

Computer Networks - 5151 (Rev 2015)
Previous year questions module wise

MODULE 1

Oct 2017

1. Mention the purpose of NIC. (2)
2. Differentiate between switch and bridge. (2)
3. Differentiate between unicast, multicast and broadcast address. (6)
4. Explain virtual LAN. (6)
5. Explain wired LAN. (8)
6. Explain the different levels of addresses used in TCP/IP model. (7)
7. Explain wireless LAN. (7)
8. Explain different network topologies. (8)

Apr 2018

1. Define computer networks. (2)
2. Differentiate between ISO OSI and TCP/IP protocol stack. (6)
3. Explain CSMA/CD protocol. (6)
4. Explain different layers in TCP/IP protocol suite. (10)
5. Explain features and specification of Fast Ethernet. (5)
6. Explain Ethernet frame format. (10)
7. Describe the minimum and maximum Ethernet frame size. (5)

Oct 2018

1. Name four network topologies. (2)
2. Define port address, logical address and physical address. (6)
3. Explain hidden terminal and exposed terminal problem. (6)
4. Explain different forwarding techniques. (6)
5. Explain TCP/IP protocol suite. (8)
6. Explain the different categories of Standard Ethernet. (7)
7. Explain the different categories of network connecting devices. (8)
8. Explain the architecture of IEEE 802.11. (7)

Apr 2019

1. Define protocol and what are its key elements. (2)
2. Name any two media access control mechanisms on LAN. (2)
3. Explain dissimilarities between ISO-OSI and TCP/IP protocol stack. (6)
4. Explain different topology. (6)
5. Which is the medium access control mechanism in Ethernet? Explain its working. (10)
6. Explain features and specification of Gigabit Ethernet. (5)
7. Explain the differences between hub and switch. (10)

Oct 2019

1. What is the access method used by wireless LAN. (2)
2. Explain with a neat diagram the frame format of Ethernet. (6)
3. Give a detailed description of TCP/IP and its architecture. (15)
4. Identify the features and functions of the following network connecting devices. (9)
a. Hub b. Switch c. Router
5. Write notes on BSS and ESS in wireless LAN. (6)

Apr 2020

1. What is virtual LAN. (2)

2. Write notes on multicasting. (2)
3. Describe various network topologies. (6)
4. Explain LAN connecting devices. (6)
5. State IEEE 802.11 Architecture. (8)
6. Describe about Wired LAN. (7)
7. Explain TCP/IP architecture. (8)
8. Describe Wireless LAN. (7)

MODULE 2

Oct 2017

1. Define RIP. (2)
2. Explain DHCP. (6)
3. Explain subnetting. (6)
4. Compare distance vector and path vector routing. (10)
5. Explain the function of a router. (5)
6. Describe the different protocols of the network layer. (10)
7. Explain the different classes of IPv4 addresses. (5)

Apr 2018

1. Name any two routing algorithms. (2)
2. Name the three security issues in IPv4 Datagram. (6)
3. Difference between unicasting, multicasting and broadcasting. (6)
4. Define classless addressing. (5)
5. Draw and explain datagram format of IPv4. (10)
6. Explain Distance Vector routing algorithm. (15)

Oct 2018

1. Define ICMP. (2)
2. Explain the different classes of IPv4 addresses. (6)
3. Explain two intra domain routing protocols. (8)
4. Explain the structure of IPv4 header. (7)
5. Difference between classful addressing and classless addressing in IPv4. (10)
6. Explain the network layer services. (5)

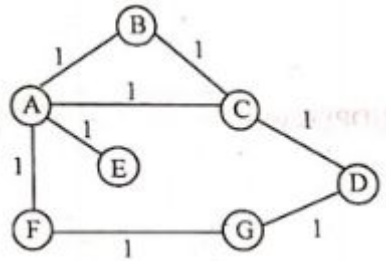
Apr 2019

1. Name two services of network layer. (2)
2. Define subnet. (2)
3. Explain packetizing of network layer. (6)
4. Difference between unicasting, multicasting and broadcasting. (6)
5. Explain the use of DHCP. (5)
6. Explain the different classes of IP addresses. (10)
7. Explain link state routing algorithm. (10)
8. Define the loopback address. (5)

Oct 2019

1. Define subnetting. (2)
2. List any two network layer services. (2)
3. What is DHCP. (6)
4. Write notes on classful and classless addressing. (6)
5. With a neat diagram, explain IPv4 datagram format. (9)

6. Compare unicasting, multicasting and broadcasting. (6)
7. Explain the concept of Distance vector routing algorithm. By applying the algorithm, find the routing table maintained at node B.



Apr 2020

1. Write notes on multicasting. (2)
2. Write notes on DHCP. (6)
3. Summarise Distance Vector routing algorithm. (6)
4. Draw and explain IP datagram format. (7)
5. List and analyze various congestion control mechanisms. (8)
6. Write notes on delay and throughput. (7)
7. Describe IPv4 addresses. (8)

MODULE 3

Oct 2017

1. Define socket address. (2)
2. Difference between TCP and UDP. (6)
3. Explain the services offered by TCP. (8)
4. Explain how the error control is done in TCP. (7)
5. What are the services offered by SCTP. (8)
6. Explain congestion control in the transport layer. (7)

Apr 2018

1. Define the term piggybacking. (2)
2. Define three-way handshaking protocol. (2)
3. Explain six transport layer services. (6)
4. Why is TCP reliable? Explain. (6)
5. Explain flow regulation in the transport layer. (10)
6. Explain the features of stop and wait protocol. (5)
7. Why is UDP unreliable? List its frame features. (10)
8. Explain the features of Go-Back-N protocol. (5)

Oct 2018

1. Define SCTP. (2)
2. Explain SYN flooding attack. (6)
3. Explain the three-way handshaking in TCP. (10)
4. Mention the uses of UDP. (5)
5. Compare TCP, UDP and SCTP. (7)
6. Explain the sliding window protocol in TCP. (8)

Apr 2019

1. Describe User Datagram Protocol. (6)

2. Describe SCTP. (6)
3. Define Stop-and-wait protocol. List its limitations. (5)
4. Explain the different TCP services. (10)
5. Define the Go-Back-N protocol. List its properties. (5)

Oct 2019

1. Specify which protocol (TCP/UDP) is used for (a) File Transfer (b) Video Streaming. (2)
2. Give the comparison between Go-Back-N and Selective Repeat protocol. (6)
3. Compare TCP and UDP. (6)
4. Explain the three-way handshake process to establish a virtual circuit. (8)
5. Summarize SCTP services. (7)
6. With a neat diagram explain UDP datagram and uses of UDP. (9)
7. Both TCP and UDP use port numbers. What are these port numbers used for and what is meant by the term well-known ports? Give an example of a well-known port. (6)

Apr 2020

1. List the services of Transport Layer. (2)
2. Compare TCP and UDP. (6)
3. Describe SCTP. (6)
4. Describe various Transport Layer Protocols. (9)
5. Explain UDP. (6)
6. List and explain various Transport Layer Services. (9)
7. Write notes on TCP. (6)