

NETWORKING

1. Which of the following is not true about campus networks?
 - a. Have multiple LANs connected
 - b. Interconnected with routers
 - c. Interconnected with switches
 - d. Multiple buildings that are far apart
2. Which of the following layers is not in the Cisco Layer 3 network structure?
 - a. Core
 - b. Distribution
 - c. Access
 - d. Network
3. Which of the following is true about the core layer?
 - a. Data congestion in the core doesn't need to be avoided.
 - b. It's the backbone of the network.
 - c. Only minor portions of data travel in the core.
 - d. Route policies are often enforced at this layer.
4. Which of the following is not true about the distribution layer?
 - a. Point where the individual LANs connect to the network.
 - b. Routing and filtering is done here.
 - c. The speed is slower than the core layer.
 - d. All the above are true.
5. What questions need to be asked when developing a network plan that implements all three layers? (Choose all that apply.)
 - a. What layer will the network servers be on?
 - b. Which routers can be connected on the distribution layer?
 - c. Which layer will the hosts be on?
 - d. How far apart are the buildings?
6. As a network engineer, you need to come up with a final IP subnet design. Which of the following is a factor to consider?
 - a. Your IP address
 - b. The physical placement of the gateway
 - c. The number of subnetworks needed
 - d. All the above
7. Which of the following is a private network address?
 - a. 172.16.38.57
 - b. 10.15.256.200
 - c. 192.178.224.0
 - d. 172.32.84.5
8. A _____ is two or more classful contiguous networks grouped together.
 - a. Subnet
 - b. Supernet

- c. Network
 - d. Superwork
9. The /19 CIDR block creates ____ IP addresses.
- a. 1024
 - b. 254
 - c. 4096
 - d. 8192
10. Care must be taken to overlap network boundaries when creating a network design.
- a. True
 - b. False
11. Which of the following is not a reason to use VLANs?
- a. Creates a flat network design
 - b. Allows LANs to span routers
 - c. Creates broadcast domains
 - d. Allows grouping of devices if they are not on the same physical segment
12. What type of VLAN configuration connects host computers to a VLAN that spans switches?
- a. Port-based
 - b. Tag-based
 - c. Protocol-based
 - d. None of the above
13. What type of VLAN is connected to specific ports based on the type of protocol used?
- a. Port-based
 - b. Tag-based
 - c. Protocol-based
 - d. None of the above
14. Which of the following is true of the trunk port?
- a. Only uses ISL.
 - b. Carries data for multiple VLANs.
 - c. Ports are in trunk mode by default.
 - d. 802.1Q is proprietary to Cisco switches.
15. Which of the following describes the Layer 3 address(es) used by Layer 3 devices?
(Select all that apply)
- a. Network address
 - b. Logical address
 - c. IP address
 - d. MAC address
 - e. All the above
16. What piece of information cannot be found in the routing table?
- a. Forwarding port.
 - b. Network addressees.
 - c. Gateway address.
 - d. All the above can be found in the routing table.

17. Which of the following is not a Layer 2 technology?
- a. Ethernet
 - b. DSL
 - c. T1
 - d. AMT
18. In the interface FastEthernet 0/2 notation, 0/2 indicates the [interface-card-slot/port].
- a. True
 - b. False
19. Which of the following is not a step in the process to create a router on a stick?
- a. Assign IP addresses
 - b. Define encapsulation
 - c. Link using switch access port
 - d. Create subinterfaces
20. Routing protocols provide a standardized format for route management including which of the following?
- a. Route selection
 - b. Sharing route status with neighbor routers
 - c. Calculating alternative routes if the best path route is down
 - d. All the above
 - e. None of the above
21. Which of the following is true about static routes?
- a. Usually the default gateway in PCs
 - b. Specify where data is not allowed to go
 - c. Automatically configured
 - d. Can't be seen in the routing table
22. 127.0.0.1 is a ____.
- a. Static route
 - b. Route print
 - c. Loopback
 - d. null0 interface
23. Which of the following commands show you the routing table?
- a. netstat -t
 - b. route print
 - c. show route
 - d. netstat -r
24. Which of the following is the correct syntax to create a static route?
- a. ip route <next-hop-ip-address><subnet-mask> <network-address>
 - b. route <network-address> <subnet-mask> <next-hop-ip-address>
 - c. ip route <exit interface><network-address> <subnet-mask> <next-hop-ip-address>
 - d. ip route <network-address> <subnet-mask> <next-hop-ip-address>
25. Which of the following elements are used to determine the best path to a network?
- a. Balancing
 - b. Administrative distance

- c. Metric
 - d. All the above
26. Which of the following are features of dynamic routing protocols?
- a. What information is exchanged between routers
 - b. When updated routing information is exchanged
 - c. Steps for reacting to changes in the network
 - d. Criteria for establishing the best route selection
 - e. All the above
27. Convergence is ____.
- a. When a router obtains a clear view of the routes in a network.
 - b. A numeric measure assigned to routes for ranking the routes best to worst; the smaller the number, the better.
 - c. A procedure in the protocol that enables routers to use any of the multiple data paths available from multiple routers to reach the destination.
 - d. A procedure in the protocol that determines the best route.
28. A metric is ____.
- a. When a router obtains a clear view of the routes in a network.
 - b. A numeric measure assigned to routes for ranking the routes best to worst; the smaller the number, the better.
 - c. A procedure in the protocol that enables routers to use any of the multiple data paths available from multiple routers to reach the destination.
 - d. A procedure in the protocol that determines the best route.
29. Hop count is ____.
- a. The number of routers the data packet must pass through to reach the destination network
 - b. A measure of the reliability of the link, typically in terms of the amount of errors
 - c. The time it takes for a data packet to travel from source to destination
 - d. The measured delay time in terms of clock ticks, where each tick is approximately 55 milliseconds (1/18 second)
30. Which of the following is not a disadvantage of RIP?
- a. Large routing tables
 - b. Consumes bandwidth
 - c. Slow convergence
 - d. Dynamic routing protocol
31. You use a classless network address with the network command when configuring RIP.
- a. True
 - b. False
32. Which of the following are advantages of RIP?
- a. Simple to configure
 - b. Good for large networks
 - c. Suited for fast convergence
 - d. Suited for contiguous networks

