Code: 13A04605 **R13**

B.Tech III Year II Semester (R13) Regular Examinations May/June 2016

TELECOMMUNICATION SWITCHING NETWORKS

(Electronics and Communication 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 line coding.
(b) Calculate data rate of STS-1 signal.
(c) Identify the basic functions of switching.
(d) Mention the advantages of time division switching.
(e) Define timing jitter.
(f) What is Doppler shift?
(g) Write the basic principles of ISDN.
(h) Point out the features of ADSL.
(i) Define Erlang.
(j) What is blocking probability?

PART – B

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

UNIT – I

2 Describe transmission systems FDM and TDM with neat sketch.

OR

3 Explain about the following:

(a) SONET optical standards.
(b) SONET block diagram.

UNIT – II

4 Illustrate input controlled time division space switch.

OR

5 Demonstrate basic time division time switch.

UNIT – III

6 Discuss Basic approaches used for synchronization in digital networks.

OR

7 Memorize the concept of network management.

UNIT – IV

8 Describe ISDN functional grouping and reference points

OR

9 Elaborate the concept ADSL.

UNIT – V

10 Write in detail about Grade of Service and Blocking Probability.

OR

11 Summarize the concepts of Delay systems and Finite Queues.

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