GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY
(AN AUTONOMOUS INSTITUTION)
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QUESTION BANK(DESCRIPTIVE)

Subject Name with Code: Computer Networks (22A0520T)
Course & Branch: B.Tech & CSE & CSE(DS)
Year& Semester: III B.Tech I Semester
Regulation: RG22

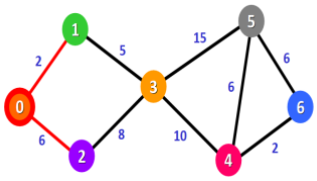
UNIT - I

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	Define computer networks?	L1, CO2,2M
2.	List out layers of OSI &TCP/IP model?	L1, CO2,2M
3.	What are the unguided media for communication?	L1, CO1,2M
4.	Explain different types of networks.	L2, CO1,2M
5.	Explain Network topologies.	L2, CO1,2M
6	Brief the history of internet	L2, CO1,2M
7	What is ARPANET?	L1, CO1,2M
8	Explain the types of transmission modes.	L2, CO1,2M
9	What are the different transmission media?	L1, CO2,2M
Descriptive Questions (Long)		
10.	Explain the layers of ISO-OSI reference model with neat sketch	L2, CO2,12M
11.	Define Topology? and explain different types of network typologies?	L2, CO1,12M
12.	What are the different types of networks? Explain in detail.	L2, CO1,12M
13.	Briefly explain different types of transmission Medias in computer networks?	L2, CO1,12M
14.	Describe the concept of TCP / IP reference model	L2, CO2,12M
15.	Compare and Contrast between TCP/IP & OSI Reference Model.	L4, CO1,12M

UNIT - II

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	What are the issues of data link layer?	L1, CO3,2M
2.	What is the need of flow control in data link layer?	L1, CO3,2M
3.	Define protocol?	L2, CO3,2M
4.	What do mean by redundancy?	L1, CO3,2M
5.	Write note about error detection.	L1, CO3,2M
6	Define checksum?	L2, CO3,2M
7	Define Parity Check?	L2, CO3,2M
8	What is Media Access Control?	L1, CO3,2M
9	What are the two sublayers of Data link layer?	L1, CO3,2M
10	List the error detection techniques ?	L1, CO3,2M
Descriptive Questions (Long)		
10.	Explain the following terms of the data link layer: (i) Framing. (ii) Error control. (iii) Flow control.	L2, CO3,12M
11.	Explain CRC method for error checking with an example	L2, CO3,8M
12.	a)Given the generator polynomial x 3 + 1 and bit stream is 10011101, compute using the CRC method b)Explain design issues of data link layer	L3, CO3,8M L2, CO3,4M
13.	Explain about sliding window protocols?	L2, CO3,12M
14.	a) Write a short note on stop &wait protocol? b) Write a short note on GO -Back ARQ used in real time Applications?	L2, CO3,12M
15	Explain design issues of data link layer?	L2, CO3,12M

UNIT - III

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	Define Routing algorithm?	L2, CO4,2M
2.	Define Congestion ?	L2, CO4,2M
3.	What is mean by Internetworking?	L1, CO4,2M
4.	Describe the problems with congestion	L2, CO4,2M
5.	What is mean by connection Oriented Services?	L1, CO4,2M
6	Write the purpose of ICMP	L1, CO4,2M
7	What are the disadvantages with static routing tables?	L1, CO4,2M
8	What is Router?	L1, CO4,2M
9	What do mean by ARP?	L1, CO4,2M
10	Define unicast and Multicast?	L1, CO4,2M
Descriptive Questions (Long)		
11.	a)Find out Shortest Path source "0" and destination "6"  b)Difference between IPV4 and IPV6	L3, CO4,8M L4, CO4,4M
12.	What is Congestion control? Explain how Congestion Occurred while sendingthe Data packets?	L2, CO4,12M
13.	a) Define internetworking? b) construct Link state Routing algorithm with an example.	L2, CO4,4M L3, CO4,8M
14.	Construct distance vector routing algorithm and explain the serious drawback of distance vector routing algorithm	L3, CO4,12M
15.	Define Congestion? Explain How can we prevent congestion ?	L2, CO4,12M

UNIT - IV

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	Write the functions of Transport Layer?	L1, CO5,2M
2.	List the transport service primitives	
3.	What are the transport layer protocols? define it?	L1, CO5,2M
4.	What are the fields that are present in the UDP header?	L1, CO5,2M
5.	What is mean by connection less Services in transport layer?	L1, CO5,2M
6	Mention the services offered by transport layer	L1, CO5,2M
7	Define UDP?	L2, CO5,2M
8	Explain the process of three-way handshaking protocol ?	L2, CO5,2M
Descriptive Questions (Long)		
9.	Discuss in detail about the elements of transport layer.	L2, CO5,12M
10.	Explain the service primitives of the Transmission control protocol over the network?	L2, CO5,12M
11.	Compare and contrast the concept in between UDP and TCP.	L4, CO5,12M
12.	Define TCP?&Explain Briefly about the Internet transport protocols in TCPwith a neat sketch?	L2, CO5,12M
13.	Illustrate the protocol scenario for establishing a connection using a three-way handshake in TCP	L2, CO5,12M
14.	Define UDP?&Explain Briefly about the Internet transport protocols in UDP? with a neat sketch?	L2, CO5,12M
15	Draw and explain the various fields in TCP segment header.	L2, CO5,12M

UNIT - V

S.No.	Question	[BT Level] [CO][Marks]
2 Marks Questions (Short)		
1.	What is mean by Application layer?	L1, CO6,2M
2	Define HTTP?	L1, CO6,2M
3.	Define network Security?	L1, CO6,2M
4.	Define SMTP Protocol?	L1, CO6,2M
5.	What is POP in an email system?	L1, CO6,2M
6	Mention the protocols used in email transmission	L1, CO6,2M
7	Define WWW?	L2,CO6,2M
8	Explain the basic working of network security	L2,CO6,2M
Descriptive Questions (Long)?		
9.	Define DNS protocol?&Explain how it can be used in Various types ofDevices &Applications	L2, CO6,12M
10.	a)Write a short note on E-mail &Buffering with a neat sketch?	L2, CO6,12M
11.	What is SMTP protocol ?&Explain how it can be used in Various types of Devices &Applications?	L2, CO6,12M
12.	Briefly explain about Email Services protocols over the network .	L2, CO6,12M

13.	What is FTP protocol?&Explain how it can be used in Various types ofDevices &Applications?	L2, CO6,12M
14.	Explain the following: i)DNS ii)E-mail in the internet	L2, CO6,12M
15.	a)Explain about DNS in detail. b)What are the different types of network security tools and explain?	L2, CO6,6M L3, CO6,6M
16	Explain the following: i)SMTP ii)E-mail	L2, CO6,12M

Signature of the Staff: D.Ramesh

Signature of Department Academic Committee Member 1:

Signature of Department Academic Committee Member 2:

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