

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)

- 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.
