

**B.Tech. IN ELECTRICAL ENGINEERING
(BT ELVI)**

Term-End Examination

June, 2011

**BIEE-007 : ELECTRICAL MEASUREMENTS AND
MEASURING INSTRUMENTS**

Time : 3 hours

Maximum Marks : 70

Note : (1) Attempt any seven questions.

(2) All questions carry equal marks.

1. Describe static characteristics of measurement systems with suitable examples and figure. 10
2. Draw and explain the PMMC instrument in brief, also write its torque equation. 10
3. Explain the working of electro-dynamo meter type watt meter, also write its torque equation. 10
4. With the help of neat block diagram, explain the working of Harmonic analyzer. 10
5. Derive the expression for bridge sensitivity for Wheat-Stone bridge. 10

6. How will you measure the value of unknown inductance of a coil by using Maxwell's Inductance bridge ? 10
7. Describe the method of reversals of obtaining the B-H curve with neat circuit diagram and supporting equations. 10
8. Draw and explain average responding voltmeter by using bridge rectifier circuit. 10
9. Draw and explain the block diagram of a general purpose CRO. Also write the classification of oscilloscope. 10
10. Write short notes on *any two* of the following : 2x5=10
- (a) Moving Iron Instrument
 - (b) Energy meter
 - (c) Dual trace CRO
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