

**BACHELOR OF SCIENCE in PHYSICS (HONS)**  
**SEMESTER – V**

**Paper Code: PHY-507 P**

**PHY – 507P: PHYSICS PRACTICAL**

**100 MARKS**

**Laboratory :**

1. To draw the characteristics of a transistor in the CE and CB configurations.
2. To draw the resonance curve of series and parallel LCR circuit and to determine the Q- factor.
3. Determination of the constant of a ballistic galvanometer by using a standard capacitor.
4. To construct two input OR and AND logic gates using p-n junction transistors and to verify their truth table.
5. To study the performance of NOT circuit using transistors.
6. To draw the characteristics of a Zener diode and to study its use as a voltage regulator.
7. To study solid state half-wave and full-wave rectifiers and to determine the ripple factor and percentage of regulation and different types of filters.
8. To plot the frequency response of an R-C coupled amplifier
  - (i) without feedback and
  - (ii) with negative feedback and to determine the bandwidth in each case.
9. Determination of self-inductance by Anderson's method.
10. Determination of mutual inductance by using a Ballistic Galvanometer and to draw the M.O. curve.
11. Determination of the band gap of a p-n junction diode (germanium).

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