Department of Physics:

Program Outcomes, Program Specific Outcomes

Programme Outcomes: Physics

B.Sc.	
POs – 1	Acquired the knowledge with facts and figures related to any three subjects in pure science.
POs – 2	Understood the basic concepts, fundamental principles and scientific theories related to various scientific phenomenon and their relevance in the day to day life.
POs – 3	Acquired the skills in handling scientist Instruments planning & performing in laboratory experiments.
POs – 4	The skill of observations and drawing logical inferences from the scientific experiments.
POs – 5	Analysed the scientific data critically & systematically & the ability to draw the objective conclusions

B.Sc.	
PSOs - 1	Demonstrate knowledge in various branches of physics like properties of matter thermodynamic Electricity & Magnetism quantum mechanics Atomic Physics, Nuclear Physics, Molecular Physics, Modern Physics etc. they will be able to apply this knowledge to analyse a variety of physical phenomenon.
PSOs – 2	Demonstrate proficiency in mathematics and mathematical concepts needed for a proper understanding of Physics.
PSOs – 3	Show that they have learned laboratory skills enabling them to take measurements in Physics laboratory and analyse the measurements to draw valid conclusions
PSOs – 4	Communicate scientific communication orally and in written and will prove that they can think critically and work independently.

F.Y.B.Sc.	
Course Details	**Outcomes of the Course** On successful completion of the course, students will able to,
Paper No. I – Properties of Matter Acoustics & Sound	• Learning the basic concepts of gravitation, elasticity, surface Tension, Viscosity, acoustics and ultrasonic • Understand the concepts of properties of matter and to recognise their application in real life problems • Formulate the equation for unique cases in the diverse categories of material systems
Paper No. II – Heat & Thermodynainics	• Learning the basic ideas of heat • Finding applications of the Physical quantities • Solving the problems based on heat transfer, entropy and thermal radiation
Paper No. III – Electricity and Magnetism	• Acquire knowledge on elementary ideas of electricity and magnetism • Emphasize the significance of laws involved in electric circuits • Formulate the equations and solve the problems
Paper No. IV – Optics	• List the basic ideas in image formation and the defects involved • Understand the central concepts of interference diffraction and polarization

S.Y.B.Sc.	
Course Details	**Outcomes of the Course** On successful completion of the course, students will able to,
Paper No. V – Mathematical statistical physical and Relative	• Learning the basic mathematical methods used in physics • Learning the basics of statistics and application for MB, BE, and FD Statistic • Learning the concepts of relativity and Einstein's theory of relativity
Paper No. VI – Modern and Nuclear Physics	• Understanding the concepts of photoelectric effect, X-rays, nuclear forces and models, Particle accelerators and detectors • Learning the Planck Einstein equations, Braggs law, nuclear fission, Fusion, Chain reaction, Cyclotron, Betterton etc.
Paper No. VII – General Electronics	• Be familiar with the basic concepts of electronics like diodes and transistors • Apply the knowledge to understand the working of amplifiers oscillators and multivibrators
Paper No. VIII – Solid State Physics	• Outline the importance of Solid State Physics in the modern society • Explore the relationship between chemical bonding and crystal structure and their defects • Transfer their knowledge level form theoretical physical subject to wards the understanding of basic properties of solid state matter

T.Y.B.Sc.

Course Details	Outcomes of the Course On successful completion of the course, students will able to,
Paper No. IX – Classical and Quantum Mechanics	• Recognize the basic terms in classical and quantum mechanics • Understand the difference between classical mechanics and quantum technics • Apply basics to construct and solve problem in quantum mechanics
Paper No. X – Electromagnetic	• Understand the basic concepts of Electromagnetic waves • Study the interaction of EM Wave with matter
Paper No. XI – Atomic and Molecular Physics, LASER's	• Acquire knowledge of fundamental physics understanding atomic and molecular physics • Understand the working and construction of lasers (eg. Ruby laser, He-Ne laser. etc.)
Paper No. XII – Non conventional energy sours and optical fibre	• Outline the importance of non-conventional energy sources • Understand the construction and working of optical fibres and their use in communication

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