

GOVERNAMENT DEGREE COLLEGE, BHUPALAPALLY

PROGRAM OUTCOMES

DEPARTMENT OF PHYSICS

PROGRAM OUT COMES:

PO1: Acquire knowledge in Physical Sciences with a thrust on fundamental principles and theories related to various scientific phenomena and their relevance in day-to-day life.

PO2: Graduates attain practical knowledge through hands-on training and project experience to meet the industrial needs.

PO3: Graduates develop critical thinking skills to identify, analyze and solve problems of their core areas using modern tools.

PROGRAM SPECIFIC OUTCOMES:

PSO1: Students develop problem solving skills and methods and develop logical tools and models used to solve various real life problems.

PSO2: The students attain sound knowledge in the areas of Mechanics, Thermal Physics, Waves and oscillations, optics, electromagnetism, modern physics, solid-state physics for pursuing higher education and research.

DEPARTMENT OF COMPUTER SCIENCE:

PROGRAM OUT COMES:

PO1: To develop problem solving abilities using a computer.;

PO2: To prepare necessary knowledge base for research and development in Computer Science.

PO3: Students will be able to build the necessary skill set and analytical abilities for developing computer based solutions for real life problems.

PROGRAM SPECIFIC OUTCOMES:

PSO1: communicate scientific information in a clear and concise manner both orally and in writing.

PSO2: To train students in professional skills related to Software Industry

DEPATMENT OF BOTANY:

PROGRAM OUT COMES:

PO1. Understanding of plant diversity and its importance in the maintainance of ecological balance.

PO2. Students learn to carry out practical work, in the field and in the laboratory, interpreting plant morphology and anatomy, Plant identification, Vegetation analysis techniques.

PROGRAM SPECIFIC OUTCOMES:

PSO1. Apply the knowledge of basic science, life sciences and fundamental process of plants.

PSO2. Apply the knowledge gained from the studies for the upliftment of society via addressing health, environmental issues, food scarcity .

DEPATMENT OF ZOOLOGY

Program outcomes:

PO1: Demonstrate and apply the fundamental knowledge of the basic principles of major fields of Zoology.

PO2: Apply knowledge to solve the issues related to animal sciences

PO3: Take appropriate steps towards conservation of endemic and endangered animal species.

PROGRAM SPECIFIC OUTCOMES:

PSO1: To foster curiosity in the students for Zoology.

PSO2: To create awareness amongst students for the basic and applied areas of Zoology

PSO3: To provide an insight to the aspects of animal diversity. To inculcate good laboratory practices in students and to train them about proper handling of lab instruments.

DEPARTMENT OF CHEMISTRY

PROGRAM OUT COMES:

PO-1: B.Sc. Chemistry curriculum is so designed to provide the students a comprehensive understanding about the fundamentals of chemistry covering all the principles and perspectives.

PO-2: The branches of Chemistry such as Organic Chemistry, Inorganic Chemistry, Physical Chemistry and Analytical Chemistry expose the diversified aspects of chemistry where the students experience a broader outlook of the subject.

PO-3: The syllabi of the B.Sc. Chemistry course are discretely classified to give stepwise advancement of the subject knowledge right through the three years of the term.

PROGRAM SPECIFIC OUTCOMES: PSO-1: The students will understand the existence of matter in the universe as solids, liquids, and gases which are composed of molecules, atoms and sub atomic particles.

PSO-2: Students will learn to estimate inorganic salt mixtures and organic compounds both qualitatively and quantitatively using the classical methods of analysis in practical classes.

PSO-3: Students will grasp the mechanisms of different types of reactions both organic and inorganic and will try to predict the products of unknown reactions.

DEPARTMENT OF MATHEMATICS

PROGRAM OUT COMES:

PO1: Disciplinary Knowledge: Capable of demonstrating comprehensive knowledge and understanding of one or more other disciplines that form a part of an undergraduate programme of study.

PO 2: Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives. Critically evaluate practices, policies and theories by following scientific approach to knowledge development.

PO 3 :Self-directed and Life-long Learning: Acquire the ability to engage in independent and life- long learning in the broadest context socio- technological changes. Critical sensibility to lived experiences, with self-awareness and reflexivity of both and society.

PO 4: Research –related skills: A sense of inquiry and capability for asking relevant/ appropriate questions, problematizing, synthesizing and articulating; Ability to recognize cause- and- effect relationships, define problems, formulate hypotheses, interpret and draw conclusions from data, ability to plan, execute and report the results of an experiment or investigation. Ability to apply one's learning to real life situations.

