



C09-AEI-402

3412

**BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2013
DAEIE—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. State the use of meggar for insulation measurements.
2. List the principle of extending the range of DC voltmeter.
3. List the principle of rectifier type voltmeter.
4. List the advantages of digital instruments over analog instruments.
5. List the specifications of digital multimeter.
6. Draw the diagram of CRT.
7. Define deflection sensitivity and write its expression.

8. List the specifications of CRO.
9. List the specifications of AF oscillator.
10. State the necessity of plotters.

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 instruments with a neat sketch. 10
12. (a) Explain the working of FET input voltmeter with necessary circuit. 8
(b) Classify the bridges. 2
13. (a) Explain the working digital LCR meter with block diagram. 8
(b) List the applications of digital LCR meter. 2
14. Explain the working of successive approximation type digital voltmeter with block diagram. 10
15. Draw the block diagram of general purpose CRO and describe the function of each block. 10
16. (a) Explain the principle of sampling oscilloscope with block diagram. 7
(b) List the applications of CRO. 3

- 17.** (a) Explain the working of function generator with block diagram. 8
(b) List the applications of function generator. 2
- 18.** (a) Explain the working of XY recorders. 8
(b) List the applications of XY recorders. 2
