connectivity between different parts of the world.

PSO6: Comprehend the lives of great intellectuals of India and the State to imbibe characters and virtues that enabled them to be leaders.

## **DEPARTMENT OF COMMERCE**

### **BACHELOR OF COMMERCE**

**PSO1:** Perform Computerized Accounting using Tally Software and use computers for creating documents, spreadsheets and presentations

**PSO2:** Perform Accounting for the purpose of evaluating a business & its operations and assist in Business Decision Making for increasing profitability, decreasing costs, selection from various alternatives and Reporting the statements

**PSO3:** Organise & Manage Business operations, especially its Finances and Human Resources

**PSO4:** Understand and Apply the principles and techniques of communication, drafting necessary communications in the daily operations of a Business

**PSO5:** Analyse the Economic and Business Environment, utilize Statistical tools for data analysis and make decisions accordingly

**PSO6:** Understand the legal provisions with regard to operation of Business, Factories, Companies and GST

**PSO7:** Understand the principles and techniques of Business Domains such as Auditing, Marketing, Banking, E-Commerce, Insurance

**PSO8:** Understand the concepts of Income Tax and use it to compute Income Tax payable by Individuals and Firms

**PSO9:** Outline the services of various Governmental and Non-Governmental organisations for Entrepreneurs, and develop ambition to start own venture.

**PSO10:** Fill up and Process different forms related to Banking, Insurance, Office Communication, Cost Accounting, Income Tax and GST

## **DEPARTMENT OF COMMERCE (COMPUTER APPLICATIONS)**

### **B.Com (Computer Applications)**

**PSO1:** Understand the basic Concepts of Accounting, Management, Economics, Business Laws and Taxations and Computer Applications in Business.

**PSO2:** Analyse the relationship between Accounting, Management, Finance and Practical Applications of Computers in Business.

**PSO3:** Acquire accounting and computer skills to perform at their best in various capacities in a Business Environment.

**PSO4:** Able to prepare financial statements and Calculate Tax Liability of Individuals.

**PSO5:** Develop software solutions required to maintain, analyse and interpret data in business organisations.

## **DEPARTMENT OF COMMERCE (FINANCE & ACCOUNTS)**

### **B.Com (Finance & Accounts)**

**PSO1:** Understand the various Accounting, Finance, Business Law and Taxation policies in India.

**PSO2:** Enable to take up of various professional courses viz. CA, ICWA, CMA, CS etc. by providing the necessary inputs.

**PSO3:** Acquire an in-depth understanding of various accounting and taxation rules.

PSO4: Identify career oriented education and also engage in self-employment (entrepreneur).

## **DEPARTMENT OF MATHEMATICS**

### **B.Sc., Mathematics**

Students will

1. develop an appreciation of the basic concepts of Calculus, Analytical Geometry, Trigonometry, Linear Algebra, Abstract Algebra, Real Analysis and Complex Analysis, Differential Equations, Numerical Methods, Dynamics, Statics, Operations Research, Mathematical Statistics, Graph Theory, and Quantitative Techniques.
2. develop knowledge in computational programming.
3. develop a quest for knowledge which will pave way for doing Mathematics by students themselves.
4. learn many mathematical structures
5. gain the confidence to work in a team
6. construct and express logical arguments
7. develop generic skills that will pave way for their career.

### **M.Sc. - Mathematics**

Students will

1. develop an appreciation of the basic concepts of Algebra, Real Analysis, Complex Analysis, Differential Equations, Differential Geometry, Resource Management techniques, Mathematical Statistics, Probability theory, Tensor Analysis and Relativity Theory, and Number theory and Cryptography.
2. develop a quest for knowledge which will pave way for doing Mathematics by students themselves.
3. develop an analytical thinking and taste for research.
4. learn many mathematical structures

5. gain the confidence to work in a team
6. construct and express logical arguments
7. develop generic skills that will pave way for their career.

### **M.Phil Mathematics**

- Employ modern library research tools to locate and retrieve scientific information about a technique, topic related to different fields of Mathematics.
- Publications of their research work in the peer reviewed journals to benefit the society and career in research.
- Recognize the need for the preparation and ability to carry out an independent research.
- Ability to identify new problems arising from recent developments.
- Ability to conduct ethically and scientifically sound research in the chosen specialisation domain of Fuzzy set theory, Banach Algebra, Probability Models and Lie Groups.

