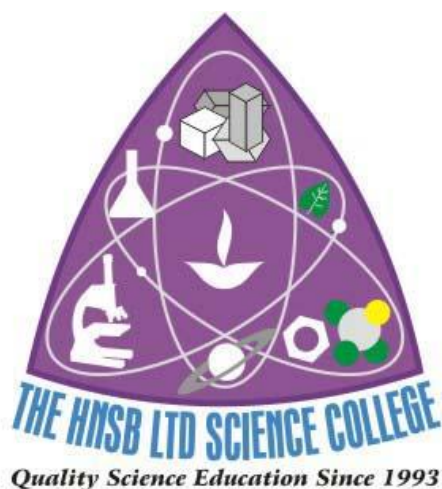


Program Educational Objectives (PEOs),
Program Outcomes (POs)
&
Program Specific Outcomes (PSOs)
(2024-2025 Batch)
(B.Sc.Sem.-3)



THE DEPARTMENT OF PHYSICS

THE H. N. S. B. LTD. SCIENCE COLLEGE
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Vision:-

The Department of Physics strives to provide an intellectual environment that fosters the search for the new knowledge in highly dynamic techno -world through its quality education.

Mission:-

The Department focus is on the comprehensive, interdisciplinary teaching in applications of Physic, so as to enable learning and applying new technique in dynamic techno -world as the field evolves.

Program Educational Objectives (PEOs)

The graduate will

PEO-1	Graduates will develop the skills to handle new techniques applied in dynamic techno-world where they have to serve themselves.
PEO-2	Graduate will use their course as a training ground to develop their positive attitude, skills which will enable them to become a multi facet personality shining in any chosen field.
PEO-3	Graduate will generate the creativity and acquire the knowledge to solve the complex problems due to practical education.
PEO-4	Graduate develop teaching skills, subject knowledge in the course of their study which will help them to shine in various field including education.

Program Outcomes(POs)

PO-1	To make students eligible for Higher Studies and professional courses.
PO-2	To develop the abilities to read, understand and interpret physical information – verbal, mathematical and graphical. To provide an intellectually stimulating environment to develop skills and enthusiasms.
PO-3	students to the best of their potential.
PO-4	To give need based education in physics of the highest quality at the undergraduate level.
PO-5	To enable students to perform experiments and interpret the results of observation, including an assessment of experimental uncertainties. To make students eligible for government job.

Program Specific Outcomes(PSOs)

PSO-1	According to Guideline of NEP 2020, that curriculum, course content and assessment of scholastic achievements play important roles in shaping education.
PSO-2	The view that assessment should support and encourage the broad instructional goals such as basic knowledge of the discipline of Physics including phenomenology, theories and techniques, concepts and general principles.
PSO-3	This should also support the ability to ask subjective questions and to obtain its

	solutions by use of qualitative and quantitative reasoning and by experimental investigation.
PSO-4	With this in mind, we aim to provide a firm foundation in every aspect of Physics ranging from a broad spectrum of modern trends in Physics to experimental, computational and mathematical skills of students.

Course Outcomes (COs)

Course	Outcomes (Cos)
Multi Discipline specific course(Theory) Paper Name: Thermodynamic and Optic Paper Code: SC23MDSCPHY303	After the successful completion of the course students will be able to <ol style="list-style-type: none"> 1. Understands the Thermodynamics, Maxwell's Equation, T-ds Equations, Kelvin effect, Compressibility. 2. Fermat's Principle, law of reflection and refraction. 3. Introduction of polarization, Huygen's explanation. Type of polarized, Half and Full wave plate.
Practical Multi Discipline Core Course(MJDSCP)- SC23PMDC P PHY303	By the end of the course, the students will be able to understand. <ul style="list-style-type: none"> • The basic principles of Physics related to their courses in the practical way. • The operational details of electronic circuits. • The process to analyze the observations and infer the outcome of the experiments. • How to analyze the experimental data and graphical analysis.
SKILL ENHANCEMENT COURSE (Theory) Paper Name: Energy Technology Paper Code: SC23SECPHY306 Paper Name : Vacuum Pumps, Pressure Gauges and Instruments Paper Code: SC23SECPHY306A	At the end of the course students will be able to To Know different types of energy technology like solar, Geothermal, wind etc. <ul style="list-style-type: none"> • Understand the basic knowledge of working of various Pumps & Errors in instruments. • Learns the construction, working process and use of various measuring optical instruments. • Will get sufficient knowledge of optical instruments and its application
INDIAN KNOWLEDGE SYSTEM(IKS) COURSE Paper Name: Yoga – Pranayam and Wellness Paper Code: SC23IKSPHY305 Paper Name: Traditions in Indian Parivar Paper Code: SC23IKSPHY305	What is Yoga ? What important in life? Basic Concept of Yoga. Different types of Yoga. Different types of Pranayam. To provide concept of parivar and duties of family members. To draw attention of students to gruhasth ashram and Sacrament of marriage. To discuss the importance Indian tradition in Hindu parivar. To give sufficient knowledge to students about mass meal and mass prayer with family.