



R20 Regulation

Subject code:3P5FD

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, July 2024

## Computer Networks (IT)

Maximum Marks: 70

Date:24.07.2024 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.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A		CO	Bloom Tx
All the following questions carry equal marks (10X2M=20 Marks)			
1	Write the advantages of optical fiber over twisted-pair and coaxial cables.	1	L1
2	Define data communications and explain different modes of data communication.	1	L1
3	Define error detection and error correction?	2	L1
4	What is aloha?	2	L1
5	What is multicast routing protocol?	3	L1
6	Explain about IPv4 address.	3	L1
7	Write any 2 differences between UDP and TCP protocols?	4	L1
8	Explain some techniques to improve in QoS ?	4	L1
9	Why http protocol is known as stateless protocol?	5	L1
10	What are services provided in network security?	5	L1
Part-B			
Answer All the following questions. (5X10M=50Marks)			
11	Explain TCP/IP model in detail. [10]	1	L2
OR			
12	a. Explain circuit switched network with neat diagram? [5] b. Write difference between datagram network and virtual circuit network?[5]	1	L2
13	a. Explain about point-to-point protocol with neat sketch. [5] b. Explain about Flow and Error Control with neat diagram. [5]	2	L2
OR			
14	Explain about channelization and control access with neat diagram. [10]	2	L2
15	Compare and contrast IPv4 and IPv6 addressing schemes. Highlight the differences in address length, representation, and the reasons behind the transition to IPv6. [10]	3	L2
OR			
16	Explain about various type of routing algorithm and explain better algorithm among all of them. [10]	3	L2

17	a. Explain about process to process delivery in transport layer. [5] b. Explain difference between UDP protocol and TCP protocol. [5]	4	L2
	OR		
18	a. Explain about data traffic and Congestion and its control. [5] b. Explain about QoS in switched network in detail. [5]	4	L2
19	Examine the significance of the Application Layer in computer networking, with a focus on key elements such as name space, Domain Name System (DNS), TELNET, electronic mail, file transfer, the architecture of the World Wide Web (WWW), HTTP, and SNMP. [10]	5	L2
	OR		
20	Explain about network layer security and application layer security in detail. [10]	5	L2