

B.Tech III Year II Semester (R09) Supplementary Examinations May/June 2016

ELECTRONIC MEASUREMENTS & INSTRUMENTATION

(Electronics and Communication Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) What are the various static characteristics?
(b) What is meant by accuracy? What are the different ways of expressing accuracy?
- 2 (a) Explain the random noise generator with the help of a block diagram.
(b) Draw the frequency response of noise and explain.
- 3 (a) Describe the operation of a distortion analyzer using resonance to suppress the fundamental frequency.
(b) How Wien bridge harmonic distortion analyzer differ from Resonance Bridge?
- 4 (a) Why delay time is used in vertical section of an oscilloscope?
(b) Draw the trigger pulse circuit and explain.
- 5 (a) With a neat block diagram, explain the function of each block of a general purpose oscilloscope.
(b) Mention the advantages of general purpose oscilloscope.
- 6 (a) Discuss in detail about Kelvin double bridge.
(b) With a neat diagram explain in detail about Hay bridge.
- 7 (a) State the applications of a solar cell.
(b) Briefly explain the principle and operation of piezoelectric accelerometer.
- 8 What are data loggers? What are the functions of data loggers?
