



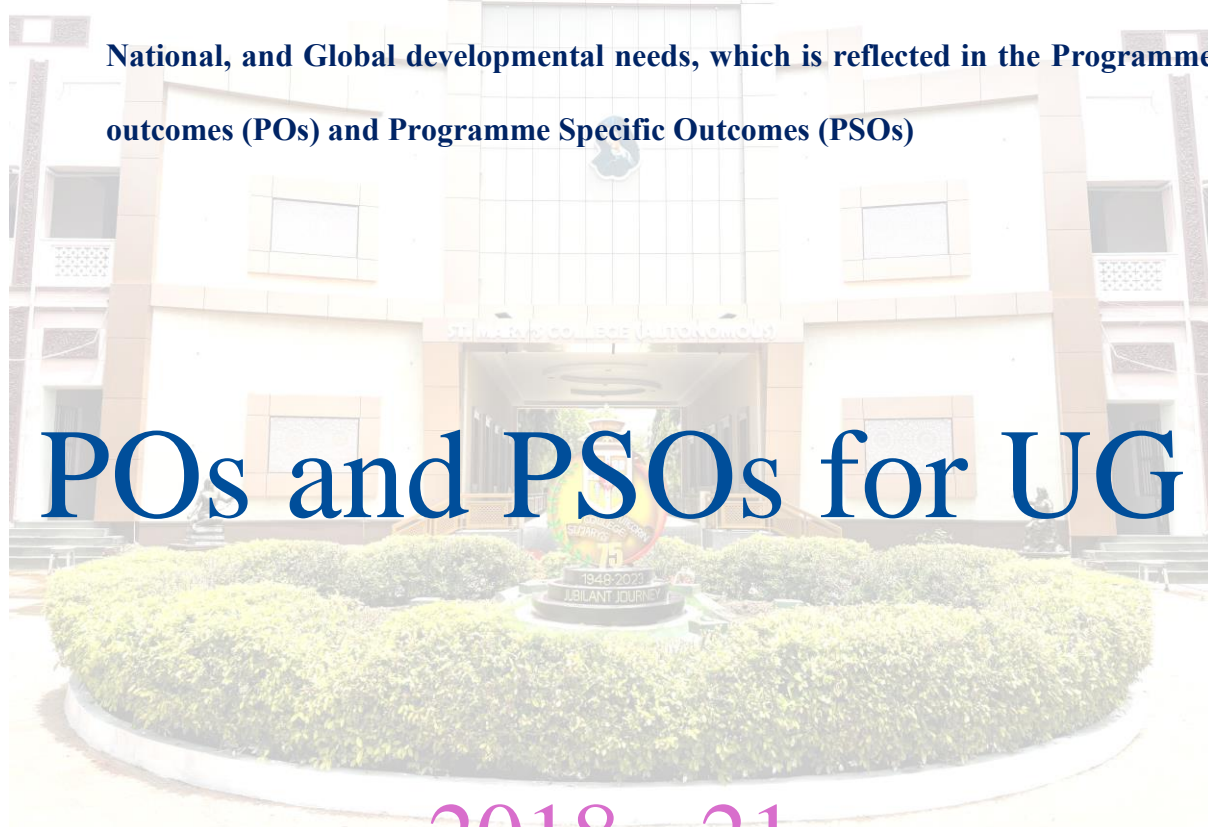
St. Mary's College (Autonomous)
Reaccredited with 'A+' Grade by NAAC (Cycle IV)
Thoothukudi



Criterion: I – Curricular Aspects
1.1 – Curriculum Design and Development
Year: 2018-2023



1.1.1 Curricula developed and implemented have relevance to the Local, Regional, National, and Global developmental needs, which is reflected in the Programme outcomes (POs) and Programme Specific Outcomes (PSOs)



POs and PSOs for UG

2018 - 21

B.A. English

Programme Outcome

PO No.	At the end of the B.A. Programme, the graduates will
PO-1	apply the acquired knowledge of the chosen discipline, assimilate the facts and understand the context of various backgrounds collect data from various sources to formulate a project either individually or in collaboration with others
PO-2	develop intellectual flexibility, creativity and cultural literacy to facilitate life-long learning
PO-3	express herself clearly in her vernacular language and English enhanced through the study of languages
PO-4	exercise the skill acquired to enhance career opportunities
PO-5	understand the values of life and practice them in all possible ways in their personal practical lives
PO-6	estimate ideologies of world's greatest authors
PO-7	develop their analytical skills through their research project
PO-8	prove their mettle in the job market

