



## **PROGRAMME SPECIFIC OUTCOMES**

### **UNDER GRADUATE PROGRAMMES**

**PROGRAMME SPECIFIC OUTCOMES (PSO):** The Programme Specific Outcome (PSO) outlines the expected accomplishments of students in a particular academic program upon its completion. The PSOs detail the skills, knowledge, and abilities that graduates will possess upon completing the specific programme.

#### **B.A. ENGLISH**

At the end of **B.A. ENGLISH** Programme a student will have obtained:

**PSO1: Disciplinary Knowledge**

Capable of demonstrating comprehensive knowledge and understanding the discipline of Arts that forms an integral part of an undergraduate programme of study.

**PSO2: Communication Skills**

Quality in expressing the thoughts and ideas through appropriate media and vocabulary both orally and in written form and identify linguistics structures and sounds.

**PSO3: Critical Thinking**

Capability to apply analytical thinking to a body of knowledge, analyse ideas based on evidences and subject them to criticise for a fuller comprehension of the subject.

**PSO4: Research Related Skills**

Ability to inquire, ask appropriate/ relevant questions, recognise cause and effect relationships, analyse, interpret and draw conclusions from the text.

**PSO5: Reflective Thinking**

Critical thinking to reflect on the subject and relating it to the life experience.

**PSO6: Multicultural Competence**

Possess knowledge of values and beliefs of multiple cultures and capability to interact in multicultural groups.

**PSO7: Moral and Ethical Awareness**

Ability to embrace moral/ and ethical values to lead life. Capability to identify ethical issues related to one's work, avoid unethical behaviour such as plagiarism and adopt unbiased and truthful actions in all aspects of work.

**PSO8: Lifelong Learning**

Acquiring the skill of how to learn and gain knowledge so that learning becomes a lifelong activity through self-directed learning aimed at personal development.

**B.A. TAMIL**

At the end of **B.A. TAMIL** Programme a student will have obtained:

**PSO1: ஒழுக்கநெறிமுறைகள்**

அற இலக்கியத்தின் மூலம் அறக்கருத்துகளையும் ஒழுக்கநெறிமுறைகளையும் கடைப்பிடிக்கலாம்.

**PSO2: சுற்றுச் சூழல் நிலைத் தன்மை**

காப்பியங்கள், பண்டைய இலக்கியங்கள் மூலம் சுற்றுகூழல் பயன் மற்றும் மாசு அடையாவண்ணம் இயற்கையை பயன்படுத்தக் கற்றல்

**PSO3: பிழையின்றி எழுதும் திறன்**

குமிழை இலக்கண, இலக்கியப் பிழையின்றி எழுத முயல்வர்.

**PSO4: மனிதநேயத் தன்மை**

சமய இலக்கியங்கள் மற்றும் பிற இலக்கியங்கள் மூலம் மற்றவர்களுக்கு உதவும் தன்மையும், கொடுத்துதவும் நெறியையும் கற்றல்.

**PSO5: கலாச்சாரம், பண்பாடு அறிதல்**

சங்க இலக்கியங்கள் மூலம் அக்கால மக்களின் பழக்கம், பண்பாடு மற்றும் ஆடை, அணிகளான்கள் பற்றி அறியமுடியும்.

**PSO6: தொழில் சார்ந்த நெறிமுறைகள்**

எதிர்காலத்தில் வேலைவாய்ப்பைப் பெறவும், தொழில் தொடங்கவும், வாணிபம் செய்யவும் கற்றல்.

**PSO7: மொழி பெயர்ப்பு கலையை அறிதல்**

மொழிபெயர்ப்பின் அவசியத்தையும், வழிமுறைகளையும் கற்றல்

**B.A. HISTORY**

At the end of **B.A. HISTORY** Programme a student will have obtained:

**PSO1: Disciplinary Knowledge**

Understand background of our religion, customs institutions, administration and so on.

**PSO2: Design and Development**

Understand the present existing social, political, religious and economic conditions of the people.

**PSO3: Ethics**

Analyze relationship between the past and the present is lively presented in the history.

**PSO4: Environment Sustainability**

Develop practical skills helpful in the study and understanding of historical events. They:

- (a) Draw historical maps, charts, diagrams etc.
- (b) Prepare historical models, tools etc.

**PSO5: ICT & Digital Literacy**

Develop interests in the study of history and activities relating to history. They:

- (a) Collect ancient arts, old coins and other historical materials;
- (b) Participate in historical drama and historical occasions;
- (c) Visit places of historical interests, archaeological sites, museums.



