

4246**BOARD DIPLOMA EXAMINATION, (C-14)****JUNE-2019****DEEE - THIRD SEMESTER EXAMINATION****ELECTRICAL & ELECTRONIC MEASURING INSTRUMENTS**

Time: 3 Hours

Max.Marks : 80

PART-A**10x3=30M**

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

- 1) Compare Absolute and Secondary Measuring Instruments in any three aspects.
- 2) State the essential torques in Indicating Instruments.
- 3) State any three advantages of dynamo meter type Instruments.
- 4) Mention the remedies for commonly occurring errors in MC Instruments.
- 5) List the methods for measurement of Medium Resistance Value.
- 6) State any three applications of Potentiometer.
- 7) Define Transducer and write any two types of Transducers.
- 8) List the applications of Sensors.
- 9) Write any three advantages of Digital Multimeter.
- 10) Draw the block diagram of Rectifier type Voltmeter.

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PART-B

5x10=50M

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

- 11) (a) State the classification of Measuring Instruments on the basis of its constructions.
(b) Draw the block diagram of 1- Φ digital Energy Meter.
- 12) Explain construction and working principle of Attraction type MI Instrument with a neat sketch.
- 13) Compare MC and MI instruments in any ten aspects.
- 14) (a) State the errors in MI Instruments.
(b) List the advantages and disadvantages of MI Instruments.
- 15) (a) Explain about the Extension of range of Ammeter.
(b) A PMMC Instrument gives a reading of 25mA when the potential difference across its terminals is 75mV. Calculate the shunt Resistance for full-scale deflection of 50A.
- 16) Explain measurement of Earth Resistance by using Megger.
- 17) Explain the working of LVDT and write advantages and disadvantages.
- 18) Explain the working of Digital frequency meter with block diagram.

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