33. Which code in the routing table means the route was discovered using RIP?
- a. C
 - b. R
 - c. S
 - d. M
34. Which of the following commands is used to configure RIPv2 and not RIP?
- a. router rip
 - b. router ripv2
 - c. version 2
 - d. no version 1
35. The no auto-summary command is used with RIPv2 to force the router to advertise actual networks. True or False?
- a. True
 - b. False
36. Which of the following are not reasons to use TFTP?
- a. Upgrading or archiving the configuration files.
 - b. Save and reload the configuration files to and from a remote server.
 - c. Updating and saving the Internetwork Operating System (IOS) files.
 - d. All the above are reasons.
37. What information must you have available when trying to save a configuration from the router to a TFTP server?
- a. Privileged EXEC mode password
 - b. Name of the configuration file
 - c. Address of the TFTP server
 - d. Both a and c
38. Which of the following is not a feature of OSPF?
- a. Dynamic routing protocol
 - b. Link state protocol
 - c. Proprietary
 - d. Supported by many vendors
39. The router with the highest priority is the ____.
- a. Neighbor ID
 - b. Designated Router (DR)
 - c. Backup Designated Router (BDR)
 - d. State of FULL
 - e. DR Election
40. Which of the following is not one of the key issues of link state protocols?
- a. Finds neighbors/adjacencies
 - b. Uses route advertisements to build routing table
 - c. Sends "Hello" packets for routing tables
 - d. Sends updates when routing changes
41. Which of the following is not an advantage of OSPF?
- a. Proprietary

- b. Rapid convergence
 - c. Uses VLSM
 - d. Uses areas to partition the network
42. Which of the following characteristics is not shared by IS-IS and OSPF?
- a. Use the Dijkstra algorithm.
 - b. Classless protocols.
 - c. Use Hello packets.
 - d. The backbone can be segmented.
43. Which of the following is not true about IS-IS?
- a. Originally designed as part of the OSI network layer service called CLNS.
 - b. It requires the IP protocol for it to function.
 - c. Every router uses the NET to define its process.
 - d. All the above are true.
44. Which of the following commands are used to configure IS-IS?
- a. `clns routing`
 - b. `ip router isis`
 - c. `ip isis`
 - d. `net`
45. What information can you get using the `sh ip protocol` command?
- a. Routing protocol
 - b. Minimum path
 - c. Interfaces participating in the routing process
 - d. All the above
46. The `clns` commands are used when dealing with the IS-IS protocol at the Layer 2 level. True or false?
- a. True
 - b. False
47. Which of the following is not true about EIGRP?
- a. Cisco proprietary.
 - b. Allows the use of VLSM.
 - c. Considered a hybrid protocol.
 - d. All the above are true.
48. Which component of EIGRP is used to track all routes advertised by its neighbors?
- a. Neighbor Discovery Recovery
 - b. DUAL Finite State Machine
 - c. Protocol Dependent Modules
 - d. Reliable Transport Protocol
49. Which of the following is a reason that routing redistribution is necessary?
- a. Two or more static protocols are used.
 - b. Redistribute dynamic routes.
 - c. Certain protocols not supported by devices.
 - d. All the above are reasons
50. Which of the following is not a correct redistribute command?
- a. `redistribute all`
 - b. `redistribute <protocol>`

- c. redistribute connected
 - d. redistribute static
51. Which of the following commands redistribute the static routes on a router?
- a. redistribute all
 - b. redistribute <protocol>
 - c. redistribute connected
 - d. redistribute static
52. Which of the following commands redistribute EIGRP routes into RIP?
- a. redistribute rip metric <bandwidth> <delay> <reliability> <load> <MTU>
 - b. redistribute eigrp <AS_number> metric <0-16>
 - c. redistribute eigrp metric <bandwidth> <delay> <reliability> <load> <MTU>
 - d. redistribute rip <AS_number> metric <0-16>
53. Which of the following parameters are included in OSPF "Hello" packets?
- a. Hello Interval
 - b. Router Alive Interval
 - c. Wildcard mask
 - d. All of the above are parameters
54. What is the address on OSPF "Hello" packets?
- a. 224.0.0.9
 - b. 224.0.0.5
 - c. 224.0.0.1
 - d. 224.0.0.7
55. Which of the following is not needed to configure a user computer's network settings?
- a. IP address.
 - b. Wildcard mask.
 - c. Default gateway.
 - d. All the above are needed settings
56. What is the correct order of DHCP packets when obtaining an IP address?
- a. DHCP Discover, DHCP Offer, DHCP ACK, DHCP Request
 - b. DHCP Offer, DHCP Discover, DHCP Request, DHCP ACK
 - c. DHCP Discover, DHCP Offer, DHCP Request, DHCP ACK
 - d. DHCP Discover, DHCP Request, DHCP Offer, DHCP ACK
57. Which of the following is a valid APIPA address?
- a. 169.254.50.3 255.255.0.0
 - b. 169.254.169.44 255.255.255.0
 - c. 254.169.90.64 255.255.0.0
 - d. 169.255.85.91 255.255.0.0
58. The DHCP Offer packet does not contain which of the following information?
- a. Domain name
 - b. Relay router name
 - c. Default gateway
 - d. Leased time
59. NAT is a technique used to do which of the following?
- a. Translate external private address to a public address.
 - b. Associate a single public IP address with many internal addresses.

- c. Hide the internal IP infrastructure.
 - d. Use TCP/UDP ports.
60. The local address defines any IP address that is on the outside of or external to the network. True or False?
- a. True
 - b. False
61. Which of the following is not a type of NAT?
- a. Static NAT.
 - b. Dynamic NAT.
 - c. NAT overload.
 - d. All the above are types of NAT.
62. You have the following output. What command was used to get this?
- ```
RouterA# ???
Pro Inside global Inside local Outside local Outside global
tcp 12.0.0.2:57425 10.10.70.5:57425 74.125.227.20:80 74.125.227.20:80
```
- a. show ip nat translation
  - b. ip nat inside source static tcp
  - c. show nat translation
  - d. None of the above
63. Which of the following is not a firewall technology?
- a. Packet filtering.
  - b. Proxy server.
  - c. Stateful packet filtering.
  - d. All the above are firewall technologies.
64. Inbound and outbound data packets are compared to determine if a connection should be allowed when using this method.
- a. Packet filtering
  - b. Proxy server
  - c. Stateful firewall
  - d. Access lists
65. Which of the following is not a disadvantage of proxy servers?
- a. Not all network services can be filtered.
  - b. The proxy server can run slowly.
  - c. Adding services can be difficult.
  - d. There can be a potential problem with network failure if the proxy server fails or is corrupted.
66. Which of the following is one of the steps to apply access lists on a router?
- a. Isolate the servers.
  - b. Identify the problem.
  - c. Decide where to place the access list.
  - d. Both a and b.
  - e. Both b and c.
67. Which of the following is not a type of access list?
- a. Standard
  - b. Protocol



- c. Extended
- d. Named

Question 1# - Which of the following are ways to provide login access to a router? (choose all that apply)

- A. HTTP
- B. Aux Port
- C. Console
- D. LLC
- E. Telnet
- F.

