

**V – Semester Practicals, Paper – VI A: Solid State Physics**  
**Question bank**

1. Find the molar susceptibility of the metal ion in the given solution using Quinck's tube
2. Find the magnetic susceptibility of a given solid using Gouy balance
3. Determine the Piezoelectric d-coefficient and hence calculate e and g coefficient using dielectric constant
4. Find the variation of dielectric constant of a ferroelectric/dielectric material at 1KHz and 10KHz
5. Draw the PE hysteresis loop and hence find the area of the loop
6. Find the BH curve of a Ferrite material and hence find the Loss
7. Find the Variation of resistivity of a Semiconductor using four probe method
8. Find the carrier concentration in a semiconductor using hall coefficient
9. Draw the characteristics of a solar cell and find its efficiency and fill factor
10. Find the lattice parameter "a" of a cubic crystal using powder diffraction pattern
11. Find interplanar spacing using Laue pattern