

G10 vt. Polytechnic, Bhadrak  
Faculty Name - Nibedita HO  
Important questions

Branch : Electrical Engg. Semester -3<sup>rd</sup>

SUB : Electrical Engineering Material

- Q.1 What are the types of Electrical engg. Materials?
- Q.2 Explain different types of interatomic bonds.
- Q.3 Define resistivity.
- Q.4 State Ohm's law.
- Q.5 What are the factors affecting resistivity ?
- Q.6 Write the properties of low resistivity materials and give 5 no.of examples.
- Q.7 Write the properties of high resistivity materials and give 3 no.of examples.
- Q.8 Define superconductivity and write 4 no. of applications of superconductor material.
- Q.9 What is doping process?
- Q.10 Explain the energy band theory of conductor, semiconductor & insulator.
- Q.11 Write 5 differences between P-type semiconductor & N- type semiconductor.
- Q.12 Write the short note on Hall effect generator.
- Q.13 Write the basic difference between photoconductive cell & photovoltaic cell ?
- Q.14 What are the factors affecting dielectric strength ?
- Q.15 Write the short note on Dielectric loss.
- Q.16 Write the short note on Sulphur hexafluoride(SF<sub>6</sub>).
- Q.17 Write the short note on Electrolytic capacitors .

T.M.H.

Q.18 Explain the Magnetisation (B-H) Curve .

Q.19 Explain the hysteresis loop of a ferromagnetic material .

Q.20 Write 3 properties of a fuse material.

Q.21 Write the short note on

a. Dehydrating material.

b. PVC

c. Natural & synthetic rubbers

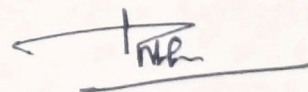
d. Resins

Q.22 Describe the polarization of a dielectric material.

Q.23 Describe the breakdown process of different types of dielectrics.

Q.24. Define forbidden zone .

Q.25 Define magnetostriction .

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