CBCS SCHEME

USN | | | | | | | | | | |

18EE36

Third Semester B.E. Degree Examination, Dec.2023/Jan.2024
Electrical and Electronic Measurement

Time: 3 hrs. Max. Marks: 100

Note: ***Answer any FIVE full questions, choosing ONE full question from each module.***

Module-1

1 a. Explain Maxwell's inductance and capacitance bridge. **(10 Marks)**
b. Explain Fall off potential method to measure Earth resistance. **(10 Marks)**

OR

2 a. Explain Anderson's bridge. **(10 Marks)**
b. Explain Megger. **(10 Marks)**

Module-2

3 a. Explain Dynamometer type of Wattmeter. **(10 Marks)**
b. Explain measurement of 3ϕ power using 2 Wattmeter method. **(10 Marks)**

OR

4 a. Explain Dynamometer type power factor meter. **(10 Marks)**
b. Explain Single phase induction type energy meter. **(10 Marks)**

Module-3

5 a. Explain Shunt's and Multipliers. **(10 Marks)**
b. Explain Silsbee's method of testing CT. **(10 Marks)**

OR

6 a. Explain Measurement of flux / flux density. **(10 Marks)**
b. A CT has a single turn primary and 400 secondary turns. The magnetizing current is 90A while core loss current is 40A. Secondary circuit phase angle is 28, calculate the actual primary current and ratio error when secondary current carries 5A current. **(10 Marks)**

Module-4

7 a. Explain Ramp type DVM. **(10 Marks)**
b. Explain true rms reading voltmeter. **(10 Marks)**

OR

8 a. Explain integrating type DVM. **(10 Marks)**
b. Explain Q meter. **(10 Marks)**

Module-5

9 a. Explain Dot matrix displays. **(10 Marks)**
b. Explain Cathode ray tubes. **(10 Marks)**

OR

10 a. Explain Electro cardio graph. **(10 Marks)**
b. Explain Nixie tubes and LVD. **(10 Marks)**

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