ANURAG GROUP OF INSTITUTIONS
(Autonomous)
School of Engineering
I-B.Tech-II-Semester
1-Assignment Questions
Subject: ENGINEERING PHYSICS-II

1. What are matter waves? Describe the experimental verification of matter waves using Davisson- Germer Experiment.

2. Explain the physical significance of wave function and derive the Schrodinger's one dimensional time independent wave equation.

3. Show that the energies of a particle in an infinite potential well of box are quantized.

4. Derive the electrical Conductivity of metals by using Ohms law.

5. Write the postulates of classical free electron theory.

6. An electron is moving under a potential field of 15KV. Calculate the wavelength of the electron.

7. An electron is bound in one dimensional infinite well of width 0.12 nm. Find the energy values in the ground state and first two excited states.

8. Calculate the velocity and kinetic energy of an electron of wavelength 1.66×10^{-10} m