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C14-AEI-305

4218

BOARD DIPLOMA EXAMINATION, (C-14)

JUNE—2019

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 Megger for insulation measurements.
3. State the balancing conditions of bridges.
4. List any three specifications of Digital Voltmeter.
5. List any three specifications of digital frequency meter.
6. List any three applications of CRO.
7. State the conditions for flicker free waveform in CRO.
8. Write the expression for deflection sensitivity.
9. List any three specifications of RF signal generator.
10. List any three applications of digital IC tester.

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PART—B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answer should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. Explain the construction and principle of operation of Moving Iron instrument with diagram.
12. (a) Explain the construction and principle of series type voltmeter with diagram.
(b) Explain the capacitance measurement using Schering bridge with diagram.
13. Explain the working of successive approximation type digital voltmeters with block diagram.
14. (a) Explain the working of digital LCR meter with block diagram.
(b) Explain the working of digital frequency meter with diagram.
15. Explain the function of various controls and terminals of CRO and list its specifications.
16. Describe the function of different parts of CRT with diagram.
17. Explain the working of RF signal generator with diagram and list its applications.
18. (a) Explain the working of XY Recorders with diagram.
(b) Explain the working of digital IC tester with block diagram.

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