PROGRAM SPECIFIC OUTCOMES:

PSO1: Solid Foundation in Knowledge: Bachelor Degree in Mathematics is the culmination of in-depth knowledge of many core branches of mathematics, viz. Algebra, Calculus, Geometry, Differential Equations, Mechanics, Real and Complex Analysis including some related areas like Computer Science and Statistics. Thus, this programme helps students in building a solid foundation for further higher studies and research in Mathematics

PSO2: Competency in Skills: The skills and knowledge gained has intrinsic beauty, which leads to proficiency in analytical reasoning, critical understanding, analysis and synthesis in order to solve theoretical and practical problems. This can orient students towards applications of mathematics in other disciplines and moreover, can also be utilised in modelling and solving real life problems.

PSO 3: Problem Solving: Students undergoing this programme learn to logically question assertions, to recognize patterns and to distinguish between essential and irrelevant aspects of problems. This helps them to learn behave responsibly in a rapidly changing interdependent society.

PSO 4: Proficiency in Employments: This programme will help students to enhance their employability for Government jobs, jobs in banking, insurance and investment sectors, data analysis jobs, and jobs in various other public and private enterprises.

DEPARTMENT OF HISTORY

PROGRAM OUT COMES:

PO 1. The students acquire knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough.

PO 2. The B.A. graduates will be acquainted with the social, economical, historical, geographical, political, ideological and philosophical tradition and thinking.

PO 3. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.

PO 4. The B. A. program enables the students to acquire the knowledge with human values framing the base to deal with various problems in life with courage and humanity.

PROGRAM SPECIFIC OUTCOMES

PSO1. Understand the basic themes, concepts, chronology and the Scope of Indian History.

PSO2: Acquaint with range of issues related to Indian History that span distinct eras.

PSO3: Understand the history of countries other than India with comparative approach.

PSO4: Think and argue historically and critically in writing and discussion.

PSO5: Prepare for various types of Competitive Examinations

PSO6. Critically recognize the Social, Political, Economic and Cultural aspects of History

DEPARTMENT OF ECONOMICS

PROGRAM OUT COMES:

PO1 :Critical Thinking: Ability to take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives

PO2 :Effective Communication: Ability to speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology

PO3: Effective Citizenship: Ability to demonstrate empathetic social concern and equity-centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering

PO4: Environment and Sustainability: Ability to understand the issues of environmental contexts and sustainable development

PROGRAM SPECIFIC OUTCOMES

PSO1: Remember the concept of economic principles and policies.

PSO2: Understand the essentials of empirical estimation

PSO3: Apply the required quantitative skills to economic problems for effective decision making.

PSO4 :Demonstrate critical thinking skills in understanding fiscal issues and problems related to social welfare, justice and equity.

PSO5: To analyse the issues in the regional economy and its implications to the household budget

DEPARTMENT OF COMMERCE

PROGRAM OUT COMES:

PO1: The program will enable students to develop business acumen, managerial skills and abilities, and be capable of maintaining business accounts.

PO2: students will be able to communicate effectively both in terms of business as well as social interaction.

PO3: the program will encourage entrepreneurship spirit among students and encourage them to participate effectively in social, commercial and civic issues ultimately leading to national development.

PO4: the program will develop the ability to think critically and independently translating into a well developed personal value system.

PROGRAM SPECIFIC OUTCOMES

PSO 1 :apply different concepts in starting and managing business and realize the social responsibilities, social realities and inculcate an essential value system.

PSO 2 :solve problems related to employer, employee, investors and consumers with legal protection.

PSO 3 :prepare financial statements of business using accounting principles, concepts ,conventions and provisions .

PSO 4 :develop necessary professional knowledge and skills in finance and taxation.

PSO 5 :implement traditional and modern strategies and practices of costing, banking, economics, marketing, management, auditing and taxation.

PSO 6: practice different techniques of communication and apply it in business and profession

DEPARTMENT OF POLITICAL SCIENCE

PROGRAM OUTCOMES:

PO1: Develop knowledge of theories, concepts, and research methods in humanities and social sciences.

PO2: Assess how global, national and regional developments affect society.

PO3: The Political Science degree furnishes the students with a unique multidisciplinary approach in social sciences and prepares them for further academic study and for careers in the public and the private sector.

PROGRAM SPECIFIC OUTCOMES

PSO1: Understand the world, country, society and have awareness of ethical problems, social rights, values and responsibility to the self and to others.

PSO2: Understand and follow changes in patterns of political behaviour, ideas and structures. Develop the ability to make logical inferences about social and political issues on the basis of comparative and historical knowledge.

PSO3: Take individual and team responsibility, function effectively and respectively as an individual and a member or a leader of a team; and have the skills to work effectively in multi-disciplinary teams.

PSO4: Know how to access and evaluate data from various sources of information