

Electrical Engineering Materials

Question Bank

1. Discuss structure of Solids.
2. Define Resistivity, also discuss factors affecting resistivity.
3. Discuss terms: Skin effect and Hall effect
4. What are dielectric properties: discuss dielectric properties of solids and liquids
5. Define Polarization and types of polarization
6. Discuss: Drift Velocity, relaxation types of electrons, collision time and mean free path
7. Discuss magnetic property of different materials
8. Discuss ferromagnetic origin
9. Define and discuss Curie Weiss Law.
10. Superconductivity and its origin
11. The conductivity of a conductor can be increased by
 - a. Decrease in Temperature
 - b. Increase in Temperature
 - c. Decreasing its vibration
 - d. Increasing its vibration
12. The co-ordination number of a simple cubic structure is
 - a. 2
 - b. 4
 - c. 6
 - d. 8
13. By increasing impurity content in the metal alloy the residual resistivity always
 - a. Decrease
 - b. increase
 - c. Remains constant

d. becomes temperature dependent

14. On which of the following factors does the resistivity of a material depend?

a. Resistance of the conductor

b. area of the conductor section

c. Length of the conductor

d. All of the above

15. The value of critical field below the transition temperature will

a. Increase

b. decrease

c. Remain unchanged

d. Any of the above