



R20 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

Subject code:307DA

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

B.Tech VII Semester Regular Examinations, November 2023

COMPUTER NETWORKS

(ECE)

(Open Elective)

Maximum Marks: 70

Date:06.12.2023 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)

		Bloom Tx
1	What are the advantages and disadvantages of LAN?	L1
2	Differences between 10 base 2 and 10 base 5 cables.	L2
3	Difference between fixed frames and variable length frames.	L2
4	Mention the design issues of data link layer.	L2
5	What is Routing?	L1
6	Write the concept of flooding.	L1
7	What is the significance of TCP.	L1
8	Write the flow control and buffering in transport layer.	L1
9	Write short notes on multimedia.	L1
10	Write a short note on e-mail.	L1

Part-B

Answer All the following questions.

(5X10M=50Marks)

11	A. Compare WAN, LAN & MAN topologies. B. Explain in detail about encoding asynchronous communications.	5M 5M	L3 L2
	OR		
12	Explain the functionality of each layer in OSI reference model.	10M	L2
13	A. Compare the throughput of pure aloha and slotted aloha. B. Describe the stop and wait protocol with neat sketch.	5M 5M	L3 L2
	OR		
14	A. Explain the design issues of data link layer. B. Explain flow control mechanism using sliding window protocol.	5M 5M	L2 L2
15	A. Discuss in detail about the packet switching networks. B. Explain broadcast routing algorithm with an example.	5M 5M	L2 L3
	OR		
16	Define Routing. Explain Distance Vector Routing Algorithm with an example. 10M		L3

17	Explain about TCP and UDP protocol.	10M	L2
	OR		
18	How a connection is established in a transport protocol? Explain three protocol scenarios for establishing a connection.	10M	L3
19	What is electronic mail? Explain about the protocols associated with the electronic mail system.	10M	L2
	OR		
20	A. Explain in detail about voice over IP.	5M	L2
	B. Write a short note on SNMP & Network Security.	5M	L2