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Roll No .....

EE-5004-CBGS

B.E. V Semester

Examination, December 2020

Choice Based Grading System (CBGS)

Electronic Instrumentation

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Explain dual trace oscilloscope with the help of block diagram. Write function of each block.

   b) What is Lissajous patterns? Explain how it can be used for measurement of frequency.

2. a) Discuss the principle of Dual trace and Dual beam CRO.

   b) Explain the working of Digital storage CRO.

3. Explain the working of following bridges.

   i) Maxwells inductance and capacitance bridge

   ii) High voltage Schering bridge

   iii) Heaviside Campbell's bridge

4. a) What are the application of Q-meter? Explain measurement methods of Q-meter.

   b) Explain in brief Lissajous patterns.

5. a) Explain the working principle of digital tachometer.
   b) With the help of block diagram give the working principle of dual scope digital voltmeter.

6. a) Explain working principle of analog and X-Y Recorder.

   b) Describe the principle of working and circuit diagram of thermistor.

7. a) With help of diagram explain working of frequency selective wave analyzer.
   b) What are the advantages of digital instrument over analog instrument.

8. Write short notes :
   a) Successive approximation type digital volt meter
   b) Piezo-electric transducers

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