



C16-AEI-304

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BOARD DIPLOMA EXAMINATION, (C-16)

MARCH/APRIL—2018

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 bridge circuits.
2. List the different torques needed for driving the analog instrument.
3. State the need for high input impedance for a voltmeter.
4. List the specifications of digital multimeter.
5. List the specifications of digital frequency meter.
6. State the necessity of time base generator.
7. List the conditions for stationary and flicker-free waveforms.
8. List the specifications of CRO.
9. List the specifications of function generators.
10. State the necessity of plotter.

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 shunt type ohmmeter with diagram.
12. Explain the principle of operation of extending the range of DC voltmeter with diagram.
13. Explain the working of ramp type digital voltmeters with block diagram.
14. Explain the working of digital LCR meter with block diagram.
15. Explain the basic principle of operation of digital oscilloscope with a block diagram.
16. Explain the procedure for measurement of voltage (DC and AC), frequency, phase using CRO.
17. Explain the working of AF oscillator (sine) with block diagram.
18. Explain the working of digital IC tester with block diagram.
