

**B.Tech. - VIEP - ELECTRICAL ENGINEERING
(BTELVI)**

Term-End Examination

June, 2016

00696

BIEE-019 : ELECTRICAL INSTRUMENTATION

Time : 3 hours

Maximum Marks : 70

Note : Attempt any five questions. All questions carry equal marks. Use of calculator is permitted. Missing data, if any, may be suitably assumed.

1. Explain the construction and operation of the following transducers : 2×7=14
 - (a) Thermistor
 - (b) Linear-Variable-Differential Transformer (LVDT)

2. Explain the working principle of capacitive transducer. Mention the advantages and disadvantages along with the applications of capacitive transducers. 14

3. How are telemetry systems classified ? Discuss the working of a general telemetering system, with the help of a block diagram. 14

4. What are the functions of data acquisition system ? With the help of a suitable block diagram, explain analog data acquisition system. 14
 5. What is strip chart recorder ? Why is it called X-t recorder too ? Describe the working of a basic type of strip chart recorder. 14
 6. What are the elements of process control system ? Explain pneumatic and digital controllers with the help of suitable diagrams. 14
 7. What are the different elements of process control system ? Explain the different process characteristics. 14
-