Programme Specific Outcome

PSO No.	Upon completion of B.A. English Literature programme students will be able to
PSO - 1	apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres.
PSO - 2	participate in discussions by listening to others' perspectives, asking productive questions, and articulating original ideas.
PSO - 3	cultivate communicative competency and writing skills required in the job market.
PSO - 4	explain how language and literary works shape their perceptions of the world.
PSO - 5	compete in the global market of Higher Education
PSO - 6	emerge as freelance writers, journalists and social activists
PSO - 7	recognize how literary writings can transform the society
PSO - 8	acquire knowledge about wider range of voices within and across cultures
PSO - 9	meet the requirements of a good English teacher
PSO - 10	evolve as better citizens with conscious striving for growth

B.A. History

Programme Outcome:

PO. No.	Upon completion of BA degree programme, the students will be able to
PO-1	apply the acquired knowledge of the chosen discipline, assimilate the facts and understand the context of various backgrounds.
PO-2	develop intellectual flexibility, creativity and cultural literacy to facilitate life-long learning
PO-3	express herself clearly in her vernacular language and English enhanced through the study of languages.
PO-4	exercise the skill acquired to enhance career opportunities.
PO-5	understand the values of life and practice them in all possible ways in their personal practical lives.
PO-6	make a report of spot visits or archeological site visits.
PO-7	collect data from various sources to formulate a project either individually or in collaboration with others
PO-8	prove their mettle in the job market

Programme Specific Outcome:

PSO No.	Upon completion of BA degree programme, the students of History will be able to
PSO-1	Construct the history of our nation with illustration and study the basic themes, concepts, chronology and scope of history.
PSO-2	Categorize the historians and historical writing and build the art of historical writing.
PSO-3	Develop the various skills to construct themselves as a good personality.
PSO-4	Take up spot study in historical sites.
PSO-5	Analyse the different stages and personalities of human beings and enhance the human values and Rights.
PSO-6	Familiarize with contemporary world and evaluate the burning problems of the present day.
PSO-7	Utilize the computer application software for knowledge dissemination and their career advancement.
PSO-8	Understand and recognise the present existing socio-economic, political and religious condition of the people.
PSO-9	Be acquainted with the range of issues related to history and its distinctive eras.
PSO-10	Learn the various history of nations with comparative approach.

B.A. Economics

Programme Outcome:

PO. No	Upon completion of B.A. Economics programme, the graduates will be able to
PO-1	use economic concepts, theories, models, and data-analytic techniques.
PO- 2	identify, compile, interpret, and analyse quantitative economic data by expressing relationships between concepts through graphs, statistical or mathematical analysis.
PO-3	specific content areas (fields) of economics, develop deeper critical and quantitative thinking skills and apply problem-solving skills to complex problems
PO-4	explain core economic terms, concepts, theories and models
PO-5	apply advanced economic theories to explain the behaviour of individuals, businesses, and industries in market-based systems and the challenges of developing economies.
PO-6	make a report of spot visits or archeological site visits.
PO-7	collect data from various sources to formulate a project either individually or in collaboration with others
PO-8	prove their mettle in the job market

Programme Specific Outcome

PSO No	Upon completion of B.A. Economics Degree Programme, the graduates will able to
PSO-1	understand the economic way of thinking.
PSO-2	know how to make a rational choice using economic principles.
PSO-3	demonstrate entrepreneurial abilities and capacity and also able to define, identify and/or apply the principles of entrepreneurship
PSO-4	evaluate theory and critique research within the discipline.
PSO-5	demonstrate knowledge and ability in entrepreneurship gained throughout the program..
PSO-6	analyze the ethical and social justice of various markets and policy outcomes.
PSO-7	develop skills and knowledge that provide a foundation for pursuing lifelong learning and a socially responsible life
PSO-8	ability to analyze a problem and draw correct inferences using qualitative and/or quantitative analysis by using statistical and mathematical tools.

