

## 3471

### **BOARD DIPLOMA EXAMINATION, (C-09)**

MARCH / APRIL - 2019

# DECE - IV SEMESTER EXAMINATION ELECTRONIC MEASURING INSTRUMENTS

Time: 3 Hours] [Total Marks: 80

### PART - A

 $3 \times 10 = 30$ 

Instructions:

- (1) Answer ALL questions.
- (2) Each question carries THREE marks.
- (3) Answer should be brief and straight to the point.
- 1 Draw the neat sketch of PMMC meter.
- 2 Explain meter loading
- 3 Draw the neat block diagram of Distortion Factor meter.
- 4 What is accuracy of a Frequency meter.
- 5 Draw the neat block diagram of Digital Multimeter.
- 6 Draw the block diagram of digital I.C Tester.
- 7 Draw the block diagram of general purpose CRO.
- 8 List different types of Probes used in Oscilloscopes.
- 9 Draw the basic block diagram of RF signal generator.
- 10 List various types of Signal Generators with reference to frequency.

#### PART - B

 $10 \times 5 = 50$ 

Instructions:

- (1) Answer any FIVE questions.
- (2) Each question carries TEN marks.
- (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- Draw the Wheat stone bridge circuit and explain the resistance measurement using Wheatstone bridge.
- 12 Explain the construction and working of a series type Ohmmeter.
- Explain the working of successive approximation type DVM with a neat block diagram.
- 14 Explain the working of Logic Analyzer with neat block diagram.
- 15 Explain the principle of sampling oscilloscope with neat block diagram and necessary waveforms.
- 16 Explain the construction & working of X-Y recorder with neat Block diagram.
- 17 Draw the block diagram of a Function generator & explain its working.
- 18 Explain the working of Bolometer type RF power meter with a schematic diagram.

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