

PHYSICS COURSE OUTCOMES

B. Sc	Semester I	Credits: 4
Course: 1	Mechanics, Waves and Oscillations	Hrs/Wk: 4

- To understand basic theories related with properties of matter and its applications to determine values of various physical quantities associated with matter.
- Be able to apply knowledge of the properties of matter to explain natural physical processes and related technological advances.
- To learn about fundamentals of verbal and mathematical concepts of waves and oscillations.
- We should make the students to know their skills required to get the information from the syllabus and use them in a proper way.

B. Sc	Semester II	Credits: 4
Course: 2	Wave Optics	Hrs/Wk: 4

- Understand the nature of light and principles of Laser and holography.
- Analyse the intensity variation of light due to interference, diffraction and polarization.
- Solve problems in Optics by selecting the appropriate equations and performing numerical or analytical calculations.
- Student can able to operation of optical devices including polarizers, interferometers and Lasers

B. Sc	Semester III	Credits: 4
Course: 3	Heat and Thermodynamics	Hrs/Wk: 4

- Students will be able to Perform experiments and interpret the results of observation, including making an assessment of experimental uncertainties.
- They develop the ability to apply the knowledge acquired in the classroom and laboratories to specific problems in theoretical and experimental Physics.
- To apply the theories learnt and the skills acquired to solve real time problems.
- To understand the concepts and significance of the various physical phenomena.

B. Sc	Semester IV	Credits: 4
Course: 4	Electricity, Magnetism & Electronics	Hrs/Wk: 4

- To learn about Gauss law and solve the electric field and magnetic field for various geometric objects and to learn basic electronic concepts in analog and digital theory.
- To be Explain all the topics of Experiments, Concepts and Derivations to the student.
- Apply the principles of electronics in day to day life.
- Encourage all the students to study higher educational courses in reputed institutes and to enrich the students with creative, logical and analytical skills and to motivate the students towards research side.

B. Sc	Semester IV	Credits: 4
Course: 5	Modern Physics	Hrs/Wk: 4

- To Create awareness on the topics of Atomic & Molecular Physics, Quantum mechanics, Nuclear Physics, and Solid state physics.
- To be Explain all the topics of Experiments, Concepts and Derivations to the student.
- Explain the basic principles of quantum mechanics and apply to Atomic, Molecular structure of energy levels etc.
- Motivate all the students to pursue PG courses in reputed institutes and to endow the students with creative and analytical skills; this will equip them to become entrepreneurs.

B. Sc	Semester V	Credits: 4
Course: 6B	Low Temperature Physics & Refrigeration	Hrs/Wk: 4

- Identify various methods and techniques used to produce low temperatures in the Laboratory.
- Acquire a critical knowledge on refrigeration and air conditioning.
- Demonstrate skills of Refrigerators through hands on experience and learns about refrigeration components and their accessories.
- Understand the classification, properties of refrigerants and their effects on environment.
- Comprehend the applications of Low Temperature Physics and refrigeration.

B. Sc	Semester V	Credits: 4
Course: 7B	Solar Energy and Applications	Hrs/Wk: 4

- Understand Sun structure, forms of energy coming from the Sun and its measurement.
- Acquire a critical knowledge on the working of thermal and photovoltaic collectors.
- Demonstrate skills related to callus culture through hands on experience
- Understand testing procedures and fault analysis of thermal collectors and PV modules.
- Comprehend applications of thermal collectors and PV modules.