## **DEPARTMENT OF PHYSICS**

### **B.Sc., Physics**

- |      |                                                                                                                                                                                                                                |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PS01 | Graduates will acquire a comprehensive knowledge of fundamentals of physics.                                                                                                                                                   |
| PS02 | Graduates will attain a systematic understanding of core physical concepts, principles and theories along with their applications in classical mechanics, optics, electricity, atomicphysics, nuclear physics and electronics. |
| PS03 | Students will show that they have learned laboratory skills enabling them to take measurements in a physics laboratory and analyse the measurements to draw valid conclusion.                                                  |
| PS04 | Students will realize and develop an understanding of the impact of physics and science on society.                                                                                                                            |

## **M.Sc., Physics**

- PSO1. Graduates will have fundamental and advanced level knowledge in physics like mathematical physics, condensed matter physics and crystal physics.
- PSO2. Select, interpret and critically evaluate information from a range of sources that include books, scientific reports, journals, case studies and the internet.
- PSO3. Be able to experimentally expertise in basic as well as advanced areas of physics.
- PSO4. Develop proficiency in the analysis of complex physical problems and the use of mathematical or other appropriate techniques to solve them.

## **M. Phil., Physics**

PSO1. Scholar will learn the approach to research methods.

PSO2. Scholar will be able to research independently and publish papers.

PSO3. Scholar will be guide their students in doing physics projects.

## **DEPARTMENT OF CHEMISTRY**

### **B.Sc. Chemistry**

**PSO1** To gain the knowledge of the basic facts and concepts in chemistry through theory and practical work so as to develop interest in the study of chemistry as a discipline.

**PSO2** To develop the skills in applying the principles of chemistry by the students in all possible ways.

**PSO3** To understand the nature and society by appreciating the role of chemistry through the recent developments in chemistry.

**PSO4** To understand the different industrial processes new research and developed methods and their applications.

**PSO5** To familiarize the applications of chemistry in various inter disciplinary subjects.

**PSO6** To develop knowledge in the functioning of chemical instruments and apparatus and in the proper methods of handling chemicals.

**PSO7** To develop skills in solving the problems arising out of industrial production and environmental pollution.

### **M.Sc. Chemistry**

**PSO1** To make them skill-oriented with Computer knowledge and its application in chemistry and make them aware of the software available to handle the subject and present the experimental data.

**PSO2** To make them understand the multi-dimensional aspects of chemistry as this subject deals with Quantum Chemical aspects and their application across Materials and sensors.

**PSO3** To make them understand the aspects of chemical reactivity and physical processes, thus try their hands on Molecular modeling, Drug discovery and process development.

- PSO4** To make them learn the benefits of natural materials and their usefulness by the extraction, structural elucidation and synthesis from naturally available sources.
- PSO5** To make them differentiate between the different branches of chemistry and to identify the highly resourceful areas.
- PSO6** To carry out any kind of projects in the quality control, research and process development in any kind of chemical industry to enhance the job opportunities of the students.
- PSO7** To gain adequate knowledge in the advanced subjects and gain confidence for appearing in the examinations for various competitive examinations connected with chemistry (JRF- CSIR, NET, UPSC etc.).

### **M.Phil. Chemistry**

- PSO1** To understand the various methodologies in research so that the students are able to carry out research programmes.
- PSO2** To gain knowledge in handling sophisticated instruments and carrying out experiments in the advanced level.
- PSO3** To understand the research opportunities in any field of chemistry with the assistance of a subject expert as a supervisor.
- PSO4** To carry out a dissertation work individually which could be extended as a full time research work.