Question 2# - Which statement is true regarding the user exec and privileged exec mode?

- A. They both require the enable password
- B. User exec is a subset of the privileged exec
- C. The '?' only works in Privileged exec
- D. They are identical

Question 3# - This modem standard has a speed of 28.8k and has error-correction features.

- A. V.42
- B. V.32bis
- C. V.90
- D. V.34

Questions 4# - What would be the proper command to set a DCE clock rate of 56k for a serial interface?

- A. Router (config) # clockrate 56000
- B. Router# clockrate 56000.
- C. Router (config-if) #clock rate 56000
- D. Router (config-if) # clockrate 56k

Question 5# - What is an example of a MAC address?

- A. Az32:6362:2434
- B. BA:281x:8288
- C. 101:354:665:8734:ffd6:8023
- D. A625:cbdf:6525

Question 6# - Which command does not show that two devices are failing to route packets between them successfully?

- A. show interface
- B. trace
- C. telnet
- D. ping

Question 7# - You are designing a network which needs to support 200 users. You don't plan to extend the segment beyond the current number of users. Which subnet mask would best meet your needs? Select the best answer.

- A. 255.255.0.0
- B. 255.255.255.0
- C. 255.0.0.0
- D. 255.224.0.0

E. 255.255.255.200

Question 8# - MAC is to Ethernet what \_\_\_\_\_ is to Frame Relay.

- A. DLCI
- B. LCI
- C. PVC
- D. None of the above

MCQS From: <http://cs-mcqs.blogspot.com> \_\_\_\_\_

Question 9# - The 802.2 frame specifies a type whereas 802.3 frame specifies a length:

- A. True
- B. False

Question 10# - What is used to see if a client is still connected to a NetWare server?

- A. Spoofing TCP/SAP
- B. Watchdog packet
- C. GNS Round Robin
- D. DNS Round Robin

ANSWERS

Question 1 - Correct Answers: B,C,E

Question 2 - Correct Answers: B

Question 3 - Correct Answers: A

Question 4 - Correct Answers: C

Question 5 - Correct Answers: D

Question 6 - Correct Answers: A

Question 7 - Correct Answers: B

Question 8 - Correct Answers: A

Question 9 - Correct Answers: A

Question 10 - Correct Answers: B

1. Which protocol working at the Transport layer provides a connectionless service between hosts?

A. IP

B. ARP

C. TCP

D. UDP

Answer: D

User Datagram Protocol is used at the Transport layer to provide a connectionless service.

2. Which protocol works at the Transport layer and provides virtual circuits between hosts?

A. IP

B. ARP

C. TCP

D. UDP

Answer: C

Transmission Control Protocol sets up a virtual circuit before transmitting any data. This creates a reliable session and is known as a connection-oriented session.

3. Which protocol works at the Internet layer and provides a connection service between hosts?

- A. IP
- B. ARP
- C. TCP
- D. UDP

Answer: A

Internet Protocol is used to address hosts and route packets through the internetwork. The question does not refer to a connection-oriented service, which is different from a plain connection service.

4. If a host broadcasts a frame that includes a source and destination hardware address, and its purpose is to assign IP addresses to itself, which protocol at the Network layer does the host use?

- A. RARP
- B. ARPA
- C. ICMP
- D. TCP
- E. IPX

Answer: A

Reverse ARP is used to find an IP address from a known hardware address.

5. If a router interface is congested, which protocol in the IP suite is used to tell neighbor routers?

- A. RARP
- B. ARP
- C. ICMP
- D. IP
- E. TCP

Answer: C

Internet Control Message Protocol (ICMP) is used to send redirects back to an originating router.

6. What is the valid host range the IP address 172.16.10.22 255.255.255.240 is a part of?

- A. 172.16.10.20 through 172.16.10.22
- B. 172.16.10.1 through 172.16.10.255
- C. 172.16.10.16 through 172.16.10.23
- D. 172.16.10.17 through 172.16.10.31
- E. 172.16.10.17 through 172.16.10.30

Answer: E

First start by using the 256 mask, which in this case is  $256 - 240 = 16$ . The first subnet is 16; the second subnet is 32. This host must be in the 16 subnet; the broadcast address is 31 and the valid host range is 17–30.

7. What range of addresses can be used in the first octet of a Class B network address?

- A. 1–126
- B. 1–127
- C. 128–190
- D. 128–191
- E. 129–192
- F. 192–220

Answer: D

A Class B network is defined in the first octet with the numbers 128–191.

8. What range of addresses can be used in the first octet of a Class C address?

- A. 1-127
- B. 129-192
- C. 203-234
- D. 192-223

Answer: D

A Class C network is defined in the first octet with the numbers 192–223.

9. How many bytes is an Ethernet address?

- A. 3
- B. 4
- C. 5
- D. 6
- E. 7
- F. 8
- G. 16

Answer: D

An Ethernet (MAC) address is 6 bytes long (48 bits).

10. What protocol is used to find the hardware address of a local device?

- A. RARP
- B. ARP
- C. IP
- D. ICMP
- E. BootP

Answer: B

Address Resolution Protocol (ARP) is used to find the hardware address from a known IP address.

11. Which of the following is the broadcast address for a Class B network ID using the default subnet mask?

- A. 172.16.10.255
- B. 172.16.255.255
- C. 172.255.255.255
- D. 255.255.255.255

Answer: B

A Class B network address is two bytes long, which means the host bits are two bytes long. The network address must be 172.16.0.0, which is all host bits off. The broadcast address is all bits on, or 172.16.255.255.

12. Which class of IP address provides a maximum of only 254 host addresses per network ID?

- A. A
- B. B
- C. C
- D. D
- E. E

Answer: C

A Class C network address only has 8 bits for defining hosts.  $2^8 - 2 = 254$ .

13. What is the broadcast address of the subnet address 10.254.255.19 255.255.255.248?

- A. 10.254.255.23
- B. 10.254.255.24
- C. 10.254.255.255
- D. 10.255.255.255

Answer: A

First start with 256 mask or in this case,  $256 - 248 = 8$ . The first subnet is 8. The second subnet is 16, then 24. This host is in the 16 subnet, the broadcast address is 23, and the valid host range is 17–22.

