

***B. Tech Degree VII Semester (Supplementary) Examination
in Instrumentation August 2010***

IN 704 TELEMETRY AND REMOTE CONTROL

Time : 3 Hours

Maximum Marks : 100

PART - A

(Answer ***ANY FIVE*** questions)
(All questions carry ***EQUAL*** marks)

(5 x 5 = 25)

- I. (a) Narrate the working of a synchro transmitter and receiver with simple schematics.
(b) List the advantages of using optical fibers for transmission of data.
(c) What are the limitations of wired telemetry system?
(d) List a few drawbacks of AM.
(e) Give details of any one type of optical detector.
(f) Write short note on digital coding techniques
(g) What do you mean by AGC?
(h) Write any five differences between FM and PM systems.

PART - B

(5 x 15 = 75)

- II. Draw the block diagram of a generalized telemetering system and explain each block in detail.

OR

- III. What are the different telemetry standards? Explain pneumatic telemetering with sketches.

- IV. Draw the general block diagram of radio telemetry and explain the relevance of each block.

OR

- V. What are the different methods adopted for FM detection? Explain with supporting figures.

- VI. With suitable schematics, write the principle of optical fibers in brief and describe the operation of any two types of optical sources used in telemetry.

OR

- VII. Explain optical telemetry system and mention few advantages over other methods.

- VIII. List the essential functional elements in a remote control system and explain each.

OR

- IX. What are the factors influencing telecontrol installation? Give details of each.

- X. Draw the block diagram of automatic pipeline control and explain.

OR

- XI. With the help of block diagram, outline the details of satellite telemetry and mention one existing application.