

4246

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2021

DEEE - THIRD SEMESTER EXAMINATION

ELECTRICAL AND ELECTRONIC MEASURING INSTRUMENTS

Time: 3 hours [Total Marks: 80

PART—A

 $4 \times 5 = 20$

Instructions: (1) Answer any **five** questions.

- (2) Each question carries four marks.
- (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- **1.** List any four types of indicating measuring instruments.
- **2.** What is an absolute measuring instrument?
- **3.** State the advantages of moving coil measuring instruments.
- **4.** List the common errors occur in moving iron measuring instruments.
- **5.** Define Accuracy.
- **6.** List the applications of Potentiometer.
- **7.** List the applications of Sensors.
- **8.** Draw the circuit diagram of rectifier type voltmeter.
- **9.** List the specifications of digital voltmeter.
- **10.** List the advantages and disadvantages of LVDT.

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Instructions: (1) Answer any **four** questions.

- (2) Each question carries **fifteen** marks.
- (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- **11.** Explain the different torques present in measuring instruments.
- **12.** Explain the working of repulsion type moving iron measuring instrument.
- **13.** Explain the working of dynamometer type measuring instrument.
- **14.** Compare moving coil measuring instrument with moving iron measuring instrument.
- **15.** Explain the construction of induction type single phase energymeter.
- **16.** Explain the working of basic Ohm-meter.
- 17. Explain the measurement of temperature using thermocouple.
- **18.** Explain the working of three phase digital energymeter.

