

Code No: QT41042

R13**Set No. 1**

IV B.Tech I Semester Supplementary Examinations, February/March - 2018

ELECTRONIC SWITCHING SYSTEMS

(Electronics and Communication Engineering)

Time: 3 hours

Max. Marks: 70

*Question paper consists of Part-A and Part-B**Answer ALL sub questions from Part-A**Answer any THREE questions from Part-B*

PART-A (22 Marks)

1. a) With neat sketch Manual Switching System. [3]
- b) Discuss about centralized SPC. [3]
- c) Discuss the charging plan used in telephone networks. [4]
- d) State and explain 'Erlang B' formula for offered traffic intensity 'A' and 'No. of Servers 'N'. [4]
- e) State and explain formula for the Grade of Service of loss systems in tandem. [4]
- f) Write Short notes on Numbering and Addressing of ISDN. [4]

PART-B (3x16 = 48 Marks)

2. a) How are switching systems classified? Explain a how stored program control is superior to hard wired control. [8]
- b) Write a brief note on Crossbar Systems. Draw neat diagrams. [8]
3. a) In n stage Combination switching, a trade-off between blocking probability and time delay is possible. Explain? [8]
- b) Explain Time division multiplexing. [8]
4. a) What are the factors that limit the length of subscribers loop? Discuss them. [8]
- b) Explain in detail CCITT Signaling System no.7. [8]
5. a) What is the significance of Broadband Networks? Explain. [8]
- b) Describe different traffic measurement units in Telecommunication Network. [8]
6. a) Explain in detail Sectionalized Switching Networks. [8]
- b) What is Call Packing? Explain. [8]
7. a) Explain the difference between ISDN and BISDN. [8]
- b) Write short notes on Transmission Channels. [8]