PROGRAMME OUTCOMES(POs)

B.Sc. (Mathematics, Physics, Chemistry)

Programme	Programme Outcome (POs)
B.Sc. (MPC) Mathematics, Physics, Chemistry	**PO1: Knowledge Empowerment** Empowered with Knowledge of basic concepts, principles, the scientific theories and their relevance in the day-to-day life. **PO2: Skill Enhancement** To emerge as skilful, critical and creative graduates through hands on experience in the laboratories. **PO3: Values Enrichment** To develop value-based services through outreach activities. **PO4: Social Responsibility and Extension** Transform them to become nurturers of Environment and Society.

PROGRAMME OUTCOMES(POs)

B.Sc. (Mathematics, Physics, Computer Science)

Programme	Programme Outcome (POs)
B.Sc. (MPC) Mathematics, Physics, Chemistry	**PO1: Knowledge Empowerment** Empowered with Knowledge of basic concepts, principles, the scientific theories and their relevance in the day-to-day life. **PO2: Skill Enhancement** To emerge as skilful, critical and creative graduates through hands on experience in the laboratories. **PO3: Values Enrichment** To develop value-based services through outreach activities. **PO4: Social Responsibility and Extension** Transform them to become nurturers of Environment and Society. **PO5 - Modern tool usage**: Create, select, and apply appropriate techniques, resources, and IT tools including prediction and modelling to complex activities with an understanding of the limitations **PO6 - Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. **PO7 - Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

PROGRAMME OUTCOMES(POs)

B.Sc. (Mathematics, Electronics, Internet of things (IoT)

Programme	Programme Outcome (POs)
B.Sc. (MPC) Mathematics, Physics, Chemistry	**PO1: Knowledge Empowerment** Empowered with Knowledge of basic concepts, principles, the scientific theories and their relevance in the day-to-day life. **PO2: Skill Enhancement** To emerge as skilful, critical and creative graduates through hands on experience in the laboratories. **PO3: Values Enrichment** To develop value-based services through outreach activities. **PO4: Social Responsibility and Extension** Transform them to become nurturers of Environment and Society. **PO5 - Modern tool usage**: Create, select, and apply appropriate techniques, resources, and IT tools including prediction and modelling to complex activities with an understanding of the limitations **PO6 - Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. **PO7 - Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

PROGRAMME OUTCOMES(POs)

B.Sc. (Botany, Zoology, Chemistry)

1. Scientific knowledge: Apply the knowledge of basic principles of biological sciences and fundamentals of chemical sciences specialization to the solution of scientific problems.

2. Problem analysis: Identify, formulate, review research literature, and analyse elementary to complex level scientific problems reaching substantiated conclusions using first principles of biological sciences and fundamentals of chemical sciences.

3. Design/development of solutions: Design solutions for complex scientific problems for various case studies and experimental studies regarding the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern scientific and IT tools including prediction and modelling to complex scientific activities with an understanding of the limitations. ANIMAL DIVERSITY - CHORDATES

6. The science and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the scientific practice.

7. Environment and sustainability: Understand the impact of the scientific solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the scientific practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the scientific community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management: Demonstrate knowledge and understanding of the scientific principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAMME OUTCOMES(POs)

B.Sc. (Horticulture, Botany, Chemistry)

1. Scientific knowledge: Apply the knowledge of basic principles of biological sciences and fundamentals of chemical sciences specialization to the solution of scientific problems.

2. Problem analysis: Identify, formulate, review research literature, and analyse elementary to complex level scientific problems reaching substantiated conclusions using first principles of biological sciences and fundamentals of chemical sciences.

3. Design/development of solutions: Design solutions for complex scientific problems for various case studies and experimental studies regarding the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern scientific and IT tools including prediction and modelling to complex scientific activities with an understanding of the limitations. ANIMAL DIVERSITY - CHORDATES

6. The science and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the scientific practice.

7. Environment and sustainability: Understand the impact of the scientific solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the scientific practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the scientific community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management: Demonstrate knowledge and understanding of the scientific principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAMME OUTCOMES(POs)

B.A. (HISTORY, ECONOMICS, POLITICAL SCIENCE)

PO 1 Realizing human values.

PO 2 Becoming a responsible and dutiful citizen.

PO 3 Acquiring critical temper.

PO 4 Inculcating creative ability.

PO 5 Getting well acquainted with the historical events happened in India as well as in the world.

PO 6 Getting acquainted with social transactions, social relations, social formations, social control, social values and culture.

PO 7 Working in NGOs and preparing for competitive exams

PO 8 Creating interest in basic Knowledge and major Knowledge in literature.

