Code: 9A04604

R09

B.Tech III Year II Semester (R09) Supplementary Examinations May/June 2017
ELECTRONIC MEASUREMENTS & INSTRUMENTATION
(Electronics Communication and Engineering)

Time: 3 hours   Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1 (a) Define the dynamic response of the system. How the dynamic behavior of the measuring system is determined?
   (b) Define speed of response.

2 (a) Draw the characteristics of a general pulse and explain the terminologies.
   (b) List the specifications of the pulse generator.

3 (a) In which domain the spectrum analyzer works? Explain.
   (b) State the applications of a spectrum analyzer.

4 (a) What are the advantages of negative supply in a CRO?
   (b) Compare the dual beam CRO and dual trace CRO.

5 Explain in detail about digital multimeter with suitable example.

6 Define quality factor. Derive the expression of quality factor in Hay's bridge which is used for the measurement of unknown inductance.

7 (a) Show and explain the capacitive transducer arrangement to measure angular velocity and what are its limitations?
   (b) With neat sketches and suitable equations, explain the working of a capacitive transducer.

8 Explain the RS-232 standards for communication with neat diagram. Also give the limitations with this standard.

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