Register No.:	
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## April 2024

## <u>Time - Three hours</u> (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. Define Accuracy.
- 2. Write short notes on magnetic effects and thermal effects of instruments.
- 3. State the advantages of dynamometer type instruments.
- 4. Write the working of CT.
- 5. Write notes on power measurements in AC circuits.
- 6. What is digital frequency meter?
- 7. Draw Maxwell's bridge.
- 8. Draw the circuit of Schering bridge.
- 9. What is the application of LVDT?
- 10. Write short notes on thermistor.

[Turn over.....

## PART - B

11. (a) Explain the terms True value, Precision, Static Error, Static error correction and Instruments Efficiency.

(Or)

- (b) What is measurement? Explain the functions of measurement systems.
- 12. (a) Draw and explain the construction and working of moving iron instruments.

(Or)

- (b) Explain the measurement of high resistance using Megger with a neat sketch.
- 13. (a) Describe the Wattmeters in power measurement.

(Or)

- (b) Describe Electro dynamometer type wattmeter.
- 14. (a) Explain Anderson bridge with the circuit diagram.

(Or)

- (b) Draw the block diagram of a general purpose CRO and explain.
- 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.

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