PO 9 Developing reading, writing, speaking and listening skills in language.

PO 10 Developing the Knowledge about theories of economic growth.

PROGRAMME OUTCOMES(POs)

B.COM(General)

Po1: Acquire comprehensive knowledge and effectively apply such knowledge and skills to address various issues

Po2: Acquire self-learning skills and adopt them for emerging demands at work place and life

Po3: Access ICT tools effectively and have knowledge of software applications to analyse data

Po4: Develop scientific thinking process and use the technology for communication

Po5: Predict problems, frame hypothesis, investigate and interpret the empirical data

Po6: Learn group dynamics and deal individually as well as with team and groups to perform effectively in diverse teams/groups

PROGRAMME OUTCOMES(POs)

B.COM (Computer Applications)

PO 1- Build a strong foundation in accounting, management and business subjects

PO 2- Seek variety of career options in accounting, management and business-related fields

PO 3- Equip with skills and knowledge to excel in their future careers

PO 4- Develop critical thinking skills in students

PO 5- Enter master programmes like M. Com, MBA and pursue professional programmes like C.A, CMA, C.S, etc.

PO 6- Develop entrepreneurial skills

PROGRAMME SPECIFIC OUTCOMES(PSOs)

DEPARTMENT OF MATHEMATICS

PSO 1: Ability to apply the knowledge of mathematical concepts, methods and theorems for the derivation and analysis of basic concepts in other disciplines.

PSO 2: be trained enough to get prepared for a variety of jobs in this competitive world, both industrial and academic.

PSO 3: be able to use their critical thinking, thereby finding optimal solutions to the problems.

PSO 4: develop interest in the research fields like Algebra, Analysis, Graph theory etc

PROGRAMME SPECIFIC OUTCOMES(PSOs)

DEPARTMENT OF PHYSICS

1.To understand the basic laws and explore the fundamental concepts of physics

2.To understand the concepts and significance of the various physical phenomena.

3.To carry out experiments to understand the laws and concepts of Physics.

4.To apply the theories learnt and the skills acquired to solve real time problems.

5.To acquire a wide range of problem-solving skills, both analytical and technical and to apply them.

6.To enhance the student's academic abilities, personal qualities, and transferable skills this will give them an opportunity to develop as responsible citizens.

7.To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community.

8.To motivate the students to pursue PG courses in reputed institutions.

9.This course introduces students to the methods of experimental physics. Emphasis will be given on laboratory techniques specially the importance of accuracy of measurements.

10.Providing a hands-on learning experience such as in measuring the basic concepts in properties of matter, heat, optics, electricity, and electronics.

11.Students will demonstrate proficiency in mathematics and the mathematical concepts needed for a proper understanding of physics.

12.Students will demonstrate knowledge of classical mechanics, electromagnetism and modern physics and be able to apply this knowledge to analyse a variety of physical phenomena.

13.Students will show that they have learned laboratory skills, enabling them to take measurements in a physics laboratory and analyse the measurements to draw valid conclusions.

14.Students will be capable of oral and written scientific communication and will prove that they can think critically and work independently.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

DEPARTMENT OF CHEMISTRY

PSO-1: Chemistry of p – block elements

To gain knowledge about the diborane, borazine, silicones, propionitrile halides, oxides and oxoacids of sulphur , pseudo halogens and interhalogen compounds.

PSO-2: Organometallic Chemistry

To gain knowledge about preparation and reactivity of **Li and Mg.**

PSO-3: Structural theory in Organic Chemistry

To gain knowledge about basic organic chemistry definitions and types of reactions.

PSO-4: Acyclic Hydrocarbons &Alicyclic hydrocarbons (Cycloalkanes) To gain knowledge about basic organic chemistry definitions and types of reactions.

PSO-5: Benzene and its reactivity

To gain knowledge about preparation, structure, reactivity of benzene and Aromaticity of benzene.

PSO-6: General features of absorption spectroscopy

To gain knowledge about Beers Lamberts Law, Transmittance, Absorbance, single and Double Beam spectrophotometer and applications of beers lamberts law

PSO-7: Electronic Spectroscopy:

To gain knowledge about energy levels of molecular orbitals and types of electronic transitions and concepts of chromophores and auxochromes

PSO-8: IR Spectroscopy

To gain knowledge about Modes of vibrations in di atomic and poly atomic molecules and characteristics of absorption bands of different functional groups.

PSO-9: Proton Magnetic resonance spectroscopy:

To learn about Principles of NMR, chemical shift, Spin-spin coupling and Applications of NMR.

