Total No. of Questions :10] *[Total No. of Printed Pages :2*

Roll No .....

EC - 303

B.E. III Semester

Examination, December 2012

Electronic Instrumentation

Time : Three Hours

Maximum Marks : 70/100

Note: *1. All questions carry equal marks.*
2. Attempt all questions.

Unit - I

1. a) Describe the following terms.
   i) Sensitivity ii) Linearity
   iii) Resolution iv) Hysteresis
   b) Explain the working principle of A.C. Voltmeter using Rectifier.

Or

2. a) Differentiate between D.C. and A.C. Voltmeters.
   b) Explain the principle working of D.C chopper type voltmeter.

Unit - II

3. a) With the help of block diagram explain the working of CRO.
   b) Explain the difference between dual trace and dual beam CRO.

Or

4. a) Explain the principle of electro-static deflection system.
   b) Discuss the working of storage CRO.

Unit - III

5. a) Explain the principle working of LVDT with the help of diagram.
   b) Explain the basic Q-meter circuit. Also describe the impedance measurement using Q-meter.

Or

6. a) Which bridge is suited for measurement of capacitors? Also discuss its working.
   b) Explain the working of Maxwell bridge. Why it is limited to the measurement of medium Q coils?

Unit - IV

7. a) What is function generator and explain how it works?
   b) Compare display devices based on LED and LCDs.

Or

8. a) Explain beat frequency oscillator.
   b) Explain square wave generator.

Unit - V

9. Explain PLC structure and its working.

Or

10. Differentiate between R-2R ladder and binary Ladder instruments.

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