B.Sc. Mathematics

Programme Outcome

PO.No	Upon completion of B.Sc Degree programme , the graduates will be able to
PO - 1	apply the acquired knowledge of fundamental concepts in the field of science and to find solutions to various problems.
PO - 2	inculcate innovative skills and team – work among students to meet societal expectations.
PO - 3	perform analysis to assess, interpret, and create innovative ideas through practical experiments.
PO - 4	facilitate to enter multidisciplinary path to solve day-to-day scientific problems.
PO - 5	carry out fieldworks and projects, both independently and in collaboration with others, and to report in a constructive way.
PO - 6	improve communication ability and knowledge transfer through ict aided learning integrated with library resources.
PO - 7	transfer the knowledge to the other stakeholders through extensive community development programme.
PO - 8	attain competency in job market / entrepreneurship.

Programme Specific Outcome

PSO No.	Upon completion of the B.Sc. Mathematics program, students will be able to
PSO-1	understand the foundations of mathematics and perform basic computations in higher mathematics.
PSO-2	understand the power of abstraction and generalization and to carry out investigative and mathematical work with independent judgement.
PSO-3	communicate mathematical ideas, develop proficiency in the analysis of problems and use mathematical or other appropriate techniques to solve them.
PSO-4	apply mathematical ideas to model real-world problems.
PSO-5	apply rigorous, analytic, highly numerate approach to analyze, execute tasks and solve problems in daily life and at work.
PSO-6	appreciate the role of mathematical proof as a means of conveying mathematical knowledge.
PSO-7	carry out objective analysis and prediction of quantitative information with independent judgement.
PSO-8	create, use and analyze graphical representation of mathematical relationships

B.Sc. Physics

Programme Outcome

PO.No	Upon completion of B.Sc Degree programme , the graduates will be able to
PO- 1	apply the acquired knowledge of fundamental concepts in the field of science and to find solutions to various problems.
PO- 2	inculcate innovative skills and team – work among students to meet societal expectations.
PO- 3	perform analysis to assess, interpret, and create innovative ideas through practical experiments.
PO- 4	facilitate to enter multidisciplinary path to solve day-to-day scientific problems.
PO- 5	carry out fieldworks and projects, both independently and in collaboration with others, and to report in a constructive way.
PO- 6	improve communication ability and knowledge transfer through ICT aided learning integrated with library resources.
PO- 7	transfer the knowledge to the other stakeholders through extensive community development programme.
PO- 8	attain competency in job market / entrepreneurship.

Programme Specific Outcome

PSO No.	Upon completion of B.Sc. Physics Degree programme, the graduates will be able to
PSO – 1	students will demonstrate knowledge of mechanics, wave oscillations, acoustics, properties of matter, optics, thermal physics, electricity, electromagnetism and statistical mechanics to analyze a variety of physical phenomena.
PSO – 2	students will use the knowledge of electronics and communication, digital electronics, solid state physics, optoelectronics, modern physics, Bio physics, nuclear energy and fibre optics communication to analyze the contemporary communication systems.
PSO – 3	students will have knowledge about the working of medical instruments, laser, superconductivity, sensors, biophysics, electrical appliances, wiring and nano materials
PSO – 4	students will utilize their laboratory skills to take measurements in a physics laboratory, analyze the measurements and draw valid conclusions.
PSO – 5	students will be able to compile oral and written scientific communication and will prove that they can think critically and work independently.
PSO – 6	students will be able to design, set up and carryout experiments, infer data, account for errors and compare with theoretical predictions in C++ language, microprocessor 8085 and 8086 and microcontroller to solve problems.
PSO – 7	students will utilize their knowledge about renewable energy sources to solve the present day energy crisis.
PSO – 8	students will illustrate proficiency in mathematics and the mathematical concepts needed for the proper understanding of physics and can face competitive exams with ease.

B.Sc. Chemistry

Programme Outcome

PO.No	Upon completion of B.Sc Degree programme , the graduates will be able to
PO-1	apply the acquired knowledge of fundamental concepts in the field of science and to find solutions to various problems.
PO-2	inculcate innovative skills and team – work among students to meet societal expectations.
PO-3	perform analysis to assess, interpret, and create innovative ideas through practical experiments.
PO-4	facilitate to enter multidisciplinary path to solve day-to-day scientific problems.
PO-5	carry out fieldworks and projects, both independently and in collaboration with others, and to report in a constructive way.
PO-6	improve communication ability and knowledge transfer through ict aided learning integrated with library resources.
PO-7	transfer the knowledge to the other stakeholders through extensive community development programme.
PO-8	attain competency in job market / entrepreneurship.

