

IV B.Tech I Semester Supplementary Examinations, July/Aug - 2021

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 FOUR questions from Part-B*

PART-A(14 Marks)

1. a) List out merits of digital switching? [2]
- b) Calculate availability of a dual processor system for a period of 20years if it's MTBF =3300hrs and MTTR=6hrs? [3]
- c) What is the difference between space time space switch and time space time switch? [3]
- d) State advantages of using LAN's? [2]
- e) What is meant by call packing? [2]
- f) What is voice data integration? [2]

PART-B(4x14 = 56 Marks)

2. a) Explain different switching mechanisms and compare them with each other? [7]
- b) List out the major telecommunication networks and give technical details about them. [7]
3. a) Explain the operation of distributed SPC with different levels of processing? [7]
- b) State and explain the different classes in application software? [7]
4. a) Write a short notes on input controlled time division space switch with a neat diagram? [7]
- b) What are the different modes of operation in time division time switching and explain them in brief? [7]
5. a) Explain the term common channel signaling and also state advantages of it. [7]
- b) Draw and explain the block schematic diagram of CCITT signaling system no.6? [7]
6. a) Explain the principle of grading to improve trunking efficiency with a neat diagram? [7]
- b) Write a short notes on limited availability and full availability? [7]
7. a) Draw the block diagram of ISDN and explain it briefly? [7]
- b) Explain briefly about ISDN protocol architecture? [7]