## **B.Sc. MATHEMATICS**

At the end of **B.Sc. MATHEMATICS** Programme a student will have obtained:

- PSO1:** Help the students to enhance their knowledge in soft skills and computing skills.
- PSO2:** Enable the students to equip knowledge in various concepts involved in pure mathematics.
- PSO3:** Students are trained in an effective manner to attend the competitive exams in order to brighten their future.
- PSO4:** Enable the students to acquire knowledge in computer and to work in software fields.
- PSO5:** Facilitate students to acquire a flair knowledge in discrete mathematics, analysis and solve problems efficiently.
- PSO6:** Formulate and develop mathematical arguments in a logical manner.
- PSO7:** Students will learn numerical aptitude applying both qualitative and quantitative knowledge for their future career.
- PSO8:** Such courses help to communicate effectively on commercial aspects with the society at large.
- PSO9:** Fuzzy set theory imparts through knowledge in fuzzy mathematics which is very useful for the students to do their research program in future.
- PSO10:** Provide a systematic understanding of core mathematical concepts, principles and theories along with their applications.

## **B.Sc. PHYSICS**

At the end of **B.Sc. PHYSICS** Programme a student will have obtained:

- PSO1:** Demonstrate (i) a fundamental/systematic or coherent understanding of the academic field of Physics, its different learning areas and applications, and its linkages with related disciplinary areas/subjects; (ii) procedural knowledge that creates different types of professionals related to the disciplinary/subject area of Physics, including professionals engaged in research and development, teaching and government/public service; (iii) skills in areas related to one's specialization area within the disciplinary/subject area of Physics and current and emerging developments in the field of Physics
- PSO2:** Demonstrate the ability to use Physics skills such as formulating and tackling Physics-related problems and identifying and applying appropriate physical principles and methodologies to solve a wide range of problems associated with Physics.
- PSO3:** Recognize the importance of mathematical modelling and computing, and the role of approximation and mathematical approaches to describing the physical world.
- PSO4:** Plan and execute physics-related experiments or investigations, analyze and interpret data/information collected using appropriate methods, including the use of appropriate software such as programming languages and purpose-written packages, and report accurately the findings of the experiment/investigations while relating the conclusions/findings to relevant theories of Physics.
- PSO5:** Demonstrate relevant generic skills and global competencies such as (i) problem solving skills that are required to solve different types of physics-related problems with well-defined solutions, and tackle open-ended problems that may cross disciplinary-area



boundaries; (ii) investigative skills, including skills of independent investigation of physics-related issues and problems; (iii) communication skills involving the ability to listen carefully, to read texts and research papers analytically and to present complex information in a concise manner to different groups/audiences; (iv) analytical skills involving paying attention to detail and ability to construct logical arguments using correct technical language related to physics; (v) ICT skills; (vi) personal skills such as the ability to work both independently and in a group.

**PSO6:** Demonstrate professional behaviour such as (i) being objective, unbiased and truthful in all aspects of work and avoiding unethical behaviour such as fabricating, falsifying or misrepresenting data or to committing plagiarism; (ii) the ability to identify the potential ethical issues in work-related situations; (iii) appreciation of intellectual property, environmental and sustainability issues; and (iv) promoting safe learning and working environment

## **B.Sc. CHEMISTRY**

At the end of **B.Sc. CHEMISTRY** Programme a student will have obtained:

- PSO1:** Moral, Social values and responsibilities in the context of studying Chemistry as a discipline.
- PSO2:** Access and interpret information, respond and adapt to changing situations.
- PSO3:** Critical thinking, the Analytical mind, solving social issues.
- PSO4:** Skills necessary to live and work in a diverse world.
- PSO5:** Positive approach towards Environment and Ecology from the perspective of Chemistry.
- PSO6:** Entrepreneurial Skills and Employability Skills enable the students to find jobs/business in core-chemistry fields.
- PSO7:** Familiarized with the different branches of chemistry and their applications to apprise the students of its relevance in future studies.
- PSO8:** Cultivates the competency to synthesize, separate and characterize compounds using laboratory and instrumentation techniques.

## **B.Sc. BIOCHEMISTRY**

At the end of **B.Sc. BIOCHEMISTRY** Programme a student will have obtained:

- PSO1:** Students are able to gain knowledge and demonstrate their understanding of fundamental principles in Biochemistry such as structure and functions of Biomolecules, metabolism and regulation of biochemical process.
- PSO2:** Students are trained to gain skill in biochemical techniques and the ability to evaluate and apply scientifically in both experimentation and in real life situations.
- PSO3:** Students are inculcated with moral, ethical, scientific reasoning or issues surrounding biological process or research.
- PSO4:** Students are groomed to communicate their ideas and thoughts effectively and also apply their critical scientific approach in their knowledge development.
- PSO5:** Students are encouraged to acquire knowledge and skill throughout the life in order to meet the ever changing scenario in the society.





