

ST. THOMAS COLLEGE PALAI

NAAC Accredited with 'A' Grade (3rd Cycle, CGPA 3.30) in 2015

College with Potential for Excellence (CPE-UGC)

(Affiliated To Mahatma Gandhi University, Kottayam)



PROGRAMME SPECIFIC OUTCOMES OF POSTGRADUATE PROGRAMMES (2012 - 2018 Admissions)

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M A English	
PSO1.	To provide a deep perspective into select literary works across the globe, original or in translation.
PSO2.	To help them have mastery over the nuances of theoretical discourses, language and literature in English.
PSO3.	Enabling the students to communicate in correct and impressive language.
PSO4.	To encourage and inspire the students into creative writing.
PSO5.	Making the students fit for competing successfully in their search for career all over the world.
MA Malayalam	
PSO1.	To Understand new trends in Malayalam Language
PSO2.	To introduce new methodologies of Malayalam Language
PSO3.	To Inculcate research attitude and creativity
MA Hindi	
PSO1.	To develop students competence with reference to Hindi language and literature.
PSO2.	To give a linguistic and functional orientation to the study of Hindi language and literature.
PSO3.	To provide detailed and thorough knowledge of the trends movements and literary forms of ancient and modern Hindi literature.
PSO4.	To develop a comparative outlook towards Indian literature.
PSO5.	To familiarize the students with living forms of Hindi language.
PSO6.	To provide a comprehensive knowledge of the new literary forms.
MA Economics	
PSO1.	Advanced understanding of economic principles, and appreciation of different methodological approaches in economics.
PSO2.	To discuss and evaluate the application of advanced economic principles to the design of economic policy and the analysis of economic issues.
PSO3.	To apply economic analysis to everyday problems in real world situations.
PSO4.	To analyze the international as well as national level economic issues and to assess their impact on the domestic and world economy.
PSO5.	To enable the students to suggest solutions to challenging economic problems.
PSO6.	To equip the students for further study, research and teaching career in Economics.
M A History	
PSO1.	To help students further develop their critical thinking, independent researching and writing skills in an effort to gain knowledge and advance their carriers across a variety of disciplines.
PSO2.	To provide students with knowledge of different schools of historical writing and also to develop research interests in students.

PSO3.	To equip the students to understand gender, caste, concept of human rights, relevance of environmental studies.
PSO4.	To help the student to have a systematic understanding about accumulation of historical knowledge
PSO5.	To develop a historical sense among students about our culture and tradition.
PSO6.	To widen the scope of social sciences through interdisciplinary approach.
PSO7.	Enlarge the outlook of students about the ethnicity and racial differences of our community.
PSO8.	To inculcate a historic inquisitiveness in relation to our rich cultural past.
PSO9.	To develop the abilities to distinguish between primary and secondary sources in the collection and analysis of data.
PSO10.	To ensure the quality to distinguish and evaluate the available evidences properly.
MA Political Science	
PSO1.	Demonstrate knowledge and understanding of the key theories and concepts of Political Science, and insights into the theoretical advances in the discipline.
PSO2.	Demonstrate the ability to evaluate theories in the light of empirical evidence or normative propositions.
PSO3.	Apply appropriate theories to understand and analyse social and political phenomena.
PSO4.	Demonstrate an understanding of the philosophical underpinnings of political systems, processes and movements at the local, national and international levels.
PSO5.	Evince the ability to think critically about political institutions, processes and issues relating to politics at the local, national and international levels.
PSO6.	Demonstrate the intellectual ability and skills to carry out independent research.
PSO7.	Achieve and demonstrate the ability to communicate their ideas effectively using the appropriate language of the discipline.
PSO8.	Apply critical thinking, communication and analytical skills to address significant issues of concern in society.
PSO9.	Recognize issues of social justice in their local and global contexts and demonstrate knowledge and understanding of their rights and obligations as members of society.
MSc Mathematics	
PSO1.	To improve the perspective of students on Mathematics as per modern requirement.
PSO2.	Enhance the logical, analytical and problem solving skills of students.
PSO3.	Orient students towards relating Mathematics to applications.
PSO4.	Help the student build interest and confidence in learning the subject.
PSO5.	Encourage students for pursuing higher studies and developing Research Aptitude.
PSO6.	Acquiring continuous learning skills.
PSO7.	Motivate the students to uphold scientific integrity and objectivity in professional endeavours.
PSO8.	Paves the way to seek and understand the world around them.

