

# **T.K.M College of Arts and Science, Kollam**

**Re-accredited by NAAC with "B++" Grade  
(Affiliated to University of Kerala)**



**PROGRAM SPECIFIC OUTCOMES (PSO)  
UNDERGRADUATE PROGRAMMES  
( 2017 Admission onwards)**

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## UNDERGRADUATE PROGRAMMES - BA/BSc/BCom

### Name of the program: First degree program in Mathematics (BSc Mathematics)

#### Program specific outcomes (PSO)

<b>PSO1</b>	Understand basic facts about mathematics such as axioms, notations , terminology.
<b>PSO2</b>	Understand various mathematical techniques and apply to scientific problems.
<b>PSO3</b>	Formulate mathematical arguments in a logical manner.
<b>PSO4</b>	Apply numerical techniques and computer algebra systems to solve various mathematical problems.

### Name of the program: BA Economics and Mathematics (double main)

<b>PSO1</b>	Provide a strong foundation in Economics and Mathematics
<b>PSO2</b>	Enable students to acquire necessary skills for analyzing basic economic issues at the micro and macro levels.
<b>PSO3</b>	Acquaint students with the essential mathematical and statistical methods and tools to be applied in the analytical aspects of Economics.
<b>PSO4</b>	Enable students to acquire the technical and analytical skills to proceed to a successful career in finance, business and many other fields or to proceed to further study in mathematics/economics.

### Name of the program: First degree program in Physics (BSc Physics)

<b>PSO1</b>	Equip the students in methodology related to Physics and to develop broad and balanced knowledge and understanding of physical concepts, principles and theories of Physics
<b>PSO2</b>	Develop experimental and data analysis skills through a wide range of experiments in the practical laboratories and interpret the results of observation, including making an assessment of experimental uncertainties
<b>PSO3</b>	Apply the theories learnt and the skills acquired to solve real time problems
<b>PSO4</b>	Understand and interpret physical information – verbal, mathematical and graphical.

**Name of the program: First degree program in Biochemistry  
(BSc Biochemistry)**

<b>PSO1</b>	Understand scientific terms, concepts, facts, phenomenon and their relationships.
<b>PSO2</b>	Enrich the students with the latest development in the field of biochemistry, biotechnology and other related fields of research and development.
<b>PSO3</b>	Develop skill in practical work, experiments and laboratory material and equipment along with the collection and interpretation of scientific data.
<b>PSO4</b>	Provide practical experience to the students as a part of course to develop scientific ability to work in the field of research and other fields of their own interest and make them fit for society.

**Name of the program: First degree program in Zoology  
(BSc Zoology)**

<b>PSO1</b>	Understand the diversity, systematics, evolution, general characteristics, development and biological processes of organisms
<b>PSO2</b>	Understand and apply scientific methods in experiments and technology for the welfare of the organisms
<b>PSO3</b>	Understand the economical, ethological and medical aspects of organisms
<b>PSO4</b>	Analyze the current threats faced by the organisms and environment

**Name of the program: First degree program in Botany  
(BSc Botany)**

<b>PSO1</b>	Understand structure and reproduction of plant forms algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms
<b>PSO2</b>	Understand basic concepts in methodology of science, plant systematics, ecology, anatomy, cell biology, physiology, molecular biology, genetics, plant breeding, biotechnology and bioinformatics
<b>PSO3</b>	Understand recent trends in biological branches molecular biology, biotechnology, horticulture plant breeding and nanobiotechnology.
<b>PSO4</b>	Experiment with essential laboratory practicals in anatomy, cytology, microtechnique, physiology, taxonomy, morphology, biochemistry and biophysics.

**Name of the program: First degree program in Chemistry  
(BSc Chemistry)**

<b>PSO1</b>	Understand the terms, concepts, methods, principles and experimental techniques of physical, organic, inorganic, environmental, green, nano, supramolecular and analytical chemistry
<b>PSO2</b>	Develop research attitude and adopt scientific method of identifying, analyzing and solving research problems in an innovative way
<b>PSO3</b>	Acquire qualities, punctuality, regularity, scientific attitude and scientific temper in chemical laboratories
<b>PSO4</b>	Apply physical and mathematical theories and principles in the context of chemical science

**Name of the program: First degree program in Commerce with Finance (BCom Finance)**

<b>PSO1</b>	Understanding the importance of environment and sustainable development
<b>PSO2</b>	Understand the knowledge regarding setting up of business, its legal environment and the role of management and marketing strategies in business
<b>PSO3</b>	Identify the performance of business organizations through accounting and auditing
<b>PSO4</b>	Apply the knowledge in solutions to problems in finance, taxation, and banking using the relevant statistical, mathematical and technological aspects

**Name of the program: First degree program in Commerce with Computer Application (BCom Computer Application)**

<b>PSO1</b>	Understand the importance of environment and sustainable development, the knowledge regarding setting up of business, legal environment and the role of management in business.
<b>PSO2</b>	Application of Accounting principles in preparing and interpreting accounts of business enterprise.
<b>PSO3</b>	Application of electronic data processing and data management in computer application in business operations
<b>PSO4</b>	Application of the techniques in Marketing and Finance to build a business.

**Name of the program: First degree program in English (BA English)**

<b>PSO1</b>	To build a comprehensive understanding of the discipline of literary studies.
<b>PSO2</b>	Contribute to the realm of knowledge production with an increased intellectual, creative, critical and multidisciplinary capability.
<b>PSO3</b>	Develop language learning skills like Listening, Speaking, Reading and Writing.
<b>PSO4</b>	Write analytically in different formats like essays, reviews, research papers etc.

**Name of the program: First degree program in Islamic History (BA Islamic History)**

<b>PSO1</b>	Understand the history, culture, politics and philosophy of the Islamic people from the Pre-Prophetic period up to the contemporary era.
<b>PSO2</b>	Understand the socio-political and religious institutions in the Muslim society and to identify its effects in the society.

<b>PSO3</b>	Evaluate the cultural interactions of Islam in the global arena with special emphasis on the Indo-Islamic cultural formations.
<b>PSO4</b>	Formulate a theoretical framework by analyzing the historical events and to distinguish the contemporary challenges in Islam.