



C09-AEI-402

**3412**

**BOARD DIPLOMA EXAMINATION, (C-09)**  
**MARCH/APRIL—2017**  
**DAEIE—FOURTH SEMESTER EXAMINATION**  
**ELECTRONIC MEASURING INSTRUMENTS**

*Time* : 3 hours ]

[ *Total Marks* : 80

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**PART—A**

3×10=30

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

1. State the principle of PMMC.
2. List the applications of bridges.
3. Draw the diagram for series-type ohmmeter.
4. List the specifications of digital voltmeter.
5. List the advantages of digital instruments over analog instruments.
6. Draw and label the parts of CRT.
7. List the conditions for stationary waveform.

- \* 8. Define deflection sensitivity and write the expression.
- 9. List the front panel controls of AF oscillator.
- 10. List the applications of X-Y recorder.

**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 diagram.
- 12. Explain the capacitance measurement using Schering bridge with diagram.
- 13. Explain the working of RAMP-type digital voltmeter with block diagram.
- 14. Explain the working of digital multimeter with block diagram and its specifications.
- 15. Draw the block diagram of general purpose CRO and explain the function of each block.
- 16. Explain the triggered sweep with necessary circuit.
- \* 17. Explain the working of function generator and list its applications.
- 18. Explain the working of logic analyzer with block diagram.

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