14. What is the broadcast address of the subnet address 172.16.99.99 255.255.192.0?

- A. 172.16.99.255
- B. 172.16.127.255
- C. 172.16.255.255
- D. 172.16.64.127

Answer: B



First start with 256 mask or in this case,  $256-192=64$ . 64 is the first subnet; 128 is the second subnet. This host is in the 64-subnet range, the broadcast address is 127, and the valid host range is 65-126.

15. If you wanted to have 12 subnets with a Class C network ID, which subnet mask would you use?

- A. 255.255.255.252
- B. 255.255.255.248
- C. 255.255.255.240
- D. 255.255.255.255

Answer: C

Take a look at the answers and see which subnet mask will give you what you need for subnetting. 252 gives you 62 subnets, 248 gives you 30 subnets, 240 gives you 14 subnets, and 255 is invalid. Only answer C (240) gives you what you need.

16. What is the port number range that a transmitting host can use to set up a session with another host?

- A. 1–1023
- B. 1024 and above
- C. 1–256
- D. 1–65534

Answer: B

Source hosts can use any port number starting at 1024.

17. Which of the following ranges are considered well-known port numbers?

- A. 1–1023
- B. 1024 and above
- C. 1–256
- D. 1–65534

Answer: A

The port numbers 1–1023 are defined as and considered well-known port numbers.

18. What is the broadcast address of the host subnet address 10.10.10.10 255.255.254.0?

- A. 10.10.10.255
- B. 10.10.11.255
- C. 10.10.255.255
- D. 10.255.255.255

Answer: B

First start with  $256-254=2$ . The first subnet is 2, the second subnet is 4, then 6, 8, 10, and 12. Remember that the fourth octet is host addresses. This host is a part of the subnet 10.0, the broadcast address is 11.255, and the valid host range is 10.1 through 11.254.

19. What broadcast address will the host 192.168.210.5 255.255.255.252 use?

- A. 192.168.210.255
- B. 192.168.210.254
- C. 192.168.210.7
- D. 192.168.210.15

Answer: C

Start with the 256 mask or in this case,  $256-252=4$ . This first subnet is 4. The second subnet is 8. This falls in the 4-subnet range. The broadcast address is 7, and the valid hosts are 5 and 6.

20. If you need to have a Class B network address subnetted into exactly 510 subnets, what subnet mask would you assign?

- A. 255.255.255.252
- B. 255.255.255.128
- C. 255.255.0.0
- D. 255.255.255.192

Answer: B

If you use the mask 255.255.255.0, that only gives you eight subnet bits, or 254 subnets. You are going to have to use one subnet bit from the fourth octet, or 255.255.255.128. This is 9 subnet bits ( $2^9 - 2 = 510$ ).

## SET

1. Which protocol is used to look up an IP address from a known Ethernet address?

- A. IP
- B. ARP
- C. RARP
- D. TCP

Answer: C

The protocol at the Network layer that finds an IP address from a known Ethernet address is Reverse ARP (RARP). See Chapter 3 for more information on IP protocols.

2. What is the subnet address of the IP address 192.168.100.30 255.255.255.248?

- A. 192.168.100.32
- B. 192.168.100.24
- C. 192.168.100.0
- D. 192.168.100.16

Answer: B

Start by using 256, the subnet mask, which is  $256 - 248 = 8$ . The first subnet is 8. The next subnet would be 16, then 24, and then 32. This host is in the 24 subnet, the broadcast address is 31, and the valid host range is 25 through 31. See Chapter 3 for more information on IP addressing.

3. Which of the following is the valid host range for the IP address 192.168.168.188 255.255.255.192?

- A. 192.168.168.129-190
- B. 192.168.168.129-191

C. 192.168.168.128-190

D. 192.168.168.128-192

Answer: A

Start by using 256, the subnet mask, which is  $256-192=64$ . The first subnet is 64. The next subnet would be 128. This host is in the 128 subnet, the broadcast address is 191, and the valid host range is 129 through 190. See Chapter 3 for more information on IP addressing.

4. What is the broadcast address of the subnet address 192.168.99.20 255.255.255.252?

A. 192.168.99.127

B. 192.168.99.63

C. 192.168.99.23

D. 192.168.99.31

Answer: C

Start by using 256, the subnet mask, which is  $256-25=4$ . The first subnet is 4. The next subnet would be 8, then 12, 16, 20, and 24. The broadcast address is 23, and the valid host range is 21 and 22. See Chapter 3 for more IP addressing information.

5. What is the valid host range that the host ID 192.168.10.33 255.255.255.224 is a part of?

A. 192.168.10.32-63

B. 192.168.10.33-63

C. 192.168.10.33-62

D. 192.168.10.33-61

Answer: C

Start by using 256, the subnet mask, which is  $256-224=32$ . The first subnet is 10.32. The next subnet would be 10.64. This host is in the 10.32 subnet, the broadcast address is 10.63, and the valid host range is 10.33 through 10.62. See Chapter 3 for more IP addressing information.

SET

1. Which protocol does DHCP use at the Transport layer?

- A. IP
- B. TCP
- C. UDP
- D. ARP

Answer: C

User Datagram Protocol is a connection network service at the Transport layer, and DHCP uses this connectionless service. See Chapter 3 for more information.

2. Which of the following is the valid host range for the IP address 192.168.168.188 255.255.255.192?

- A. 192.168.168.129-190
- B. 192.168.168.129-191
- C. 192.168.168.128-190
- D. 192.168.168.128-192

Answer: A

·  $256 - 192 = 64$ .  $64 + 64 = 128$ .  $128 + 64 = 192$ . The subnet is 128, the broadcast address is 191, and the valid host range is the numbers in between, or 129-190. See Chapter 3 for more information.

3. Which protocol is used to find an Ethernet address from a known IP address?

- A. IP
- B. ARP
- C. RARP
- D. BootP

Answer: B

If a device knows the IP address of where it wants to send a packet, but doesn't know the hardware address, it will send an ARP broadcast looking for the hardware or, in this case, Ethernet address. See Chapter 3 for more information.

4. Which class of IP address has the most host addresses available by default?

- A. A
- B. B
- C. C
- D. A and B

Answer: A

Class A addressing provides 24 bits for hosts addressing. See Chapter 3 for more information.

5. Which protocol does Ping use?

- A. TCP
- B. ARP
- C. ICMP
- D. BootP

Answer: C

ICMP is the protocol at the Network layer that is used to send echo requests and replies. See Chapter 3 for more information.

6. Which protocol is used to send a Destination Network Unknown message back to originating hosts?

- A. TCP
- B. ARP
- C. ICMP
- D. BootP

Answer: C

ICMP is the protocol at the Network layer that is used to send messages back to an originating router. See Chapter 3 for more information.

