

1st internal Examination  
Electrical Engineering Materials  
3rd Semester Diploma,  
Electrical Engineering

Full marks - 20

1. Answer all the questions.
  - (a) What are bundle conductors?
  - (b) What is a bimetal?
  - (c) Differentiate between volume resistance and surface resistance.
  - (d) Explain why conducting material like copper and Aluminium are not used for making the element for electrical heater.
  - (e) What is intrinsic semiconductor?
2. Write the use of fuse, what are the desirable properties of fuse material?
3. Discuss the various electrical properties of insulating material.

2nd internal Examination  
Electrical Engineering Materials  
3<sup>rd</sup> Semester Diploma,  
Electrical Engineering

Full marks = 20

1. Answer all the questions
  - (a) what is hall effect ?
  - (b) what is breakdown voltage ?
  - (c) what is thermistor ?
  - (d) what is relative permeability ?
  - (e) what do you mean by hysteresis ?
2. What are the various classifications of dielectrics explain.
3. Explain Hysteresis phenomenon for magnetic materials.