

Roll No

EX - 604
B.E. VI Semester
 Examination, June 2015
Electronic Instrumentation
Time : Three Hours

Maximum Marks : 70

- Note:* i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.
 ii) All parts of each questions are to be attempted at one place.
 iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.
 iv) Except numericals, Derivation, Design and Drawing etc.

Unit - I

1. a) Define the deflection sensitivity of CRT.
- b) Write a note on electronic multimeter.
- c) What is a differential amplifier?
- d) Discuss the digital type storage oscilloscope with the help of block diagram.

OR

Explain the working of vector impedance meter with the help of block diagram.

Unit - II

2. a) Differentiate between active and passive transducer.
- b) Explain the basic principle of strain gauge.
- c) How a thermistor measures the temperature? Explain.

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- d) Explain the measurement of relative permittivity with Schering bridge.

OR

Explain the principle of piezoelectric transducer.

Unit - III

3. a) What is a signal generator?
- b) What is the harmonic distortion in a waveform?
- c) Explain the basic wave analyzer with its circuit diagram.
- d) Describe the working of sweep frequency generator with block diagram.

OR

Explain the working of function generator with block diagram.

Unit - IV

4. a) What is a LED?
- b) What is the importance of sensitivity of a digital meter?
- c) Explain the frequency mode of an electronic counter.
- d) Explain the successive approximation DVM with block diagram.

OR

Explain the integrating type DVM with block diagram.

Unit - V

5. a) What is a data acquisition system?
- b) What is a network analyzer.
- c) Differentiate between scalar and vector analyzer.
- d) Describe optical time domain reflectometer with the help of block diagram.

OR

Explain the method of measurement of scattering parameters.