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BIEE-007

B.Tech. – VIEP – ELECTRICAL ENGINEERING (BTELVI)

Term-End Examination

00143

December, 2016

BIEE-007 : ELECTRICAL MEASUREMENTS AND MEASURING INSTRUMENTS

Time : 3 hours *Maximum Marks : 70*

Note : *Attempt any **seven** questions. All questions carry equal marks.*

1. What are the different types of static and dynamic characteristics of a measurement system ? *10*

2. Derive the expression for deflecting torque for a moving coil instrument. *10*

3. What are the methods of measurement of insulation resistance ? Explain the loss of charge method in detail. *10*

4. Explain the construction and working of a dynamometer type wattmeter. *10*

5. Describe the method for localization of cable fault by Murray and Varley loop tests. *10*

6. What are the differences between DC and AC potentiometers ? Explain the working of Drysdale potentiometer. *10*

7. What do you mean by photometry ? Explain the methods for measurement of illumination of different light sources. *10*

8. Explain the constructional features and working of a Dual Trace Oscilloscope. *10*

9. Write short notes on any ***two*** of the following : *2×5=10*

   (a) Hibbert's Magnetic Standard

   (b) Harmonic Analyzer

   (c) Shunts and Multipliers

   (d) Polar Curves