## **DEPARTMENT OF BIOCHEMISTRY**

### **B.SC. BIOCHEMISTRY**

- Understanding of fundamental biochemical principles such as the structure-function relationship of biomolecules and metabolic pathways with clinical correlations.
- Demonstrate the structure and functions of various organs of human body, immune system- their malfunctions and diagnosis.
- Observe safety practices in the laboratory, follow proper procedures and regulations for safe use, analysis and disposal of chemicals/biological specimens and respond to emergencies in the laboratory.
- Integrate and apply the techniques in analytical biochemistry, clinical biochemistry microbiology, molecular biology and basics in computer and bioinformatics.
- Well poised to pursue carriers in academic, clinical, hospital, pharmaceutical, biotechnology and community services.

- Develop professional ethical, environmental and social responsibilities

## **M.Sc. Biochemistry**

### Programme Specific Outcome

- Demonstrate the synthesis and degradation of biomolecules along with their regulation at transcriptional, translational and post-translational levels.
- Demonstrate proficiency in branches like human physiology, nutrition, microbiology, enzymology, immunology, clinical biochemistry, endocrinology, ecology, biodiversity and biotechnology.
- Design, carryout and records the results of biochemical experiments using classical techniques, modern instruments and / or computers then analyze those results to draw reasonable, accurate conclusions.
- Employ modern library research tools to locate and retrieve scientific information about a technique, topic related to Biochemistry. Communicate biochemical concepts and experimental results through effective written and oral communications.
- Imbibe ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.
- Well poised to pursue career in academic, clinical, hospital, pharmaceutical, biotechnology and community services.

## **M.Phil. Biochemistry**

- Conduct independent work in laboratory
- Read scientific articles and guide critical understanding of the contents
- Give a spoken and written presentation of scientific topics and research results
- Present hypotheses and select, adopt and conduct molecular and cell based experiments to either conform or reject the hypotheses.
- Publications of their results from the research work in the peer reviewed journals to benefit the society and career in research

## **DEPARTMENT OF BIOTECHNOLOGY**

### **B.SC. BIOTECHNOLOGY**

**This B.Sc. Biotechnology programme will**

- PSO 1: Enable the students to acquire knowledge on the fundamentals of biotechnology and to be competent in the field of biotechnology and its associated areas.
- PSO 2: Empower the students to acquire technological knowhow enabling them to apply in industry and research.
- PSO 3: Mould the students to work as entrepreneurs and technologists with strong ethics and technical skills.
- PSO 4: Equip the students to pursue higher education and research in reputed institutes at state and national level.

### **M.Sc. BIOTECHNOLOGY**

- PSO 1: Acquire knowledge on the advancement in biotechnology for sound and solid base which enables them to understand the emerging and advanced genetic engineering concepts in life sciences.
- PSO 2: apply the acquired knowledge in domain of biotechnology in industry and research.
- PSO 3: Design, conduct experiments, analyze and interpret data for investigating problems in connecting disciplinary and interdisciplinary aspects of biotechnology.
- PSO 4: Facilitate the students to pursue Higher studies (M.Phil, Ph.D) in order to attain research positions. Various examinations such as CSIR-NET, SET, GATE, ICMR, DBT and many other opens channels for promising career in research.
- PSO 5: Avail the career opportunities with biotechnology background abroad where biotechnology is a rapidly developing field.
- PSO 6: Recognize the importance of Bioethics, IPR, entrepreneurship, Communication and management skills so as to usher next generation of Indian industrialists.

### **M.Phil. BIOTECHNOLOGY**

#### **M.Phil. Biotechnology scholars will be able to**

- PSO1 - Understand the current state of Biotechnology in their area of specialization.

- PSO2 - Formulate a hypothesis and conduct research using appropriate tools and techniques with in their focused area of Study.
- PSO3 – Communicate research results in Written and Oral Format.
- PSO4 - Effective Teaching and mentor of others.
- PSO5 - Recognize the need for the preparation and ability to carry out an independence research in broadest context of Biotechnological relevance.

## **DEPARTMENT OF COMPUTER SCIENCE**

### **B.Sc., (COMPUTER SCIENCE)**

On completion of the B.Sc.(Computer science) students are able to:

**PSO 1 :** Serve as the Programmers or the Software Engineers with the sound knowledge of practical and theoretical concepts for developing software.

