

Code No: **R41045****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, March/April - 2016****TELECOMMUNICATION SWITCHING SYSTEMS****(Electronics and Communication Engineering)****Time: 3 hours****Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

- 1 a) Draw and explain 3X3 crossbar switching principal.
b) What is different switching network configuration? Compare their features.
- 2 a) Explain the classification of switching systems? In what way is stored program control superior to hardwired control?
b) Compare time division switching and space division switching techniques.
- 3 Explain in detail the Subscriber loop system.
- 4 a) Explain clearly about grade of service and blocking probability.
b) Derive expression for the blocking probability of a TSST switch if each stage is individually non-blocking.
- 5 a) Explain in detail the various components of data communication networks.
b) Explain different topologies of Data Communication Networks
- 6 a) What is bridge? Explain the operation of source routing bridge.
b) What is the relationship between ISDN layers and OSI layers?
- 7 a) Explain the terms Section, Line and Path related to SONET.
b) Explain ISDN architecture with neat sketch.
- 8 a) Discuss DSL Technology.
b) Write about SONET devices, frame and frame transmission.