Central University of Haryana (CUH), Mahendergarh, Haryana
School of Engineering and Technology (SOET)
BTech (CSE), First Years, Sessional - I

Time: 1 Hour

Marks: 20

Attempt Any two Questions

1. Describe the Kronig Penny Model and Formulate the central Equation for the Model. How does it look in the center and at the Edge of Brillouin Zone?

2. The Fermi energy of copper is 7eV. Calculate (a) The Fermi momentum of electron in copper (b) de Brogile wavelength of the electron and (c) the Fermi Energy

3. Describe the Density of States for 3D, 2D, and 1D structures in detailed. For electrons in a metallic specimen, calculate the density of energy states below 2eV.