Electrical and Electronics Engineering Material Science Questions & Answers Pdf

- 1. The maximum power handling capacity of a resistance depends on
 - a. Total surface area
 - b. Resistance value
 - c. Thermal capacity of the resistor
 - d. Resistivity of the material used in the resistor

Ans: C

- 2. The fuse material used in electrical lines must have which one of the following properties?
 - a. High resistivity
 - b. Low conductivity
 - c. High melting point
 - d. Low melting point

Ans: D

- <u>3.</u> Which one of the following materials has temperature coefficient of resistance very close to zero.
 - a. Manganin
 - b. Nichrome
 - c. Carbon
 - d. Aluminium

Ans: A

- 4. A superconductor may be used for generating
 - a. Voltage
 - b. Pressure
 - c. Temperature
 - d. Magnetic field

As: D

- <u>5.</u> The piezoelectric effect is the polarization of a dielectric under the influence of
 - a. Light
 - b. Mechanical stress
 - c. Electrical stress
 - d. Heat

Ans: B

- 6. Piezoelectricity is the reverse effect of
 - a. Electroluminescence
 - b. Electrostriction
 - c. Peltier effect
 - d. Halt effect

Ans: B

7. Which of the following insulating materials has the least affinity for moisture?

- a. Cotton
- b. Paper
- c. Asbestos
- d. Mica

Ans: C

- 8. What happens when a paramagnetic material is heated above Curie temperature?
 - a. It becomes diamagnetic
 - b. It becomes non-magnetic
 - c. It becomes ferromagnetic
 - d. It becomes anti-ferromagnetic

Ans: B

- <u>9.</u> In which one of the following magnetic materials, is the net magnetic moment zero?
 - a. Paramagnetic
 - b. Ferromagnetic
 - c. Ferrimagnetic
 - d. Anti-ferrimagnetic

Ans: D

- 10. Which one of the following is not a permanent magnetic material?
 - a. Chromium steel
 - b. Silicon iron
 - c. Cobalt steel
 - d. Alnico

Ans: B