

Roll No

EI/IC-7102

B.E. VII Semester

Examination, December 2016

Data Acquisition System

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 question 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) What are different types of display systems?
b) Draw the diagram of seven segment dot matrix display system.
c) Explain in brief plasma display.
d) Explain the working of LCD display with the help of neat diagrams.

OR

Write a detailed note on vapor display along with suitable diagrams.

Unit - II

2. a) What do you understand by Recorders?
b) What is Null type recorder?
c) Explain potentiometer type recorder by giving neat diagrams.

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- d) Describe the principle of operation of magnetic tap recorder with neat diagrams.

OR

What are the advantages of digital tape recorders. Explain the same.

Unit - III

3. a) Draw the block diagram of basic telemetry system.
b) What is Position Telemetry?
c) Explain Current telemetry.
d) Describe interference and grounding regarding telemetry.

OR

What are the different types of antennas used in telemetry? Explain any one of them.

Unit - IV

4. a) Name various data transfer techniques.
b) What is DMA controller?
c) Name various serial data transmission standards.
d) Draw the block diagram of Local Area Network and explain.

OR

What are TCP/IP protocols, and why they are required?

Unit - V

5. a) Give the significance of data acquisition system.
b) What do you understand by single channel DAS?
c) Explain with neat diagrams multi-channel DAS.
d) How microprocessor is useful in DAS explain with diagrams.

OR

Explain the need of microcontroller in DAS with neat sketches.

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