**PSO6:** Students are encouraged to articulately interpret and predict various cause and effect relationship inn biological process or investigation or research.

**PSO7:** Students are entrusted to work independently to enrich their skill and knowledge through various activities like seminar, Assignment, Quiz etc.

**PSO8:** Students are empowered to gain effective skill for their future growth with existing knowledge to identify their career in diverse fields.

## **B.Sc. MICROBIOLOGY**

**At the end of B.Sc. MICROBIOLOGY Programme a student will have obtained:**

**PSO1:** The Students will have a thorough understanding of basic concepts in Microbiology.

**PSO2:** The Students will gain knowledge of microorganisms to innovate.

**PSO3:** The Students will acquire knowledge of Microbiology and implement in day to day life.

## **B.Sc. ZOOLOGY**

**At the end of B.Sc. ZOOLOGY Programme a student will have obtained:**

**PSO1: Disciplinary knowledge**

The students will develop their ability to understand the basic concepts of zoology viz., animal kingdom, systematic classification, anatomy, morphology, physiology, embryology, evolution, ecology etc.

**PSO2: Critical thinking**

The students will obtain knowledge to express their concepts effectively by understanding their subject with various disciplines.

**PSO3: Scientific reasoning**

The students will have ability to identify, classify and describe various organisms from different phylum by understanding their structure and function of various organ system and relationship with their environment

**PSO4: Research-related skills**

The students will develop ability to explain structure and functions of a cell and organ (from molecular level to the organ system level) as well as the process of development of an embryo

**PSO5: Problem solving**

The students will acquire knowledge in cell biology, molecular biology, genetics, biotechnology, microbiology, biochemistry, biostatistics, developmental biology, immunology, animal physiology, environmental biology, evolution etc., which helps to develop their ability to analyse and solve various biological problems.

**PSO6: Cooperation/Team work**

The students will able to work effectively and respectfully with diverse team during vermiculture and mushroom culture practices

**PSO7: Information/digital literacy**

The students will able to use various biological softwares to analyze the data by obtaining knowledge in biostatistics, computational biology and biotechnology.

**PSO8: Self-directed learning**

The students will able to work independently to enhance their expertise through various activities like seminars, assignments, etc., and they can manage a project like vermiculture, mushroom culture, aquaculture etc., on completion of the course.



**PSO9: Moral and ethical awareness/reasoning**

The students will have the knowledge to minimize the environmental issues like global warming, pollution, degradation of natural resources, and helps in conservation endangered species, afforestation etc.

**PSO10: Lifelong learning**

The students will able to apply their knowledge of biological sciences in various disciplines like vermiculture, mushroom culture, aquaculture, apiculture, agriculture and medicine. And contribute the knowledge for Nations development.

**B.Sc. COMPUTER SCIENCE**

At the end of **B.Sc. COMPUTER SCIENCE** Programme a student will have obtained:

**PSO1: Disciplinary knowledge**

To acquire knowledge of mathematics and science with fundamentals of computer science to solve complex problems related to the field of Computer science.

**PSO2: Design and Development**

Ability to identify, formulate and analyze complex problems related to computer science and reaching a substantiated conclusion using mathematics and its applications

**PSO3: Ethics**

Ability to understand professional & ethical responsibility in the field of Computer Science.

**PSO4: Environment Sustainability:**

Understand the impact of the Computer professionals in societal and environmental contexts.

**PSO5: ICT & Digital Literacy:**

Capability to use appropriate software for analysis of data and relevant information from various sources for easy access and evaluation in variety of learning situation.

**B.C.A. COMPUTER APPLICATIONS**

At the end of **B.C.A. COMPUTER APPLICATIONS** Programme a student will have obtained:

**PSO1: Holistic Knowledge**

Apply the Knowledge gained through Algorithms, Mathematics, Statistics, Accounting to fields with Computer Applications.

**PSO2: Problem Analysis**

Capable of Identifying, Formulating, Reviewing and Analyzing problems were Computers are Applied.

**PSO3: Design and Develop Solutions and Project Management**

Ability to Design and Develop Applications for Complex Problem in real time with appropriate consideration to Cultural, Society and Environmental Consideration. Possess Knowledge and understanding of the Software Engineering Principles and apply this to a team as a team leader to achieve a specific goal.

