CL28_Q1. Define effective number of electrons.

CL28_Q2. The electrons near the Fermi level contribute to the conduction in metals. Explain.

CL28_Q3. How does the specific heat of metals depend on temperature?

CL28_Q4. Discuss the temperature dependence of conductivity of a metal based on the quantum free electron theory. How is the approach different from the classical method?

CL28_Q5. Explain the contribution of free electrons to the specific heat of metals on the basis of quantum free electron theory.