

NETTUR TECHNICAL TRAINING FOUNDATION
DIPLOMA IN ELECTRONICS ENGINEERING & EMBEDDED SYSTEM – CP04
IV SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JULY 2023

Subject: Electronic Instrumentation & Measurement
Subject Code: CP04402T

Total Time: 2 Hr.
Total Marks: 50

PART B

1.0 ANSWER ANY EIGHT OF THE FOLLOWING

2*8=16

- 1.1 Define error. Write the classification of error.
- 1.2 How to connect an ammeter in an electronic circuit for measuring current?
- 1.3 What are the main parts of a CRO?
- 1.4 How to produce the electron beam in a CRO?
- 1.5 Which are the types of RTD?
- 1.6 Explain the working principle of thermocouple.
- 1.7 What is the use of DTH 11?
- 1.8 Which are the pressure measuring instruments?
- 1.9 Write the features of LM 35
- 1.10 What is the role of a CRT in a CRO?

2.0 ANSWER ANY SIX OF THE FOLLOWING

3*6=18

- 2.1 Compare accuracy and precision.
- 2.2 What are the main tasks of the Instrument Transformer?
- 2.3 Write the difference between current and potential transformers.
- 2.4 Draw the block diagram of a CRO
- 2.5 Draw and explain the block diagram of electron gun.
- 2.6 Explain the construction of RTD with neat sketch.
- 2.7 Briefly explain the capacitive proximity sensor with diagram
- 2.8 Explain the working of PIR sensor.

3.0 ANSWER ANY FOUR OF THE FOLLOWING

4*4=16

- 3.1 How to extend the range of an ammeter?
- 3.2 Explain the construction of a PMMC with diagram.
- 3.3 Explain the construction and working of an energy meter.
- 3.4 Draw the block diagram of DSO. Explain.
- 3.5 Explain the working of LVDT with diagram and write advantages and disadvantages
- 3.6 How to measure pressure by strain gauge? Explain with diagram

