



C09-EC-405

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**BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—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 for rectifier-type voltmeter.
2. What is meter-loading? Give an example.
3. Draw the diagram of Q-meter.
4. List the advantages of digital instruments over analog instruments.
5. List the specifications of digital multimeter.
6. State the use of spectrum analyzer.
7. Write the expression for deflection sensitivity of CRO.

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8. List different ^{*} types of probes used in oscilloscopes.
9. List the front panel controls of AF oscillator.
10. State the importance of shielding in RF generators.

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 construction and principle of operation of PMMC instrument.
12. Explain the inductance measurement using Maxwell's bridge.
13. Explain the working of successive approximation-type digital voltmeter with block diagram.
14. Explain the working of digital LCR meter with block diagram.
15. Draw the block diagram of general purpose CRO and describe the function of each block.
16. Explain the procedure for measurement of voltage (DC and AC), frequency and depth of modulation using CRO.
17. Explain the working of function generator with block diagram.
18. Explain the working of RF signal generator with necessary diagram.

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