**PSO4: State of the Art Tools and E-learning**

Able to Create, Select and Apply different state of the art software by proper understanding of its limitations. Capability to use ICT in a variety of learning situations, demonstrate ability to



access, evaluate, and use a variety of E-Learning Sources and use appropriate software for analysis of data.

**PSO5:Environment Sustainability**

Understand the impact of Computers when applied to various divergence fields in context of environment sustainability.

**PSO6:Ethics**

Apply Ethical Principle and commit to Professional Ethics and norms of Information Technology Practice.

**PSO7:Communication Skills**

Ability to Communicate Effectively, Write effective reports, Documentation, give and receive clear Instructions.

**PSO8: Analytical and critical thinking**

Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.

## B.Com. COMMERCE

At the end of **B.Com. COMERCE** Programme a student will have obtained:

**PSO1:** This Programme Provides Opportunity for Students to develop Critical and Analytical Thinking.

**PSO2:** The Students will be ready for Employment in Functional areas like Accounting, Taxation, and Banking by Acquiring Employability Skills.

**PSO3:** Develops Creativity and Innovative attitude among Students for Planning and Executing in the Competitive Business World.

**PSO4:** The Students will be Enriched, Equipped and Motivated to become Creative and Successful Entrepreneurs.

**PSO5:** This programme will provide Training and Opportunities to acquire Enhanced Communication and Inter-Personal skills to work in teams.

## B.Com. BANK MANAGEMENT

At the end of **B.Com. BANK MANAGEMENT** Programme a student will have obtained:

**PSO1: Disciplinary Knowledge**

The students will **acquire adequate and depth knowledge** in the various courses of commerce, banking, finance, management, accounting, taxation, marketing and auditing.



**PSO2: Design and Development**

The students can **exhibit business-related skills** in their behavior and attitude viz., leadership, teamwork, effective communication in oral and written, decision-making and problem-solving

**PSO3: Employable traits and career skills**

The students will **gain employable traits and career skills** to get placement in the field of banking, taxation, accounting and management

**PSO4: Environment Sustainability**

The students will **develop entrepreneurial traits and abilities** to start and manage their own business in a successful manner

**PSO5: ICT & Digital Literacy**

The students will obtain **motivation for self-directed learning** to meet the changing demands of the workplace, and become capable to access the various ICT tools

**PSO6: Advance to further higher education**

The students can **advance to further higher education** (or) proceed to undertake professional courses such as CA, CS, ICMA, CFA and to write Competitive Exams.

**PSO7: Critical thinking and analytical skills**

The students will **gain critical thinking and analytical skills** to manifest the issues and problems of Indian and international banking practices and able to perceive the best solution.

**PSO8: Ethics**

The students will show their **care and concern in saving the environment**, adopting business ethics, respecting cultural diversity and **observing moral values** in personal and social life.

**B.B.A. COMPUTER APPLICATIONS**

At the end of **B.B.A. COMPUTER APPLICATIONS** Programme a student will have obtained:

**PSO1:** The students will acquire sufficient subject knowledge in the various disciplines such as business organization, management, imports and exports, financial management, marketing and human resource management.

**PSO2:** The students will excel in business-related skills viz., leadership, teamwork, interpersonal relationship, effective communication in both oral and written, innovative thinking, decision-making and problem-solving.

**PSO3:** The students will be employable in the fields of business firms, export-import units, HR domains, marketing areas, accounting and management.


**PSO4:** The students can develop entrepreneurial skills to start and manage their own business successfully and can analyses socio-economic, political and legal environment of the business.

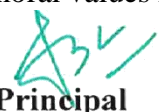
**PSO5:** The students will go for self-paced learning according to the need of the hour and have the capability to use computer programmes and applications.

**PSO6:** The students will march to take on higher education or professional courses such as MBA, MCA, CA, ICMA, CFA or other Competitive Exams.

**PSO7:** The students will have practical knowledge in business administration and will be able to apply technologies in research to solve the complex business problems.

**PSO8:** The students will show their care and concern in saving the environment, adopting business ethics, respecting cultural diversity and observing moral values in personal and social life.

  
**Controller of Examinations**  
St. Joseph's College of Arts & Science  
(Autonomous)  
Cuddalore - 1.

  
**Principal**  
**Dr. M. ARUMAI SELVAM, M.Sc., M.Phil., Ph.D.**  
PRINCIPAL 8 | Page  
St. Joseph's College of Arts & Science  
(AUTONOMOUS)  
CUDDALORE - 607 001.