

**NETTUR TECHNICAL TRAINING FOUNDATION**  
**COMMON FOR CP04, CP15 & CP23**  
**I SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JAN 2023**

**Subject: Electronics-I**

**Total Time: 2 Hr.**

**Subject Code: CP04104T/CP15104T/CP23104T**

**Total Marks: 50 Marks**

**PART B**

**1.0 ANSWER ANY EIGHT OF THE FOLLOWING**

**2\*8=16**

- 1.1 What is atomic number and mass number of an atom?
- 1.2 Define inductance. What is the unit of inductance?
- 1.3 Write the classification of semi-conductors
- 1.4 Define Diode. Draw the symbol of Diode
- 1.5 What is the need of rectifier in a circuit? Write its classifications
- 1.6 What is tunnel Diode?
- 1.7 Draw the symbol of the following Diodes: a) Zener Diode b) LED
- 1.8 What is component orientation in soldering? List the types.
- 1.9 Write any 4 applications of Diode
- 1.10 What are the 2 basic types of resistors? Draw its symbol

**2.0 ANSWER ANY SIX OF THE FOLLOWING**

**3\*6=18**

- 2.1 What are the different types of electronic components? Explain with example
- 2.2 State the difference between AC & DC current with waveform
- 2.3 Write down the characteristics of capacitor
- 2.4 Draw the energy level diagram, & write the importance of energy band in solids
- 2.5 List any six applications of LED
- 2.7 Write a short note on construction & operational modes of photo DIODE.
- 2.6 State Ohms law
- 2.8 Write a short note on Positive temperature co-efficient with graph.

**3.0 ANSWER ANY FOUR OF THE FOLLOWING**

**4\*4=16**

- 3.1 Explain the structure of an atom with labelled diagram
- 3.2 What are the factors affecting resistance of resistors?
- 3.3 Explain the Classification of solids on the basis of energy bands
- 3.4 Draw and explain the VI characteristics of PN junction Diode.
- 3.5 Explain the working of center tapped full wave rectifier without filter. Draw neat circuit diagram and waveforms.
- 3.6 Explain the different types of soldering method.

