



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

PAPER ID : 121752

Roll No.

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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.

- 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

