



C09-EC-405

**3471**

**BOARD DIPLOMA EXAMINATION, (C-09)  
OCT/NOV—2018  
DECE—FOURTH SEMESTER EXAMINATION  
ELECTRONIC MEASURING INSTRUMENTS**

Time : 3 hours ]

[ Total Marks : 80

**PART—A**

3×10=30

- Instructions** : (1) Answer **all** questions.  
(2) Each question carries **three** marks.  
(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Draw the diagram of differential voltmeter.
2. State the use of high voltage probe.
3. Draw the diagram of rectifier-type voltmeter.
4. List the specifications of digital voltmeters.
5. Explain the accuracy of a frequency meter.
6. State the functions performed by the digital LCR meter.
7. List the conditions for flicker-free waveforms in CRO.
8. State the necessity of plotter and recorders.
9. List the applications of function generators.
10. List the specifications of RF signal generator.

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**PART—B**

10×5=50

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

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain the working of FET input voltmeter with necessary circuit (DC/AC).
12. Explain the capacitance measurement using Schering bridge with diagram.
13. Explain the working of digital frequency meter with block diagram.
14. Explain the working of logic analyzer with block diagram.
15. Explain triggered sweep with necessary circuit and mention its advantages.
16. Explain the method of conversion of single-trace CRO into dual-trace CRO with block diagram.
17. Explain the working of AF oscillator (sine and square) with block diagram.
18. Explain the working of bolometer-type RF power meters.

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