



C16-AEI-304

6216

BOARD DIPLOMA EXAMINATION, (C-16)

OCT/NOV—2017

DAEI—THIRD 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. Classify the analog measuring instruments.
2. State the use of meggar for insulation measurements.
3. State loading effect of voltmeter.
4. List the advantages of digital instruments over analog instruments.
5. List the specifications of digital LCR meter.
6. Write the procedure for measurement of frequency using CRO.
7. List the important front panel controls of CRO.
8. List the applications of CRO.
9. State the importance of shielding in RF generators.
10. Define Q-meter.

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 constructions and principle of operation of PMMC instrument with diagram.
12. Explain the inductance measurement using maxwell's bridge with diagram.
13. Explain the working of successive approximation type digital voltmeters with block diagram.
14. Explain the working of digital frequency meter with a block diagram.
15. Explain triggered sweep with necessary circuit, and mention its advantages.
16. Explain the basic principle of operation of storage oscilloscope with a block diagram.
17. Explain the working of function generator with block diagram.
18. Explain the working of logic analyser with block diagram.