## SET

1. What is the subnet broadcast address the host 192.168.10.17 with four bits of subnetting will use?

- A. 192.168.10.16
- B. 192.168.10.19
- C. 192.168.10.23
- D. 192.168.10.31

Answer: D

When referring to only subnet bits, add the bits to the default mask. In this case, it is a Class C address, and the default mask is 255.255.255.0. Four bits would make the mask 255.255.255.240.  $256 - 240 = 16$ .  $16 + 16 = 32$ . Therefore, the subnet broadcast must be 192.168.10.31.

2. What is the subnet broadcast address the host 172.16.10.12 with nine bits of subnetting will use?

- A. 172.16.10.127
- B. 172.16.10.255
- C. 172.16.255.255
- D. 172.16.10.128

Answer: A

The default mask for Class B network IDs is 255.255.0.0. By adding nine subnet bits, the subnet mask is 255.255.255.128. The subnet is 172.16.10.0, and the broadcast address is 172.16.10.127. This is determined by looking at the host ID, which is 12 in this case. Since it is less than 128, the subnet must be zero in the fourth octet.

3. What is the valid host range of the IP subnet address 172.16.10.61 255.255.255.224?

- A. 172.16.10.48-63

- B. 172.16.10.33-62
- C. 172.16.10.0-254
- D. 172.16.10.60-94

Answer: B

·  $256 - 224 = 32$ .  $32 + 32 = 64$ . The subnet is 172.16.10.32, and the broadcast address is the number right before the next subnet (63 in this question). The valid hosts are the numbers in between the network ID and the broadcast address: 33-62.

4. What protocol is used to resolve an Ethernet address to an IP address?

- A. IP
- B. ARP
- C. RARP
- D. BootP

Answer: C

The RARP protocol is used to find an IP address from a known hardware address.

5. What protocol is used to resolve an IP address to an Ethernet address?

- A. IP
- B. ARP
- C. RARP
- D. BootP

Answer: B

The ARP protocol is used to find the hardware address from a known IP address.



SET

Question 1# - Which of the following are valid parameters for an extended IPX access list (Choose all that apply)?

- A. source-network
- B. permit or deny
- C. source-socket
- D. protocol
- E. list-number

Question 2# - Which of the following is not valid?

- A. router#show RAM
- B. router>show version
- C. router#show running-config
- D. router#show startup-config

Question 3# - Which of the following is a congestion management scheme that identifies conversations, separates packets that belong to each conversation, and shares bandwidth fairly between the various streams?

- A. Weighted Priority queuing
- B. Prioritizing queuing
- C. FIFO fair queuing
- D. Weighted fair queuing

Question 4# - Which of the following describes a full-duplex transmission?

- A. Data transmission in only one direction
- B. Data transmission in both directions, but only one way at a time
- C. Uses a single cable
- D. Uses a point-to-point connection from the transmitter of the transmitting station to the receiver of the receiving station

Question 5# - What would be the proper command to set a bandwidth of 56K for a serial interface?

- A. Router# bandwidth 56000
- B. Router (config-if) #bandwidth 56,000
- C. Router (config) #bandwidth 56000
- D. Router (config-if) #bandwidth 56

Question 6# - Which of the following is not part of the data link layer?

- A. Determines network topology
- B. Performs flow control
- C. Performs physical addressing
- D. Terminates a session
- E. Transports data across the physical link

Question 7# - You have an IP address of 172.16.13.5 with a 255.255.255.128 subnet mask. What is your class of address, subnet address, and broadcast address?

- A. Class B, Subnet 172.16.13.0, Broadcast address 172.16.13.255
- B. Class B, Subnet 172.16.13.0, Broadcast address 172.16.13.127
- C. Class B, Subnet 172.16.0.0, Broadcast address 172.16.255.255
- D. Class A, Subnet 172.16.13.0, Broadcast address 172.16.13.127.

Question 8# - Coaxial cable was used for which types of ethernet networks? (Select 2)

- A. 10Base-T
- B. 100Base-T4
- C. 10Base2

D. 100Base-FX

E. 10Base5

F. 100Base-T

Question 9# - As a system administrator, you need to set up one Ethernet interface on the Cisco router to allow for both sap and Novell-ether encapsulations. Which set of commands will accomplish this?

A.

```
interface ethernet 0.1
```

```
ipx encapsulation Novell-ether
```

```
ipx network 9e
```

```
interface ethernet 0.2
```

```
ipx encapsulation sap
```

```
ipx network 6c
```

B.

```
interface ethernet 0.1
```

```
ipx encapsulation Novell-ether
```

```
interface ethernet 0.2
```

```
ipx encapsulation sap
```

C.

```
interface ethernet 0
```

```
ipx encapsulation Novell-ether
```

```
ipx network 9e
```

```
interface ethernet 0
```

```
ipx encapsulation sap
```

```
ipx network 6c
```

D.

interface ethernet 0.1

ipx encapsulation Novell-ether

ipx network 9e

interface ethernet 0.2

ipx network 6c

Question 10# - Using a switch we divide the network into multiple \_\_\_\_\_ domains

A. collision

B. broadcast

C. bridged

D. virtual

## ANSWERS

Question 1 - Correct Answers: A, B,C,D,E

Question 2 - Correct Answers: A

Question 3 - Correct Answers: D

Question 4 - Correct Answers: D

Question 5 - Correct Answers: D

Question 6 - Correct Answers: D

Question 7 - Correct Answers: B

Question 8 - Correct Answers: C,E

Question 9 - Correct Answers: A

Question 10 - Correct Answers: A

SET

Question 1: What command will show you the routed protocols running on your Cisco router?

Answer: show protocols

Question 2: What type of cable should you use to connect to the console port of a Cisco router?

Answer: Rollover cable

Question 3: What type of ethernet cable should you use to connect a Hub and a Switch or two Switches?

Answer: Crossover cable

Question 4: RIP uses bandwidth and delay to determine the best path to a destination network (True/False)

Answer: False. RIP uses only hop count

Question 5: Which statement about MAC addresses is correct?

- A. The MAC address can never be changed.
- B. A MAC address is represented by binary digits that are organized in pairs.
- C. A MAC address is a number in hexadecimal format that is physically located on the NIC.
- D. It is not necessary for a device to have a unique MAC address to participate in the network.

Answer: C

Question 6: Which of the following is an IOS command that can be used to increase the security of unused switch ports?