MSc Statistics	
PSO1.	To enable to model real-world effects and their financial implications.
PSO2.	Way to get sharper predictions from the data
PSO3.	To suit for the needs of the society
PSO4.	Statistical methods to assess risk in insurance, finance and other industries.
PSO5.	Exposure to various statistical soft wares
PSO6.	To pursue higher studies in the areas of Statistics, Mathematics, Computer Science, Economics, Management and allied fields
PSO7.	Make information on economic and social development accessible to the public, allowing the impact of government polices to be assessed
PSO8.	Course prepares the students for UPSC Examinations and UGC-CSIR-NET,
MSc Physics	
PSO1.	Provide a complete theoretical understanding of the different areas of Physics together with the applied and current fields of research
PSO2.	Achieve a mastery, competence and analytical skills in the subject at a higher level.
PSO3.	Learn to carry out experiments in basic as well as certain advanced areas of physics
PSO4.	View Physics as a training ground for the mind developing logical reasoning that can be applied to diverse fields.
PSO5.	Gain research experience within some specific field of physics through project work.
PSO6.	Promote awareness amongst students for life-long learning and to inculcate in them professional and ethical attitude, good leadership qualities and commitment to social responsibilities.
MSc Chemistry	
PSO1.	To be familiarised with the emerging areas of Chemistry and their applications in various spheres of Chemical sciences and to apprise the students of its relevance in future studies
PSO2.	To be exposed to the different processes used in industries and their applications.
PSO3.	To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.
PSO4.	To be familiarised with sophisticated spectroscopic techniques such as UV-visible, IR, NMR,EPR and Mass spectrometric methods.
PSO5.	To handle scientific instruments, to plan and perform the laboratory experiments
PSO6.	To develop research oriented skills.
PSO7.	Learn professionalism, including the ability to work in teams and apply basic ethical principles.
PSO8.	To get a clear knowledge of computational techniques, Soft wares, tools for Molecular modelling etc.
PSO9.	To attain thorough knowledge in the theory and applications of separation techniques, especially sophisticated methods like chromatography, soxhlet techniques etc.

PSO10.	To employ critical thinking and the scientific knowledge to design, carryout, record and analyse the results of chemical reactions.
MSc Botany	
PSO1.	To encourage a clear, comprehensive and advanced mastery in the field of Botany.
PSO2.	To provide a deep knowledge of the basic principles of biological sciences with special reference to Botany and its applied branches.
PSO3.	To enable the students to explore the intricacies of life forms at cellular and molecular levels.
PSO4.	To sustain students' motivation and enthusiasm and to help them not only to appreciate the beauty of different life forms but also to inspire them in the dissemination of the concept of biodiversity conservation.
PSO5.	To develop problem solving skills in students and encourage them to carry out innovative research projects so as to instill in them the spirit of knowledge creation.
PSO6.	To maintain a high level of scientific excellence in botanical research with added emphasis on the role of plants in the structure and functioning of terrestrial and aquatic communities and ecosystems.
PSO7.	To equip students to perform functions that demand higher competence at national/ international levels.
MSc Biostatistics	
PSO1.	Students will able to understand health and epidemiological issues
PSO2.	Able to identify factors affecting health problems
PSO3.	Able to study about incidence of diseases and causes
PSO4.	Able to plan, design and conduct clinical trials
PSO5.	Able to assess the efficiency of medicines
PSO6.	Able to conduct testing as well as estimation
PSO7.	Able to analyze, visualize, comprehension and interpret data
PSO8.	Able to determine sample size and clinical data management
PSO9.	Get expertise in computational Biology
MSc Biotechnology	
PSO1.	An education in cell biology will impart knowledge to the students to understand origins of cells and the generation of cell diversity, as well as the common features of cellular structure and function – how they obtain energy, synthesize new molecules, communicate, proliferate and survive.
PSO2.	It will also emphasis on the fundamental importance of cell biology in modern science, particularly in relation to cell technologies and health. Basic knowledge of structure and functions of major bio-molecules will be taught. Understanding of metabolic pathways (catabolism as well as anabolism), their diversity and how these are specifically regulated and interrelated in different cells
PSO3.	Students will understand the importance of microbiology which is an integrated part of Biotechnology. All the genetic manipulation of genes is carried primarily

