GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY
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QUESTIONBANK(DESCRIPTIVE)

Subject Name with Code:
Course & Branch: Year & Semester: III-II **Regulation: RG23**

MODULE - I

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	What is the Internet?	L1, CO1, 2M
2.	Define network edge.	L1, CO1, 2M
3.	Define network core.	L1, CO1, 2M
4.	What is packet switching?	L1, CO1, 2M
5.	What is circuit switching?	L1, CO1, 2M
6.	Define delay in packet switched networks.	L1, CO1, 2M
7.	What is throughput?	L1, CO1, 2M
8.	What is packet loss?	L1, CO1, 2M
9.	What is guided transmission media?	L1, CO1, 2M
10.		
Descriptive Questions (Long)		
1	Explain the structure of the Internet with neat diagram.	L2, CO1, 10M
2	Describe network edge and network core in detail.	L2, CO1, 10M
3	Explain packet switching and circuit switching with comparison.	L3, CO1, 10M
4	Discuss different types of delays in packet switched networks.	L2, CO1, 10M
5	Explain loss and throughput in packet switched networks.	L2, CO1, 10M
6	Explain guided transmission media with advantages and limitations.	L3, CO1, 10M
7	Explain wireless transmission technologies used in networks.	L2, CO1, 10M
8	Discuss reference models used in computer networks.	L2, CO1, 10M
9	Explain multimedia networks and their challenges.	L3, CO1, 10M
10	Write notes on Internet access technologies.	L2, CO1, 10M

MODULE - II

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	What is Data Link Layer?	L1, CO1, 2M
2.	Define framing.	L1, CO1, 2M
3.	What is error detection?	L1, CO1, 2M
4.	Name any two error detection techniques.	L1, CO1, 2M
5.	What is error correction?	L1, CO1, 2M
6.	What is sliding window protocol?	L1, CO1, 2M
7.	What is multiple access protocol?	L1, CO1, 2M
8.	What is LAN?	L1, CO1, 2M
9.	Define link virtualization.	L1, CO1, 2M
10.	What is a data center network?	L1, CO1, 2M
Descriptive Questions (Long)		

1	Explain Data Link Layer design issues.	L2, CO1, 10M
2	Describe error detection and correction techniques.	L2, CO1, 10M
3	Explain elementary data link protocols.	L2, CO1, 10M
4	Explain sliding window protocols with diagrams.	L3, CO1, 10M
5	Discuss multiple access protocols in detail.	L3, CO1, 10M
6	Explain switched local area networks.	L2, CO1, 10M
7	Describe link virtualization in Data Link Layer.	L2, CO1, 10M
8	Explain data center networking architecture.	L2, CO1, 10M
9	Trace the journey of a packet: "A day in the life of a web page".	L3, CO1, 10M

MODULE - III

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	What is the Network Layer?	L1, CO1, 2M
2.	Define routing.	L1, CO1, 2M
3.	What is a routing algorithm?	L1, CO1, 2M
4.	What is internetworking?	L1, CO1, 2M
5.	What is IP?	L1, CO1, 2M
6.	Define datagram.	L1, CO1, 2M
7.	What is subnetting?	L1, CO1, 2M
8.	What is forwarding?	L1, CO1, 2M
9.	What is the difference between routing and forwarding?	L2, CO1, 2M
10.	What is ICMP?	L1, CO1, 2M
Descriptive Questions (Long)		
1	Explain functions of the Network Layer.	L2, CO1, 10M
2	Describe routing algorithms with examples.	L2, CO1, 10M
3	Explain distance vector and link state routing algorithms.	L3, CO1, 10M
4	Explain internetworking in detail.	L2, CO1, 10M
5	Describe the Network Layer in the Internet.	L2, CO1, 10M
6	Explain IP addressing and subnetting.	L3, CO1, 10M
7	Discuss IPv4 and IPv6.	L3, CO1, 10M
8	Explain packet forwarding mechanisms.	L2, CO1, 10M
9	Explain congestion in network layer and its control.	L3, CO1, 10M

MODULE - IV

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	What is Transport Layer?	L1, CO1, 2M
2.	What is UDP?	L1, CO1, 2M
3.	What is TCP?	L1, CO1, 2M
4.	Define port number.	L1, CO1, 2M
5.	What is multiplexing?	L1, CO1, 2M
6.	What is congestion control?	L1, CO1, 2M
7.	What is flow control?	L1, CO1, 2M
8.	What is connection-oriented service?	L1, CO1, 2M

9.	What is connectionless service?	L1, CO1, 2M
10.	Name any two transport layer protocols.	L1, CO1, 2M
Descriptive Questions (Long)		
1	Explain Transport Layer services and functions.	L2, CO1, 10M
2	Describe UDP and its applications.	L2, CO1, 10M
3	Explain TCP segment structure.	L2, CO1, 10M
4	Explain TCP connection establishment and termination.	L3, CO1, 10M
5	Discuss TCP flow control.	L3, CO1, 10M
6	Explain TCP congestion control mechanisms.	L3, CO1, 10M
7	Compare TCP and UDP.	L3, CO1, 10M
8	Explain reliable data transfer in TCP.	L3, CO1, 10M
9	Explain transport layer multiplexing and demultiplexing.	L2, CO1, 10M
	Write notes on Internet transport protocols.	L2, CO1, 10M

MODULE - V

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	What is Application Layer?	L1, CO1, 2M
2.	What is HTTP?	L1, CO1, 2M
3.	Define URL.	L1, CO1, 2M
4.	What is Electronic Mail?	L1, CO1, 2M
5.	What is DNS?	L1, CO1, 2M
6.	What is peer-to-peer application?	L1, CO1, 2M
7.	What is video streaming?	L1, CO1, 2M
8.	What is content distribution network (CDN)?	L1, CO1, 2M
9.	What is client-server architecture?	L1, CO1, 2M
10.	What is FTP?	L1, CO1, 2M
Descriptive Questions (Long)		
1	Explain principles of network applications.	L2, CO1, 10M
2	Describe HTTP protocol and its features.	L2, CO1, 10M
3	Explain Electronic Mail system in detail.	L3, CO1, 10M
4	Explain DNS and its working.	L3, CO1, 10M
5	Discuss peer-to-peer applications.	L3, CO1, 10M
6	Explain video streaming and challenges involved.	L3, CO1, 10M
7	Describe content distribution networks.	L2, CO1, 10M
8	Explain client-server and P2P architectures.	L3, CO1, 10M
9	Explain application layer protocols with examples.	L2, CO1, 10M
	Write notes on web applications.	L2, CO1, 10M