- A. Port security
- B. Mac-secure
- C. Firewall
- D. Shutdown

Answer: D

Question 7: IP addresses are represented by:

- A. 16-bit decimal numbers
- B. 32-bit binary numbers
- C. 8 sets of 4-bit decimal numbers
- D. 8-bit binary numbers

Answer: B

Question 8: What does the command `ip route 192.168.50.0 255.255.255.0 10.2.1.3` specify?

- A. The router should use network 192.168.50.0 to get to address 10.2.1.3.
- B. Both 192.168.50.0 and 10.2.1.3 use a mask of 255.255.255.0.
- C. You want the router to trace a route to network 192.168.50.0 via 10.2.1.3.
- D. The router should use address 10.2.1.3 to get to devices on network 192.168.50.0.

Answer: D

Question 9: Which of the following protocols is an example of an exterior gateway protocol?

- A. BGP
- B. RIP
- C. EIGRP
- D. OSPF

Answer: A

Question 10: What does the configuration register 0x2102 do?

Answer: Instructs the router to look in NVRAM for the boot sequence.

## **Multiple Choice Questions of Computer Networking**

**1-1 Computer Network is**

- A. Collection of hardware components and computers
- B. Interconnected by communication channels
- C. Sharing of resources and information
- D. All of the Above

**1-2 What is a Firewall in Computer Network?**

- A. The physical boundary of Network
- B. An operating System of Computer Network
- C. A system designed to prevent unauthorized access
- D. A web browsing Software

**1-3 How many layers does OSI Reference Model has?**

- A. 4
- B. 5
- C. 6
- D. 7

**1-4 DHCP is the abbreviation of**

- A. Dynamic Host Control Protocol
- B. Dynamic Host Configuration Protocol
- C. Dynamic Hyper Control Protocol
- D. Dynamic Hyper Configuration Protocol

**1-5 IPV4 Address is**

- A. 8 bit
- B. 16 bit
- C. 32 bit
- D. 64 bit

**1-6 DNS is the abbreviation of**

- A. Dynamic Name System
- B. Dynamic Network System
- C. Domain Name System
- D. Domain Network Service

**1-7 What is the meaning of Bandwidth in Network?**

- A. Transmission capacity of a communication channels
- B. Connected Computers in the Network
- C. Class of IP used in Network
- D. None of Above

**1-8 ADSL is the abbreviation of**

- A. Asymmetric Dual Subscriber Line
- B. Asymmetric Digital System Line
- C. Asymmetric Dual System Line
- D. Asymmetric Digital Subscriber Line

**1-9 What is the use of Bridge in Network?**

- A. to connect LANs
- B. to separate LANs

- C. to control Network Speed
- D. All of the above

**1-10 Router operates in which layer of OSI Reference Model?**

- A. Layer 1 (Physical Layer)
- B. Layer 3 (Network Layer)
- C. Layer 4 (Transport Layer)
- D. Layer 7 (Application Layer)

**Click Here for Answers**

1 – D / 2 – C / 3 – D / 4 – B / 5 – C / 6 – C / 7 – A / 8 – D / 9 – A / 10 – B

**Multiple Choice Questions of Computer Networking**

**2-1 Each IP packet must contain**

- A. Only Source address
- B. Only Destination address
- C. Source and Destination address
- D. Source or Destination address

**2-2 Bridge works in which layer of the OSI model?**

- A. Application layer
- B. Transport layer
- C. Network layer
- D. Datalink layer

**2-3 \_\_\_\_\_ provides a connection-oriented reliable service for sending messages**

- A. TCP
- B. IP
- C. UDP
- D. All of the above

**2-4 Which layers of the OSI model are host-to-host layers?**

- A. Transport, Session, Persentation, Application
- B. Network, Transport, Session, Presentation
- C. Datalink, Network, Transport, Session
- D. Physical, Datalink, Network, Transport

**2-5 Which of the following IP address class is Multicast**

- A. Class A
- B. Class B
- C. Class C
- D. Class D

**2-6 Which of the following is correct regarding Class B Address of IP address**

- A. Network bit – 14, Host bit – 16
- B. Network bit – 16, Host bit – 14
- C. Network bit – 18, Host bit – 16
- D. Network bit – 12, Host bit – 14

**2-7 The last address of IP address represents**

- A. Unicast address
- B. Network address



- C. Broadcast address
- D. None of above

**2-8 How many bits are there in the Ethernet address?**

- A. 64 bits
- B. 48 bits
- C. 32 bits
- D. 16 bits

**2-9 How many layers are in the TCP/IP model?**

- A. 4 layers
- B. 5 layers
- C. 6 layers
- D. 7 layers

**2-10 Which of the following layer of OSI model also called end-to-end layer?**

- A. Presentation layer
- B. Network layer
- C. Session layer
- D. Transport layer

**Click Here for Answers**

1 – C / 2 – D / 3 – A / 4 – A / 5 – D / 6 – A / 7 – C / 8 – B / 9 – A / 10 – D

**Multiple Choice Questions of Computer Networking**

**3-1. Why IP Protocol is considered as unreliable?**

- A. A packet may be lost
- B. Packets may arrive out of order
- C. Duplicate packets may be generated
- D. All of the above

**3-2. What is the minimum header size of an IP packet?**

- A. 16 bytes
- B. 10 bytes
- C. 20 bytes
- D. 32 bytes

**3-3. Which of following provides reliable communication?**

- A. TCP
- B. IP
- C. UDP
- D. All of the above

**3-4. What is the address size of IPv6 ?**

- A. 32 bit
- B. 64 bit
- C. 128 bit
- D. 256 bit

**3-5. What is the size of Network bits & Host bits of Class A of IP address?**

- A. Network bits 7, Host bits 24
- B. Network bits 8, Host bits 24

- C. Network bits 7, Host bits 23
- D. Network bits 8, Host bits 23

**3-6. What does Router do in a network?**

- A. Forwards a packet to all outgoing links
- B. Forwards a packet to the next free outgoing link
- C. Determines on which outgoing link a packet is to be forwarded
- D. Forwards a packet to all outgoing links except the originated link

**3-7. The Internet is an example of**

- A. Cell switched network
- B. circuit switched network
- C. Packet switched network
- D. All of above

**3-8. What does protocol defines?**

- A. Protocol defines what data is communicated.
- B. Protocol defines how data is communicated.
- C. Protocol defines when data is communicated.
- D. All of above

**3-9. What is the uses of subnetting?**

- A. It divides one large network into several smaller ones
- B. It divides network into network classes
- C. It speeds up the speed of network
- D. None of above