PSO-10: Dilute solutions:

Colligative Properties, Raoult's Law, Experimental determination methods of RLVP, elevation of boiling point, depression in freezing point. Osmotic pressure

PSO-11: Electrochemistry-I &II

To gain knowledge about Kohlrausch Law, Arrhenius theory, Ostwald's dilution law, Debye, Huckel & Onsagar's equation, Definition of Transport number and Determination of Hittorf's method, Nernst's equation, SHE, Calomel electrode, Applications of EMF Measurements

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Computer Science

PSO 1 : To apply knowledge of recent computing technologies, skills and current tools of computer science and engineering.
PSO 2 : To design and conduct experiments, as well as to analyse and interpret data.
PSO 3 : To Understand the contemporary research issues in the different areas of computer science & engineering.
PSO 4 : To explore research gaps, analyse and carry out research in the specialized/emerging areas.
PSO 5 : To design software systems, components or processes to meet identified needs within economic, environmental and social constraints.
PSO 6 : To express/present ideas in an impressive and professional manner.
PSO 7 : To recognize the need to engage in lifelong learning through continuing education and research
PSO 8 : To work in multidisciplinary and multicultural environment, become entrepreneur based upon societal needs, understanding of professional, social and ethical responsibilities.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of IoT

PSO 1 : To apply knowledge of recent computing technologies, skills and current tools of computer science and engineering.
PSO 2 : To design and conduct experiments, as well as to analyse and interpret data.
PSO 3 : To Understand the contemporary research issues in the different areas of computer science & engineering.
PSO 4 : To explore research gaps, analyse and carry out research in the specialized/emerging areas.
PSO 5 : To design software systems, components or processes to meet identified needs within economic, environmental and social constraints.
PSO 6 : To express/present ideas in an impressive and professional manner.
PSO 7 : To recognize the need to engage in lifelong learning through continuing education and research
PSO 8 : To work in multidisciplinary and multicultural environment, become entrepreneur based upon societal needs, understanding of professional, social and ethical responsibilities.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Electronics

1. Apply the fundamental knowledge of mathematics, science, electrical and electronics engineering to analyse and solve the complex problems in electrical, electronics and allied interdisciplinary areas.

2. Design, develop and implement electrical and electronics and allied interdisciplinary projects to meet the demands of industry and to provide solutions to the current real time problems.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Computer Applications

PSO 1- Understand the application of business Knowledge in both theoretical and practical aspects.
PSO 2- Determine the procedures and schedules to be followed on preparing financial statements of Companies.

PSO 3- Understand the basic concepts and functions of accounting, trade and computer software
PSO 4- Develop proficiency in the management of an organisation

PSO 5- Attain skills in conducting business transactions online

PSO6 – Analyse the scope of the business by adopting modern technology in the business practice
PSO7 - Follow the ethics pertaining to business transactions

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Botany

- Understanding the nature and basic concepts of all the plant groups, their metabolism, components at the molecular level, biochemistry, taxonomy and ecology.
- The course will make them aware of natural resources and environment and the importance of conserving it.
- Hands on training in various fields will develop practical skills, handling equipment and laboratory use along with collection and interpretation of biological materials and data.
- Knowledge gained through theoretical and lab-based experiments will generate technical personnel in various priority areas such as genetics, cell and molecular biology, plant systematics and biotechnology.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Zoology

PSO 1: should be able to understand the concepts at advanced level of Botany, Zoology and Chemistry and their applications in the field of scientific research and other relevant areas.

PSO 2: Should be able to Perform procedures as per laboratory standards in the area Taxonomy, physiology, Ecology, Cell biology, Genetics, applied zoology, Applied botany, Clinical science, Tools and Techniques of zoology and botany, Toxicology, Entomology, Biochemistry, Fish biology, Biotechnology, Immunology, and Research methodology.

PSO 3: Should be able to understand the concepts at advanced level of chemistry and their applications in the field of scientific, research laboratory and other relevant areas.

PSO 4: Should be able to communicate effectively and apply the life skills along with ethics, leadership, personality development and other subject foundational knowledge to apply in their daily work life and contributes the knowledge for National building

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Horticulture

1. Demonstrate a working knowledge and appreciation of the diversity of plants, their culture and utilization.

2. Apply horticultural principles to the successful growth and production of horticultural plants.

3. Demonstrate the knowledge, skills and attributes to be successful contributing members of the horticulture profession.

4. Synthesize and integrate information to solve horticultural problems.

5. Communicate effectively within the discipline and also be able to transmit knowledge and skills to lay-persons in the general public.

