

Department of Information Technology

B. Tech. Mid Question Bank (R22 Regulation)

Academic Year: 2024-2025

Semester: V

Subject Name: Data communication and Computer Networks

Faculty Name: B. Aditya

PART-A

MID-I Questions					
Q.No	Questions	Marks	BL	CO	Unit No
1	Define Computer networks.	2	L1	CO1	1
2	What is Framing?	2	L2	CO1	1
3	Define protocol and Transmission Media.	2	L1	CO1	1
4	Explain data link layer design issues.	2	L2	CO1	1
5	Explain sliding window protocol.	2	L2	CO1	1
6	Define Datagram Networks.	2	L2	CO1	1
7	Explain collision free protocols.	2	L1	CO2	2
8	Explain Ethernets.	2	L1	CO2	2
9	Define Framing and Error.	2	L1	CO2	2
10	Define Flow and Error Control.	2	L2	CO2	2
11	Define Point to point protocol.	2	L3	CO2	2
12	Explain Ethernet Mac Sub layer.	2	L2	CO2	2
13	Define Uni cast Routing Protocols.	2	L1	CO3	3
14	Explain Internet Working.	2	L2	CO3	3
15	Define ICMP & IGMP.	2	L3	CO3	3
UNIT-II Questions					
16	Define Logical addressing.	2	L2	CO3	3
17	Explain Multicast Routing Protocols.	2	L2	CO3	3
18	Define Tunneling.	2	L4	CO3	3
19	Define Process to Process Delivery.	2	L2	CO4	4
20	Define congestion.	2	L2	CO4	4
21	Define Congestion Control.	2	L4	CO4	4

22	Define QoS, Integrated Services.	2	L4	CO4	4
23	Define UDP & TCP Protocol.	2	L2	CO4	4
24	Explain ipv4 & its header format.	2	L3	CO4	4
25	Define TCP .	2	L2	CO5	5
26	Explain TCP segment header format.	2	L1	CO5	5
27	Define Electronic Mail.	2	L2	CO5	5
28	Explain TCP connection establishment, connection release.	2	L4	CO5	5
29	Explain RTTP.	2	L2	CO5	5
30	Explain TCP sliding window.	2	L2	CO5	5

PART-B

MID-I Questions					
Q.No	Questions	Marks	BL	CO	Unit No
1	What is Switching And Circuit Switching Techniques?	4	L2	CO1	1
2	Explain various types topologies.	4	L2	CO1	1
3	Different types of Computer networks.	4	L4	CO1	1
4	Explain layering scenario.	4	L2	CO1	1
5	Explain briefly about guided media & unguided media.	4	L1	CO1	1
6	Explain History of Internet.	4	L4	CO1	1
7	Compare OSI model & TCPIP protocol suite model.	8	L2	CO1	1
8	Explain about OSI model.	8	L2	CO1	1
9	What is implementation of Bit Stuffing and Character Stuffing?	8	L3	CO1	1
10	Explain about ALOHA,CSMA.	4	L3	CO2	2
11	Explain learning bridges.	4	L1	CO2	2
12	Explain spanning tree bridges .	4	L2	CO2	2
13	Explain repeaters.	4	L3	CO2	2
14	Explain hubs, bridges.	4	L4	CO2	2
15	Explain gateways.	4	L2	CO2	2

16	Explain switches, routers.	8	L5	CO2	2
17	Explain Classification of Elementary datalink layer protocols.	8	L5	CO2	2
18	Explain CRC.	8	L6	CO2	2
19	Explain connection less and connection oriented networks.	4	L2	CO3	3
20	Explain optimality principle.	4	L4	CO3	3
21	Explain about routing algorithms.	4	L3	CO3	3
MID-II Questions					
22	Explain briefly about distance vector routing algorithm.	4	L4	CO3	3
23	Explain hierarchal routing algorithm.	4	L5	CO3	3
24	Explain ICMP messages.	4	L4	CO3	3
25	Explain class full addressing in ipv4.	4	L4	CO4	4
26	Explain about ipv6 & its header format.	4	L2	CO4	4
27	Explain ICMP messages.	4	L2	CO4	4
28	Compare ipv6 & ipv4.	4	L2	CO4	4
29	Explain briefly about ARP & RARP.	4	L2	CO4	4
30	Explain about DHCP.	4	L5	CO4	4
31	Explain about transport layer services to upper layers.	8	L3	CO4	4
32	Explain about connection establishment and connection release.	8	L3	CO5	4
33	Explain various congestion control algorithms.	8	L2	CO5	4
34	Explain TCP congestion control.	4	L4	CO5	5
35	Explain about email architecture.	4	L3	CO5	5
36	Explain about SMTP , POP3 & IMAP4.	4	L2	CO5	5
37	Explain HTTP.	4	L2	CO5	5
38	Explain about DNS.	4	L3	CO5	5
39	Explain about FTP.	4	L4	CO5	5
40	Explain local login.	8	L2	CO5	5
41	Explain about TELNET.	8	L4	CO5	5