Physics

Assignment-I

1. Explain crystallography by powder technique to evaluate Lattice constant ‘a’.
2. Develop an expression for equilibrium concentration of Schottky defect for an Ionic crystal.
3. Develop a relation between Interplanar spacing (d) and Miller Indices.
4. Explain Kronig-penny Model by using Bloch theorem.
5. Define Fermi level and derive an expression for Intrinsic semiconductor.

**ASSIGNMENT-I QUESTION WITH CO AND BT**

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| **S.NO** | **Q.NO** | **CO** | **BT** |
| **1** | **1** | **Explain** the basics of crystals, lattice parameters and their defects. | **Understand** |
| **2** | **2** | **Explain** the basics of crystals, lattice parameters and their defects. | **Understand** |
| **3** | **3** | **Explain** the basics of crystals, lattice parameters and their defects. | **Understand** |
| **4** | **4** | **Classify** solids into different types by understanding the formation of energy bands in solids. and to Analyze the semiconductor by knowing the hall coefficient hall voltage, hall electric field and charge concentration and study the electric polarization in dielectrics | **Understand** |
| **5** | **5** | **Classify** solids into different types by understanding the formation of energy bands in solids. and to Analyze the semiconductor by knowing the hall coefficient hall voltage, hall electric field and charge concentration and study the electric polarization in dielectrics | **Understand** |