Code: 13A10707 **R13**

B.Tech IV Year I Semester (R13) Supplementary Examinations June 2017

TELEMETRY & TELECONTROL

(Electronics and Instrumentation Engineering)

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) Define telemetry and importance of telemetry system.
(b) Draw the block diagram of optical telemetry system.
(c) What is the need of telecontrol?
(d) Distinguish between FM and PM.
(e) Mention different multiple access techniques used in satellite communication.
(f) Why do we require radio frequency modulation?
(g) Define noise and also mention few names of noise.
(h) What are the applications of wireless telemetry?
(i) What are the different types of optical fiber cables?
(j) Write the uses of optical telemetry.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Draw the block diagram of telemetry system and explain each component.

OR

3 What are the different types of classification of telemetry system and explain and also give the reasons for classification.

UNIT – II

4 With a neat block diagram, explain FM data transmission and PAM/PM data transmission.

OR

5 What are the telemetry standards for baseband communication given by IRIG?

UNIT – III

6 Explain the functioning of TT&C systems of satellite communication system with a neat diagram.

OR

7 Discuss the operation of analog and digital transmission in satellite telemetry.

UNIT – IV

8 Write a brief note on losses in optical fibers.

OR

9 What are the different types of sources used in optical telemetry and give its advantages and disadvantages?

UNIT – V

10 Explain the analog and digital techniques used in telecontrol.

OR

11 Explain the steps for installation of telecontrol systems.

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