	with the help of micro-organisms, hence, understanding the growth kinetics, their physiology and genetics is needed for better understanding the Molecular biology and genetic engineering.
PSO4.	Students will become familiar with the tools and techniques of genetic engineering- DNA manipulation enzymes, genome and transcriptome analysis and manipulation tools, gene expression regulation, production and characterization of recombinant proteins
PSO5.	Students will imbibe the importance of plant biotechnology regarding basic as well as advance knowledge about the in vitro culture, maintenance and preservation of plant cells, tissues and organs. The techniques of haploid, triploid and somatic hybrid plant production and their manipulation for quantitative and qualitative improved traits.
PSO6.	The main outcome of the course is to provide basic understanding of immunology and immune responses in response to various infectious and non infectious diseases. Immunology is important subject of Biotechnology, which can help us to better understand human health. This paper can also facilitate to clear NET and JRF exam as many questions are being asked on immunology.
PSO7.	The major outcome to study the environmental biotechnology is to understand the current applications of biotechnology to environmental quality evaluation, monitoring and remediation of contaminated environments.
PSO8.	An education in environmental biotechnology aid the students to identify and implement solutions to these problems and mitigation of human impact on the environment.
PSO9.	Interdisciplinary nature of the bioinformatics and biophysics course offers substantial understanding of both the biological sciences and the physical and mathematical sciences
PSO10.	Students will be able design, conduct experiments, analyze and interpret data for investigating problems in Biotechnology and allied fields.
PSO11.	Cancer biology helps us to understand how we treat and manage cancer as well as understand what raises or lowers a person's risk of developing cancer and also used to analyse effective treatment strategies for cancer.
PSO12.	Higher studies (M.Phil, Ph.D) can be pursued in order to attain research positions. Various examinations such as CSIR-NET, ARS-NET GATE, ICMR, DBT and many other opens channels for promising career in research.
MSc Applied Microbiology	
PSO1.	To encourage a clear, comprehensive and advanced mastery in the field of Applied Microbiology.
PSO2.	To provide the excellence of biological sciences with special reference to Microbiology and its Applicable branches
PSO3.	Enabling the students to explore the intricacies of life forms at cellular, molecular and nano level.
PSO4.	To sustain students' motivation and enthusiasm and to help them not only to appreciate the beauty of microbial life forms but also to inspire them to explore the amazing properties of microbial world in favour of human life.

PSO5.	To develop problem solving skills in students and encourage them to carry out innovative research projects thereby enkindling in them the spirit of knowledge creation.
M Com	
PSO1.	The programme offers an opportunity for graduates to acquire theoretical as well as practical knowledge in commerce, especially in finance and taxation.
PSO2.	This programme equips an M. Com graduate to enter into a career either in academics, research, or alternatively, in other professional areas of banking, insurance and finance such as taxation, consultancy and financial services.
PSO3.	This programme also helps the students to attain eligibility for joining doctoral research, applying for examinations like SET, UGC- NET/JRF, KPSC, UPSC and other recruitment board examinations for which postgraduation is the basic qualification and joining professional courses in Teaching.
PSO4.	Students will acquire updated knowledge on research methods, techniques and the process and to develop skills in the application of research methods for business problem solving.
PSO5.	To build a strong inclination towards lifelong learning and acquiring contemporary knowledge in different areas of Commerce and Business Studies.
