Printed Pages : 3

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 121752

Roll No.

B. Tech.

(SEM. VII) (ODD SEM.) THEORY EXAMINATION, 2014-15

TELEMETRY AND DATA TRANSMISSION

Time : **3** Hours]   [Total Marks : **100**

1   Attempt any FOUR parts :   5x4=20

(a)   What is sampling theorem? List the important components of a telemetry system.

(b)   Define Aliasing. How can you overcome it?

(c)   Describe different types of formats. Explain Frame format.

(d)   Write short notes on PLL.

(e)   Give the block diagram of aerospace telemetry system.

(f)   Comment on Multiplexing techniques in Tele control.

121752]   1   [Contd...

2 Attempt any TWO parts : 10x2=20

(a) Compare low level and high level multiplexing techniques for data handling systems.

(b) With a neat block diagram compare FSK, PSK and QPSK.

(c) Explain the steps for installation of telecontrol systems.

3 Attempt any TWO parts : 10x2=20

(a) List the different types of interfaces. Compare RS423 with RS232C interface.

(b) (i) Give basic block diagram of telemetry system and explain each component

(ii) What are the different types of telemetry system ? Explain.

(c) Mention the different command systems. Explain any two command systems.

4 Attempt any TWO parts : 10x2=20

(a) Write short notes on:
(i) Frame synchronizer codes
(ii) R. F. links

(b) Explain in detail about Programmable controllers for factory automation.

(c) State error detection and error correction. Explain error detection code with an example.

5 Attempt any TWO parts : 10x2=20

(a) Explain the functioning of Data reception systems.

(b) Comment in detail about DM code converters.

(c) Write short notes on:

(i) sampling theorem

(ii) sampling process

(iii) convolution

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