

NETTUR TECHNICAL TRAINING FOUNDATION

DIPLOMA IN ELECTRICAL & ELECTRONICS ENGINEERING-CP23 III SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JAN 2024

Subject: Electrical & Electronics Measurement Total Time: 2 Hr.

Subject Code: CP23301T

PART B

1.0 ANSWER ANY EIGHT OF THE FOLLOWING

2*8=16

Total Marks: 50 Marks

- 1.1 Write the difference between absolute and secondary instruments
- 1.2 Why damping torque is provided in an indicating instrument?
- 1.3 What are the types of moving iron meters?
- 1.4 How to increase the range of voltmeter & ammeter?
- 1.5 What will happen to a PMMC instrument, if AC supply is given to it?
- 1.6 What is the function of delay line in CRO?
- 1.7 What is transducer? Name the different types of transducer.
- 1.8 What are the different types of strain gauges?
- 1.9 Name the methods for the measurement of liquid level.
- 1.10 What is power analyzer?

2.0 ANSWER ANY SIX OF THE FOLLOWING

3*6=18

- 2.1 Define deflecting, controlling and damping forces.
- 2.2 Explain the working of PMMC meters with neat diagram.
- 2.3 What is the difference between Wheatstone bridge and Kelvin's double bridge?
- 2.4 What do you mean by creeping error in energy meter and how it can be adjusted?
- 2.5 Explain Anderson's bridge with proper diagram.
- 2.6 Draw the block diagram of DSO and label its parts.
- 2.7 What are the methods to measure pressure? Explain any two
- 2.8 What are the two deflecting system in CRO? Explain.

3.0 ANSWER ANY FOUR OF THE FOLLOWING

4*4=16

- 3.1 Name the different types of thermocouple and explain the working with neat sketch
- 3.2 Explain the construction and working of dynamometer type wattmeter
- 3.3 Explain the construction and working of three phase energy meter.
- 3.4 With proper diagram explain the working of CRT
- 3.5 Explain the working of LVDT with neat diagram
- 3.6 List down the applications of proximity sensor