

Assignment 7

Course Name: PHYSICS-2 Course Code: 15B11PH211

Q1: Define lattice points, Bravais lattice, primitive cell, coordination number and atomic packing fraction. Calculate packing fraction for SC, BCC and FCC structures. **[CO2]**

Q2: Calculation of (c/a) ratio and packing fraction for an ideal Hexagonal close packed (hcp) structure. **[CO2]**

Q3: Explain Miller indices and how Miller indices are derived. Derive an expression for inter planar spacing of a crystal in terms of Miller indices. **[CO2]**