



C16-AEI-304

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BOARD DIPLOMA EXAMINATION, (C-16)

MARCH/APRIL—2021

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. List the different torques needed for driving analog instruments.
2. State the need for high input impedance for a voltmeter.
3. Give the classification of bridge circuits.
4. List any three advantages of digital instruments over analog instruments.
5. List any three specifications of digital multimeter.
6. Write the procedure for measurement of frequency using CRO.
7. Write the expression for deflection sensitivity in CRO.
8. List any three specifications of CRO.
9. List any three front panel controls of AF Oscillator and state their functions.
10. Define Q factor.

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PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. Explain the principle and working of rectifier type voltmeter.
12. Explain the inductance measurement using Maxwell's Bridge.
13. Explain the working of successive approximation type digital voltmeter with block diagram.
14. Explain the working of digital frequency meter with block diagram.
15. Explain the block diagram of CRO.
16. Explain triggered sweep generator with necessary circuit.
17. Explain the working of function generator with block diagram.
18. Explain the working of XY recorder with diagram.

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A.A.N.M & V.V.R.S.R POLYTECHNIC, GUDLAVALLURU, KRISHNA

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