Programme Specific Outcome

PSO No.	Students of B.Sc. Chemistry will be able to
PSO-1	have a firm foundation in the fundamentals and application of current chemical and scientific theories including those in analytical, inorganic, organic and physical chemistry.
PSO-2	students will be able to design and carry out scientific experiments as well as accurately record and analyze the results of such experiments
PSO-3	excel in problem solving, critical thinking and analytical reasoning as applied to scientific problems
PSO-4	explore new areas of research in both chemistry and allied fields of science and technology
PSO-5	appraise the central role of chemistry in our society and use this as a basis for ethical behaviour in issues facing chemists including an understanding of safe handling of chemicals, environmental issues and key issues facing our society in energy, health and medicine
PSO-6	synthesize , characterize and elucidate the structure of chemical compounds
PSO-7	cater to the need of industries in context of the developing needs of the society
PSO-8	develop a rigorous scientific attitude and provide excellence in teaching and research

B.Sc. Botany

Programme Outcome

PO.No	Upon completion of B.Sc Degree programme , the graduates will be able to
PO 1	apply the acquired knowledge of fundamental concepts in the field of science and to find solutions to various problems.
PO 2	inculcate innovative skills and team – work among students to meet societal expectations.
PO 3	perform analysis to assess, interpret, and create innovative ideas through practical experiments.
PO 4	facilitate to enter multidisciplinary path to solve day-to-day scientific problems.
PO 5	carry out fieldworks and projects, both independently and in collaboration with others, and to report in a constructive way.
PO 6	improve communication ability and knowledge transfer through ICT aided learning integrated with library resources.
PO 7	transfer the knowledge to the other stakeholders through extensive community development programme.
PO 8	attain competency in job market / entrepreneurship.

Programme Specific Outcome

PSO No.	Students of B.Sc Botany will be able to
PSO-1	identify different groups of plants /organisms and understand their origin, evolution and phylogenetic relationships that will enable to infer the trends of life on earth.
PSO-2	find how organism functions at biochemical and genome level and able to relate to growth, development and behavior of different forms of life
PSO-3	observe interconnectedness of life on earth through nutrient cycling and energy flow of nutrients and able to articulate the values of natural resources in different walk of life
PSO-4	challenge the interdisciplinary science and apply them for biological analysis and problem solving.
PSO-5	analyse, recognize and evaluate the structural make up of coastal and marine environments, their physical and chemical characteristics and sustainable opportunities for alternative education
PSO-6	practice and demonstrate the techniques that ensure skill development and job option.
PSO-7	extend science to address major environmental and ethical issues to develop just and sustainable solution
PSO-8	design, experiment, formulate hypothesis, analysing data and present data for academic classes and scientific forum

B.Sc. Zoology

Programme Outcome

PO.No	Upon completion of B.Sc. Degree programme , the graduates will be able to
PO - 1	apply the acquired knowledge of fundamental concepts in the field of science and to find solutions to various problems.
PO - 2	inculcate innovative skills and team – work among students to meet societal expectations.
PO - 3	perform analysis to assess, interpret, and create innovative ideas through practical experiments.
PO - 4	facilitate to enter multidisciplinary path to solve day-to-day scientific problems.
PO - 5	carry out fieldworks and projects, both independently and in collaboration with others, and to report in a constructive way.
PO - 6	improve communication ability and knowledge transfer through ICT aided learning integrated with library resources.
PO - 7	transfer the knowledge to the other stakeholders through extensive community development programme.
PO - 8	attain competency in job market / entrepreneurship.

