Regulation R18 *Subject code: 2O6FB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, February 2024

TELECOMMUNICATION SWITCHING SYSTEM & NETWORKS

(IT)

Maximum Marks: 70 Date:27.02.2024 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

	Part-A		
All the following questions carry equal marks (10X2M=20 Marks)		CO	Bloom Tx
1	Write short note on telecommunication network?	1	L1
2	What is the crossbar switching?	1	L1
3	Define combinational switching.	2	L1
4	With neat diagrams explain time switch and space switch?	2	L1
5	What is signalling?	3	L1
6	What is common channel signaling?	3	L1
7	Write short note on MAN.	4	L1
8	Write the basic principle of packet switching.	4	L1
9	Write short note on data networks.	5	L1
10	Write the importance of B-ISDN	5	L1
	Part-B		
Answer All the following questions. (10MX 5=50Marks)			
11	Explain about Crossbar Switch Configurations and write it's advantages? [10m]	1	L2
	OR		
12	On average, one call arrives every 5 seconds. During a period of 10 seconds, what is the probability that: (i) No call arrives (ii) One call arrives [10m]	1	L2
13	a. Discuss the basic structure and principle of operation of Time Slot Interchange (TSI) switch with the help of the diagram. [5m] b. Explain about electronic space division switching with neat sketch. [5m]	2	L2
	OR		
14	a. Explain the Time Multiplexed Time switching with Parallel-in/ serial-out configuration. [5m] b. What is signal Units? Explain briefly. [5m]	2	L2 L1
15	a. List the advantages and disadvantages of CCS. [5m] b. Explain the Architecture of SS7. [5m]	3	L1 L2

	OR		
16	a. Explain in detail the various components of data communication networks. [5m] b. Explain Inter Register Signaling with the help of an application. [5m]	3	L2
17	List all seven layers of OSI model and describe function of application layer. [10m]	4	L2
	OR		
18	a. Explain the terms in packet switching i) Routing ii) Frame Relay [4m] b. Explain the Layered Network Architecture [6m]	4	L2
19	a. Explain the differences between narrow band ISDN and BISDN. [5m] b. Explain LAN, MAN, and WAN. [5m]	5	L2
	OR		
20	a. List out the services and applications of intelligent networks. [5m] b. Write short notes on Analog Networks. [5m]	5	L1