

Register No.:

683

April 2023

Time – Three hours
(Maximum Marks: 100)

- N.B.**
1. Answer all questions under Part-A. Each question carries 3 marks.
 2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.

PART – A

1. What is Measurement, True Value and Instrument Efficiency?
2. List the functions of measurement system.
3. State the advantages and disadvantages of dynamometer type instruments.
4. Define earth resistance.
5. Write short notes on Driving System of the single phase Induction type Energy meter.
6. Write about rotating type sequence indicator.
7. What is sweep used in CRO?
8. Define Inductance.
9. What is the application of LVDT?
10. Write short notes on vibration sensor.

[Turn over.....

PART – B

11. (a) Describe the Instruments Operating forces.
(Or)
(b) Explain about the Secondary Instruments and Its working mode.
12. (a) Derive the torque equation of PMMC and moving Iron instruments.
(Or)
(b) Draw and explain the vector diagram of shaded pole instruments and write the expression for torque.
13. (a) Describe Dynamometer type single phase power factor meters.
(Or)
(b) Explain with neat diagram about Electro dynamometer type of synchroscope.
14. (a) Explain the different lissajous patterns measured by CRO.
(Or)
(b) Describe the basic components of Signal Conditioning System.
15. (a) Describe with the neat diagram about the construction and working principle of LVDT.
(Or)
(b) Explain the construction and working principle of Photovoltaic Transducer with neat diagram.