



B.Tech V Semester Regular/Supplementary Examinations, February 2024
Computer Networks
(Information Technology)

Maximum Marks: 70

Date:20.02.2024 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.
 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	What are the various modes in data transfer?	1	L1
2	What are various layers in TCP/IP protocol?	1	L1
3	Define point to point protocol.	2	L1
4	Differentiate pure aloha and slotted aloha?	2	L2
5	Define ICMP AND IGMP.	3	L1
6	Explain multi-cast routing	3	L2
7	What is process to process delivery in transport layer?	4	L1
8	what are the integrated services of QoS?	4	L1
9	What is the role of DNS in internet?	5	L1
10	Explain services and security provided by network security	5	L2
Part-B			Bloom Tx level
Answer All the following questions. (5X10M=50Marks)			
11	Explain difference between TCP/IP and OSI reference model? [10]	1	L2
OR			
12	Explain circuit switching network and type of switching networks in detail? [10]	1	L2
13	Explain HDLC communication and point to point communication. [10]	2	L2
OR			
14	Explain about CSMA/CD and CSMA/CA in detail with suitable diagram. [10]	2	L2
15	Explain the concept of internetworking and how address mapping is essential for devices to communicate across different networks. Provide examples of address mapping techniques in both IPv4 and IPv6 ? [10]	3	L3
OR			
16	Compare and contrast unicast and multicast routing protocols. Explain the advantages of multicast routing in scenarios where one-to-many or many-to-many communication is required. [10]	3	L3

17	Explain about TCP protocol and UDP protocol in detail with the neat sketch? [10]	4	L2
	OR		
18	a. Explain about QoS and various techniques to improve QoS? [5] b. What are the integrated services and differential services in QoS? [5]	4	L2 L2
19	Explain about Architecture of HTTP and SNMP. [10]	5	L2
	OR		
20	a. What are the security goals need to provide to achieve network security?[5] b. Explain about firewalls in detail? [5]	5	L2