

Code No: **R41045****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, February - 2019****TELECOMMUNICATION SWITCHING SYSTEMS****(Electronics and Communication Engineering)****Time: 3 hours****Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

- 1 a) Explain the working principle of cross bar switch with a neat diagram. [8]
b) Explain the elements of switching systems. [7]
- 2 a) With a neat diagram, explain time multiplexed time switching in parallel in/parallel out switch configuration. [8]
b) Explain 2-stage time space switch. [7]
- 3 a) Discuss different charging plans for a Telecommunication Service [10]
b) What is subscriber loop system? [5]
- 4 a) Define grade of service and distinguish how GOS and blocking probability differs. [8]
b) Write short notes on In channel signaling scheme. [7]
- 5 a) Explain data communication network architecture. [7]
b) Discuss topologies and transmission modes of a data communication circuits. [8]
- 6 a) Draw and explain ISO-OSI reference model. [8]
b) Explain virtual switching concept. [7]
- 7 a) Explain the various layers and frame format of ISDN model. [8]
b) Discuss the differences between ISDN and BISDN. [7]
- 8 a) Explain about the HFC networks. [8]
b) Discuss the Virtual tributaries and Higher rate of services in SONET. [7]