**3-10. Repeater operates in which layer of the OSI model?**

- A. Physical layer
- B. Data link layer
- C. Network layer
- D. Transport layer

**Click Here for Answers**

1 – D / 2 – C / 3 – A / 4 – C / 5 – A / 6 – C / 7 – C / 8 – D / 9 – A / 10 – A

**Multiple Choice Questions of Computer Networking**

**4-1. What is the benefit of the Networking?**

- A. File Sharing
- B. Easier access to Resources
- C. Easier Backups
- D. All of the Above

**4-2. Which of the following is not the Networking Devices?**

- A. Gateways
- B. Linux
- C. Routers
- D. Firewalls

**4-3. What is the size of MAC Address?**

- A. 16-bits
- B. 32-bits

- C. 48-bits
- D. 64-bits

**4-4. Which of the following can be Software?**

- A. Routers
- B. Firewalls
- C. Gateway
- D. Modems

**4-5. What is the use of Ping command?**

- A. To test a device on the network is reachable
- B. To test a hard disk fault
- C. To test a bug in a Application
- D. To test a Pinter Quality

**4-6. MAC Address is the example of**

- A. Transport Layer
- B. Data Link Layer
- C. Application Layer
- D. Physical Layer

**4-7. Routing tables of a router keeps track of**

- A. MAC Address Assignments
- B. Port Assignments to network devices
- C. Distribute IP address to network devices
- D. Routes to use for forwarding data to its destination

**4-8. Layer-2 Switch is also called**

- A. Multiport Hub
- B. Multiport Switch
- C. Multiport Bridge
- D. Multiport NIC

**4-9. Difference between T568A and T568B is**

- A. Difference in wire color
- B. Difference in number of wires
- C. Just different length of wires
- D. Just different manufacturer standards

**4-10. The meaning of Straight-through Cable is**

- A. Four wire pairs connect to the same pin on each end
- B. The cable Which Directly connects Computer to Computer
- C. Four wire pairs not twisted with each other
- D. The cable which is not twisted

**Click Here for Answers**

1 – D / 2 – B / 3 – C / 4 – B / 5 – A / 6 – B / 7 – D / 8 – C / 9 – D / 10 – A

**Multiple Choice Questions of Computer Networking**

**5-1 Which of the following is not the External Security Threats?**

- A. Front-door Threats
- B. Back-door Threats

- C. Underground Threats
- D. Denial of Service (DoS)

**5-2 What is the Demilitarized Zone?**

- A. The area between firewall & connection to an external network
- B. The area between ISP to Military area
- C. The area surrounded by secured servers
- D. The area surrounded by the Military

**5-3 What is the full form of RAID ?**

- A. Redundant Array of Independent Disks
- B. Redundant Array of Important Disks
- C. Random Access of Independent Disks
- D. Random Access of Important Disks

**5-4 What is the maximum header size of an IP packet?**

- A. 32 bytes
- B. 64 bytes
- C. 30 bytes
- D. 60 bytes

**5-5 What is the size of Host bits in Class B of IP address?**

- A. 04
- B. 08
- C. 16
- D. 32

**5-6 What is the usable size of Network bits in Class B of IP address?**

- A. 04
- B. 08
- C. 14
- D. 16

**5-7 In which type of RAID, data is mirrored between two disks.**

- A. RAID 0
- B. RAID 1
- C. RAID 2
- D. RAID 3

**5-8 What do you mean by broadcasting in Networking?**

- A. It means addressing a packet to all machine
- B. It means addressing a packet to some machine
- C. It means addressing a packet to a particular machine
- D. It means addressing a packet to except a particular machine

**5-9 Which of the following is/are Protocols of Application?**

- A. FTP
- B. DNS
- C. Telnet
- D. All of above

**5-10 Which of the following protocol is/are defined in Transport layer?**

- A. FTP
- B. TCP
- C. UDP
- D. B & C

**Click Here for Answers**

1 – C / 2 – A / 3 – A / 4 – D / 5 – C / 6 – C / 7 – B / 8 – A / 9 – D / 10 – D

### **Multiple Choice Questions of Computer Networking**

#### **6-1. What is the IP Address range of APIPA?**

- A. 169.254.0.1 to 169.254.0.254
- B. 169.254.0.1 to 169.254.0.255
- C. 169.254.0.1 to 169.254.255.254
- D. 169.254.0.1 to 169.254.255.255

#### **6-2. Which of the following is correct in VLSM?**

- A. Can have subnets of different sizes
- B. Subnets must be in same size
- C. No required of subnet
- D. All of above

#### **6-3. What does the port number in a TCP connection specify?**

- A. It specifies the communication process on the two end systems
- B. It specifies the quality of the data & connection
- C. It specify the size of data
- D. All of the above

#### **6-4. The class-based addressing is also known as**

- A. Modern Model
- B. Classful Model
- C. Classless Model
- D. Heterogeneous Model

#### **6-5. Which of the following is correct in CIDR?**

- A. Class A includes Class B network
- B. There are only two networks
- C. There are high & low class network
- D. There is no concept of class A, B, C networks

#### **6-6. What is the size of Source and Destination IP address in IP header?**

- A. 4 bits
- B. 8 bits
- C. 16 bits
- D. 32 bits

#### **6-7. Which of the following is reliable communication?**

- A. TCP
- B. IP
- C. UPD
- D. All of them

#### **6-8. What is the typical range of Ephemeral ports?**

- A. 1 to 80
- B. 1 to 1024
- C. 80 to 8080
- D. 1024 to 65535

**6-9. What is the purpose of the PSH flag in the TCP header?**

- A. Typically used to indicate end of message
- B. Typically used to indicate beginning of message
- C. Typically used to push the message
- D. Typically used to indicate stop the message

**6-10. What is the natural mask for a class C Network?**

- A. 255.255.255.1
- B. 255.255.255.0
- C. 255.255.255.254
- D. 255.255.255.255

**Click Here for Answers**

1 – C / 2 – A / 3 – A / 4 – B / 5 – D / 6 – D / 7 – A / 8 – D / 9 – A / 10 – B

1. When collection of various computers seems a single coherent system to its client, then it is called

- a) computer network
- b) distributed system
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

2. Two devices are in network if

- a) a process in one device is able to exchange information with a process in another device
- b) a process is running on both devices
- c) PIDs of the processes running of different devices are same
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

3. Which one of the following computer network is built on the top of another network?

- a) prior network
- b) chief network
- c) prime network
- d) overlay network

View Answer

Answer:d

Explanation:None.

4. In computer network nodes are
- a) the computer that originates the data
  - b) the computer that routes the data
  - c) the computer that terminates the data
  - d) all of the mentioned

[View Answer](#)

5. Communication channel is shared by all the machines on the network in
- a) broadcast network
  - b) unicast network
  - c) multicast network
  - d) none of the mentioned

[View Answer](#)

Answer:a

Explanation:None.