**PSO 2 :** Serve as the Computer Engineers with enhanced knowledge of computers And its building blocks.

**PSO 3 :** Work as the Hardware Designers/Engineers with the knowledge of Networking Concepts.

**PSO 4 :** Work as the System Engineers and System integrators

**PSO 5 :** Serve as the System Administrators with thorough knowledge of DBMS.

**PSO 6 :** To Give Technical Support for the various systems.

**PSO 7 :** Work as the Support Engineers and the Technical Writers Work as Consultant and Management officers for system management.

**PSO 8 :** Work as IT Sales and Marketing person. Serve as the IT Officers in Banks and cooperative societies.

**PSO 9 :** Work as DTP Operator in small-scale industries.

**PSO 10 :** Serve as the Web Designers with latest web development technologies.

## **BACHELORS OF COMPUTER APPLICATIONS (BCA)**

On completion of the B.C.A. students are able to:

**PSO 1 :** Improve their computer literacy, their basic understanding of operative systems and a working knowledge of software commonly used in academic and professional environments.

**PSO 2 :** Develop criteria to organize and present different type of works in academic and professional environments.

**PSO 3 :** Learn how to organize information efficiently in the forms of outlines, charts, etc. by using appropriate software.

**PSO 4 :** Develop the skills to present ideas effectively and efficiently. do Academic and Professional Presentations - Designing and delivering an effective presentations and

**PSO 5 :** Developing the various IT skills to the electronic databases. Use the Systems Analysis Design paradigm to critically analyze a problem.

**PSO 6 :** Solve the problems (programming networking database and Web design) in the Information Technology environment.

**PSO 7 :** Function effectively on teams to accomplish a common goal and Demonstrate professional behavior.

**PSO 8 :** Develop IT-oriented security issues and protocols. design and implement a web page.

**PSO 9 :** Improve communication and business management skills, especially in providing technical support.

### **B.Sc.,( SOFTWARE COMPUTER SCIENCE)**

On completion of the B.Sc.(Software Computer science) students are able to:

**PSO 1 :** Serve as the Programmers or the Software developers with the sound knowledge of practical and theoretical concepts for developing software.

**PSO 2 :** Serve as the Software Professionals with enhanced knowledge of computers and its building blocks.

**PSO 3 :** Work as the System Designers/Engineers with the knowledge of Networking Concepts.

**PSO 4 :** Serve as the System Administrators with thorough knowledge of DBMS.

**PSO 5 :** To Give Technical Support for the various systems.

**PSO 6 :** Work as the Support Engineers and the Technical Writers Work as Consultant and Management officers for system management.

**PSO 7 :** Work as IT Sales and Marketing person. Serve as the IT Officers in Banks and cooperative societies.

**PSO 8 :** Can become entrepreneurs with software training institutes

**PSO 9 :** Serve as the Web Designers with latest web development technologies.

### **M.Sc., (COMPUTER SCIENCE)**

Masters degree holders can apply the methods and procedures of computer science to

**PSO 1 :** Design, implement, test, document, and maintain a computer-based system

**PSO 2 :** Apply research methods, techniques, and problem solving approaches from the field of research in which they are specializing

**PSO 3 :** Access, retrieve and evaluate relevant professional information reliably

**PSO 4 :** Analyze complex real-world problems and devise computer-based solutions

**PSO 5 :** Be receptive to new ideas and innovation

### **M.Phil.,(COMPUTER SCIENCE )**

At the end of the program, the research scholars will have the

**PSO 1 :** Ability to identify new problems arising from recent developments in and related to the chosen research domain within the discipline of Computer Science or Information Security.

**PSO 2 :** Ability to conduct ethically and scientifically sound research in the chosen specialisation domain of Computer Science or Information Security, respectively, within the bounds of the law and given due consideration of ethical and moral constraints.

**PSO 3 :** Ability to successfully conduct and manage research undertakings which may include aspects not only from the chosen research domain but also from other domains within the discipline of Computer Science or Information Security, respectively, and elements of interdisciplinary research involving diverse groups of individuals

**PSO 4 :** Ability to organise and participate in research and development through established national and international research frameworks.

**PSO 5 :** Capability to apply current abstract research and methods within the chosen research domain to specific problems in creative and innovative ways