6. Apply concepts of horticulture science to select, manage, and improve plants and their products

7. Demonstrate competence with laboratory and/or field-based technologies used in modern horticulture

8. Anticipate and recognize problems, identify causes of these problems, quantify potential impacts, analyse options, identify viable solutions, and evaluate actions and consequences of treatments and interventions

9. Understand how global issues including climate change, energy use, water availability, and/or food safety impact sustainability of horticultural systems locally, nationally, and globally

10. Apply principles of accounting, business law, labour, marketing, and personnel management to a horticultural business and contribute to developing various components of a business plan

11. Quantify economic importance of plants in managed ecosystems and the impact of horticultural crops in food systems

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of History

PSO-1	Acquaint with the basics of history and course of historical development at regional and national level.
PSO-2	Able to understand the current and prospective political, socio – economic and cultural changes across globe through the learning of past and contemporary history.
PSO-3	Learn to identify the contributions of great men and women through movements and revolutions for better modern age of governance and administration.
PSO-4	Able to get sensitized on various issues of human race chiefly pertaining to women, children, downtrodden and other vulnerable groups to help the learner to understand their role in society
PSO-5	Laid platform to enter tourism sectors both at government organizations and private firms by knowing the procedures of travel formalities, ticketing and the organization and functions of travel Agencies which develop entrepreneurial skills in the learner.
PSO -6	Gaining various transferable skills in a wide range of careers such as law, journalism, service sectors, archaeological spheres, museums, library science etc and there by enhances the chances of getting placements in those sectors.
PSO – 7	Aware of local areas pertaining to its history, polity, ethnography, geography, ecology and so on to build a regional and national history in a better way.
PSO – 8	Develop the skills required to become graduate teachers at various levels
PSO – 9	Acquire the skills needed to pursue career of civil servants both at union and state level.

PSO -10	Knowing the fundamentals of research to pursue research career as a mission

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Economics

PSO 1 Understanding how different degrees of competition in a market affect pricing and output.

PSO 2 Understanding the efficiency and equity implications of market interference, including government policy.

PSO 3 Developing research Knowledge in economics and also Developing the skill of data collection & use of sampling techniques in research.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Political Science

1. Comprehend the basic theories of political Science, structures and processes of government systems
2. participate as a good citizen of the society;
3. analyse political and policy problems and participate in formulating policy options;
4. use electronic and traditional library resources to research key local, state, national and international policy issues and present results;
5. demonstrate critical thinking, including the ability to form an argument, detect fallacies, and martial evidence, about key issues of public policy and politics;
6. discuss the major theories and concepts of political science and its subfields; and deliver thoughtful and well-articulated presentations of research findings

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Commerce

1. Understand the basic concepts of the commerce, management, accounting of & economics. 2. Analyse relationship among commerce, trade industry, services, management and administration.

3. Perform all accounting activities and can handle type of business very well.

4. Understand application of knowledge of commerce in business service sector industry, marketing, finance entrepreneurship development etc.

5. Develop communication skills and computer awareness and rules of income tax act.

6. Think about commercial and professional way or point of view.

7. Self employment confidences develop.

8. Understanding legal issue/ law relating to banking and insurance sector.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of Telugu

ప్రోగ్రాము స్పెసిఫిక్ అవుట్ కంస్	1.విద్యార్థులకు తెలుగు భాష మీద మరియు సాహిత్యం మీద జ్ఞానం పెరుగుతుంది. 2. విద్యార్థులకు తెలుగు కథలు, నవలలు మరియు నాటకాలు ఇతర సాహిత్య ప్రక్రియల్లో సృజనాత్మక లేఖన నైపుణ్యాలు పెరుగుతాయి. 3.ఈ పాఠాల వల్ల విద్యార్థులకు నైతిక విలువలు, దైవిక విలువలు మరియు సామాజిక బాధ్యతలు పెరుగుతాయి

PROGRAMME SPECIFIC OUTCOMES(PSOs)

Department of English

- Understand major and minor forms of literature.
- Have developed interest in literature and language.
- Enjoy reading the short stories, poems, novels and dramas.
- Know the literary theories, terms and concepts in Criticism.
- Appreciate the literary works.
- Understand the structure and function of grammatical units
- Know the use of language at semantic and syntactic levels.
- The students could improve vocabulary.
- Use English effectively in formal and informal situations
- . Attempt creative writings.
- Know phonological and morphological aspects of English.
- Understand the values of literature in life.
- Understand different cultures of the times.
- Know various genres in English literature like Indian English literature,
- British literature and American literature.
- Develop language learning skills like Listening, Speaking, Reading and Writing.
- Develop vocabulary and communicative skills.
- Develop verbal and non-verbal skills of communication.