Programme Specific Outcome

PSO No	Upon completion of B.Sc. Zoology Degree programme, the graduates will be able to:
PSO1	Acquire the knowledge about the characteristics common to all animals and understand their unique features , significances & systematic positions .
PSO2	Understand the basic concepts of biology. Compare and contrast various developmental processes in organisms.
PSO3	Explore fundamental ecological principles from populations to communities through ecosystems and interactions between biotic and abiotic factors, employ technical and analytical skills to quantify the environmental toxicants
PSO4	Institute a thorough understanding of the function of biological molecules through the study of their structure and determine and connect the role of DNA in regulating cell activity to its importance as the basis of inheritance, evolution and biotechnology
PSO5	Demonstrate updated knowledge of Sericulture, Aquaculture, Apiculture Vermitechnology, Economic Zoology, value added fishery products for rural development and self employment
PSO6	Demonstrate the proficiency in basic methods of instrumentation and quantitative analytical skills used to conduct biological research including fundamental methods of microscopy and cell and molecular biology
PSO7	Identify the structure, function, and characteristics of immune system, find suitable vaccines for infections / immunological problems. Assess the modes of transmission and the mechanisms of microbial pathogenesis, treatment and control measures to microbial infection.
PSO8	Evolve critical thinking skills/lab techniques so as to be capable of designing, carrying out and interpreting scientific experiments

B.Sc. Computer Science

Programme Outcome:

PO.No	Upon completion of B.Sc Degree programme, the graduates will be able to
PO- 1	apply the acquired knowledge of fundamental concepts in the field of science and to find solutions to various problems.
PO- 2	inculcate innovative skills and team – work among students to meet societal expectations.
PO -3	perform analysis to assess, interpret, and create innovative ideas through practical experiments.
PO -4	facilitate to enter multidisciplinary path to solve day-to-day scientific problems.
PO -5	carry out fieldworks and projects, both independently and in collaboration with others, and to report in a constructive way.
PO- 6	improve communication ability and knowledge transfer through ICT aided learning integrated with library resources.
PO -7	transfer the knowledge to the other stakeholders through extensive community development programme.
PO -8	attain competency in job market / entrepreneurship.

Programme Specific Outcome

PSO.No	Upon completion of B.Sc Degree programme, the graduates will be able to
PSO-1	understand the basic operation of digital computers.
PSO-2	acquire sufficient programming Skill through various concepts of computer languages
PSO-3	apply mathematical concepts in solution of common computing applications
PSO-4	discuss computing algorithm concepts in the solution of computing applications.
PSO-5	understand the standard techniques for solving a problem on a computer, including programming techniques
PSO-6	employ various techniques for the representation of information in computers
PSO-7	build skills to create web pages with various technologies
PSO-8	describe nature of the software development process, testing and effective document preparation.
PSO-9	understand the various techniques and operations of system software
PSO-10	enhance students skills and embrace new computing technologies and encouraging self-learning activities

B.Com

Programme Outcome:

PO No.	Upon completion of B.Com programme, the graduates will be able to
PO - 1	develop language, numerical abilities and writing skills.
PO - 2	apply basic mathematical and statistical skills necessary for analysis of a range of problems in Economics, Accounting, Marketing, Management and Finance.
PO - 3	have a thorough knowledge of law and legislations related to commerce, business and industry.
PO - 4	familiarise with recent trends in business organisation and industries and be informed about national and global economic environment.
PO - 5	know the recent trends of the world, develop the knowledge level leading to an overall development.
PO – 6	apply reasoning informed by the contextual knowledge to assess societal health, safety, legal and cultural issues and the consequent responsibilities relevant to professional accounting practice.
PO – 7	understand the impact of professional accounting solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development
PO – 8	function effectively as an individual and as a member or leader in teams and in multidisciplinary settings.

Programme Specific Outcome

PSO No.	Upon completion of B.Com Degree programme, the graduates will be able to,
PSO - 1	build a strong foundation of knowledge in different areas of commerce.
PSO - 2	develop the skill of applying concepts and techniques used in business and an attitude for working effectively and efficiently in an enterprise.
PSO – 3	develop functional and general management skills with sound ethics.
PSO - 4	integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students.
PSO - 5	acquire practical skills relating to finance,accounting, banking, taxation, computer application and other fields of business.
PSO - 6	expose students to entrepreneurship and inculcate global mindset.
PSO - 7	make decisions at personal and professional level.
PSO - 8	evaluate different problems using analytical, creative and integrative abilities.

