

Assignment of  
Electrical Engineering Material.  
Branch- Electrical SEM- 3rd sem  
TEMPLECITY INSTITUTE OF TECHNOLOGY & ENGINEERING (TITE)

Writing Space

MODULE-1

- 1/ Define conducting and insulating materials?
- 2/ State any six properties of copper?
- 3/ write the types of semiconducting material with examples?
- 4/ Define dielectric strength and write its units?

MODULE-2

- 5/ what are the electrical properties of insulating materials?
- 6/ mention the types of magnetic materials with example?
- 7/ Name different types of special purpose materials?

MODULE-3

- 8/ write any six differences between primary and secondary cells?
- 9/ distinguish between copper and aluminium in any ten aspects?
- 10/ State properties of ACSR conductors and write its applications?

MODULE-4

- 11/ distinguish between P-type and N-type semiconductors in any five aspects?
- 12/ Explain polarization related to dielectric material?
- 13/ what are the properties and applications of sulphur-hexafluoride ( $SF_6$ ) gas?
- 14/ Explain hysteresis loop by neat sketch along with connection diagram?

MODULE 1

15/ calculate the ampere-hour and watt-hour efficiencies of a battery, which is charged for 7 hours at 25 amp at an average voltage of 1.6V and discharged at 20 A for 8 hours at an average voltage of 1.2V

Q-1

Q-2

Q-3

Q-4

Q-5

Q-6

Q-7