4239

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2021

DECE - THIRD SEMESTER EXAMINATION

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 the characteristics of ideal ammeter.
- **2.** Give the principle of rectifier type voltmeter.
- **3.** List the advantages of digital instruments over analogue instruments.
- **4.** List the specifications of digital frequency meter.
- **5.** Mention the advantages of triggered sweep.
- **6.** List different types of probes used in CRO.
- **7.** Draw the block diagram of AFO.
- **8.** List the applications of RF signal generator.
- **9.** Define distortion factor.
- **10.** Define stray capacitance of a coil.

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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 working of FET input voltmeter.
- 12. Explain the inductance measurement using Maxwells bridge.
- **13.** Explain the working of digital LCR meter with block diagram.
- **14.** Explain the procedure for measurement of voltage, time interval, frequency using CRO.
- **15.** Draw the block diagram of general purpose CRO and explain.
- **16.** Explain the working of function generator with block diagram.
- **17.** Explain the working of AF power meter.
- **18.** Explain the working of Q-meter with a block diagram.

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