

Code No: **R41045****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, Oct/Nov - 2018****TELECOMMUNICATION SWITCHING SYSTEMS****(Electronics and Communication Engineering)****Time: 3 hours****Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

- 1 a) What is the significance of SPC and explain the differences between Centralized and Distributed SPC? [8]
b) What are the different switching network configurations? Compare their features. [7]
- 2 a) What is the significance of Combination Switching? Give two stage TS switching network configuration and explain. [7]
b) Find the blocking probability of three stage network for $M = N = 2048$, $p = q = 16$ $\alpha = 0.1$ for $S = 16, 24$ and 32 . [8]
- 3 a) With examples explain the national and international numbering plans. [7]
b) Explain about switching hierarchy. [8]
- 4 a) An exchange is designed to handle 2000 calls during busy hour. One day, the number of calls during busy hour is 2200. What is the resulting GoS (Grade of Service). [7]
b) Compare in channel signaling and common channel signaling. [8]
- 5 a) What is the need for layered architecture? Explain. [7]
b) Discuss peer to peer and client/server networks. [8]
- 6 a) Explain all the seven layers of OSI model in detail. [7]
b) Write short notes on public switched network. [8]
- 7 a) Discuss about ISDN interfaces. [7]
b) Explain the protocol architecture of ISDN. [8]
- 8 a) Write short notes on CMTS. [7]
b) Write short notes on "HFC networks". [8]