B.Com (Corporate)

Programme Outcome:

PO No.	Upon completion of B.Com programme, the graduates will be able to
PO - 1	develop language, numerical abilities and writing skills of students.
PO - 2	apply basic mathematical and statistical skills necessary for analysis of a range of problems in Economics, Accounting, Marketing, Management and Finance.
PO - 3	have a thorough knowledge of law and legislations related to commerce, business and industry.
PO - 4	familiarise with recent trends in business organisation and industries and be informed about national and global economic environment.
PO - 5	know the recent trends of the world, develop the knowledge level leading to an overall development.
PO – 6	apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional accounting practice.
PO – 7	understand the impact of the professional accounting solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development
PO – 8	function effectively as an individual and as a member or leader in teams and in multidisciplinary settings.

Programme Specific Outcome

PSO No.	Upon completion of B.Com Degree programme, the graduates will be able
PSO - 1	to build a strong foundation of knowledge in different areas of commerce.
PSO - 2	develop the skill of applying concepts and techniques used in business and an attitude for working effectively and efficiently in an enterprise.
PSO – 3	develop functional and general management skills with sound ethics.
PSO - 4	integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students.
PSO - 5	to acquire practical skills relating to finance,accounting, banking, taxation, computer application and other fields of business.
PSO - 6	to expose students to entrepreneurship and inculcate global mindset.
PSO - 7	to enable a student to be capable of making decisions at personal and professional level.
PSO - 8	evaluate different problems using analytical, creative and integrative abilities.

B.B.A.

Programme Outcome

PO No.	Students of Business Administration will be able to
PO – 1	pursue a career in general business management in a variety of settings including for profit and not-for-profit organisations, industry and government.
PO – 2	apply analytical and problem solving skills in the functional areas of accounting, marketing, finance , customer relationship management, logistics, human resource management and economics in the business environment .
PO – 3	demonstrate knowledge and understanding of the ethical, legal and social obligations and responsibilities of business
PO – 4	apply ethical principles in the business environment with people of diverse ethnic, cultural, gender and other backgrounds.
PO – 5	understand globalization and value cultural diversity
PO-6	apply entrepreneurial skills for personal and professional development, timely responding to market changes
PO-7	know business starting principles and understands business environment influencing factors
PO-8	apply business structural planning principles, project activity methods in business management

Programme Specific Outcome

PSO No.	Students of Business Administration will be able to
PSO-1	explicit the sound knowledge of business concepts in the major disciplines of business environment.
PSO-2	make the students proficient in the uses of technology in modern organisational operations
PSO-3	demonstrate the knowledge and understanding of the ethical, legal and social responsibilities of business
PSO-4	develop the students in managerial and entrepreneurial skills through pragmatic approach.
PSO-5	expose the students to function expertly in team.
PSO-6	generate the students to define, analyze, and devise solutions for business issues & demonstrate to prepare accurate reliable financial reports.
PSO-7	enhance the students with excellence in leadership.
PSO-8	formulate the students to acquire employment in various emerging areas of administration

B.Sc. Microbiology

Programme Outcome

PO.No	Upon completion of B.Sc Degree programme , the graduates will be able to
PO 1	apply the acquired knowledge of fundamental concepts in the field of science and to find solutions to various problems.
PO 2	inculcate innovative skills and team – work among students to meet societal expectations.
PO 3	perform analysis to assess, interpret, and create innovative ideas through practical experiments.
PO 4	facilitate to enter multidisciplinary path to solve day-to-day scientific problems.
PO 5	carry out fieldworks and projects, both independently and in collaboration with others, and to report in a constructive way.
PO 6	improve communication ability and knowledge transfer through ict aided learning integrated with library resources.
PO 7	transfer the knowledge to the other stakeholders through extensive community development programme.
PO 8	attain competency in job market / entrepreneurship.

B.Sc. Psychology

Programme Outcome

PO. NO.	Upon completion of B.Sc. Degree Programme, students will be able to
PO-1	show familiarity with the major concepts in psychology
PO-2	have a knowledge about the theoretical perspectives, empirical findings and historical trends in psychology
PO-3	understand and apply basic research methods in psychology including research design, data analysis and interpretation
PO-4	use critical and creative thinking in daily life and understand humans from a psychological perspective.
PO-5	use scientific approach to solve problems related to behaviour and mental processes
PO-6	understand psychological principles and use it for personal growth
PO-7	apply psychological principles to personal, social and organizational issues
PO-8	weigh evidence and tolerate ambiguity and act ethically.