

C09-EE-305

3243

BOARD DIPLOMA EXAMINATION, (C-09) 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.
 - List the applications of sensors. **7**.
 - 8. Draw the circuit diagram of rectifier type voltmeter.
 - 9. List the specifications of digital voltmeter.
 - Draw the block diagram of digital multimeter. 10.

/3243 1 [Contd... **PART—B** 15×4=60

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 controlling torque in measuring instruments.
- **12.** Explain the working of anyone type of moving iron measuring instrument.
- **13.** Explain the two wattmeter method of measuring power in three phase circuit.
- **14.** Explain the working of dynamometer type wattmeter.
- **15.** Explain the method of extending the range of moving coil ammeter.
- **16.** Explain the construction of megger.
- **17.** Explain thermocouple.
- **18.** Explain the working of three phase digital energymeter.

