Code: 9A02704

R09

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017
INSTRUMENTATION
(Electrical & Electronics Engineering)

Time: 3 hours   Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   (a)   List the static characteristics of measuring systems.
    (b)   How do you perform statistical analysis of random errors?

2   (a)   Find whether the signal given by x(n) = 5 Cos (6n) is periodic.
    (b)   Define unit step, ramp and delta functions for CT.

3   (a)   Bring out the differences between frequency modulation system (FM) and pulse modulation (PM).
    (b)   Explain the salient features of land line with feedback system.

4   (a)   Explain the process of time division multiplexing.
    (b)   How do you perform digital recording using analog recorder?

5   (a)   With a neat figure, explain the working of a frequency selective analyzers.
    (b)   List the applications of vector impedance meter and give its functionality.

6   (a)   Explain the working of LVDT and list its applications.
    (b)   What is the principle of thermocouple and explain its function.

7   How do you measure velocity and angular velocity? Explain in detail.

8   Write explanatory notes on:
    (a)   Modern digital DAS.
    (b)   Measurement of liquid level.

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