6. Bluetooth is an example of
- a) personal area network
  - b) local area network
  - c) virtual private network
  - d) none of the mentioned

[View Answer](#)

Answer:a

Explanation:None.

7. A \_\_\_\_\_ is a device that forwards packets between networks by processing the routing information included in the packet.

- a) bridge
- b) firewall
- c) router
- d) all of the mentioned

[View Answer](#)

Answer:c

Explanation:None.

8. A list of protocols used by a system, one protocol per layer, is called
- a) protocol architecture
  - b) protocol stack
  - c) protocol suit
  - d) none of the mentioned

[View Answer](#)

Answer:b

Explanation:None.

9. Network congestion occurs
- a) in case of traffic overloading
  - b) when a system terminates
  - c) when connection between two nodes terminates

d) none of the mentioned

View Answer

Answer:a

Explanation:None.

10. Which one of the following extends a private network across public networks?

a) local area network

b) virtual private network

c) enterprise private network

d) storage area network

View Answer

Answer:b

Explanation:None.

This set of Computer Networks Questions & Answers focuses on “Physical Media”.

1) Which of this is not a guided media ?

a) Fiber optical cable

b) Coaxial cable

c) Wireless LAN

d) Copper wire

View Answer

Answer: c

Explanation: Wireless LAN is unguided media.

2) UTP is commonly used in

a) DSL

b) FTTP

c) HTTP

d) None of the mentioned

View Answer

Answer: a

Explanation: Unshielded twisted pair(UTP) is commonly used in home access.

3) Coaxial cable consists of \_\_\_\_\_ concentric copper conductors.

a) 1

b) 2

c) 3

d) 4

View Answer

Answer: b

Explanation: None.

4) Fiber optics posses following properties

a) Immune electromagnetic interference

b) Very less signal attenuation

c) Very hard to tap

d) All of the mentioned

View Answer



Answer: d

Explanation: None.

5) If an Optical Carrier is represented as OC-n, generally the link speed equals(in Mbps),

- a)  $n \times 39.8$
- b)  $n \times 51.8$
- c)  $2n \times 51.8$
- d) None of the mentioned

View Answer

Answer: b

Explanation: None.

6) Terrestrial radio channels are broadly classified into \_\_\_\_\_ groups.

- a) 2
- b) 3
- c) 4
- d) 1

View Answer

Answer: b

Explanation: The three types are those that operate over very short distance, those that operate in local areas, those that operate in the wide area.

7) Radio channels are attractive medium because

- a) Can penetrate walls
- b) Connectivity can be given to mobile user
- c) Can carry signals for long distance
- d) All of the mentioned

View Answer

Answer: d

Explanation: None.

8) Geostationary satellites

- a) Are placed at a fixed point above the earth
- b) Rotate the earth about a fixed axis
- c) Rotate the earth about a varying axis
- d) All of the mentioned

View Answer

Answer: a

Explanation: They are placed in orbit at 36,000km above Earth's surface.

1. A piece of icon or image on a web page associated with another webpage is called

- a) url
- b) hyperlink
- c) plugin
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

2. Dynamic web page

- a) is same every time whenever it displays
- b) generates on demand by a program or a request from browser
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

3. What is a web browser?

- a) a program that can display a web page
- b) a program used to view html documents
- c) it enables user to access the resources of internet
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

4. Common gateway interface is used to

- a) generate executable files from web content by web server
- b) generate web pages
- c) stream videos
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

5. URL stands for

- a) unique reference label
- b) uniform reference label
- c) uniform resource locator
- d) unique resource locator

View Answer

Answer:c

Explanation:None.

6. A web cookie is a small piece of data

- a) sent from a website and stored in user's web browser while a user is browsing a website
- b) sent from user and stored in the server while a user is browsing a website
- c) sent from root server to all servers
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

7. Which one of the following is not used to generate dynamic web pages?

- a) PHP
- b) ASP.NET
- c) JSP
- d) none of the mentioned

View Answer

8. An alternative of javascript on windows platform is

- a) VBScript
- b) ASP.NET
- c) JSP
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

9. What is document object model (DOM)?

- a) convention for representing and interacting with objects in html documents
- b) application programming interface
- c) hierarchy of objects in ASP.NET
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

10. AJAX stands for

- a) asynchronous javascript and xml
- b) advanced JSP and xml
- c) asynchronous JSP and xml
- d) advanced javascript and xml

View Answer

Answer:a

Explanation:None.

1. Multiple object can be sent over a TCP connection between client and server in

- a) persistent HTTP
- b) nonpersistent HTTP
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

2. HTTP is \_\_\_\_\_ protocol.

- a) application layer
- b) transport layer
- c) network layer

d) none of the mentioned

View Answer

Answer:a

Explanation:None.

3. In the network HTTP resources are located by

a) uniform resource identifier

b) unique resource locator

c) unique resource identifier

d) none of the mentioned

View Answer

Answer:a

Explanation:None.

4. HTTP client requests by establishing a \_\_\_\_\_ connection to a particular port on the server.

a) user datagram protocol

b) transmission control protocol

c) broader gateway protocol

d) none of the mentioned

View Answer

Answer:b

Explanation:None.

5. In HTTP pipelining

a) multiple HTTP requests are sent on a single TCP connection without waiting for the corresponding responses

b) multiple HTTP requests can not be sent on a single TCP connection

c) multiple HTTP requests are sent in a queue on a single TCP connection

d) none of the mentioned

View Answer

Answer:a

Explanation:None.

6. FTP server listens for connection on port number

a) 20

b) 21

c) 22

d) 23

View Answer

Answer:b

Explanation:None.

7. In FTP protocol, client contacts server using \_\_\_\_\_ as the transport protocol.

a) transmission control protocol

b) user datagram protocol

c) datagram congestion control protocol

d) stream control transmission protocol

View Answer

Answer:a

Explanation:None.

8. In which mode FTP, the client initiates both the control and data connections.

- a) active mode
- b) passive mode
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

9. The file transfer protocol is built on

- a) data centric architecture
- b) service oriented architecture
- c) client server architecture
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

10. In file transfer protocol, data transfer can be done in

- a) stream mode
- b) block mode
- c) compressed mode
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

1. Ethernet frame consists of

- a) MAC address
- b) IP address
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

2. What is stat frame delimiter (SFD) in ethernet frame?

- a) 10101010
- b) 10101011
- c) 00000000
- d) 11111111

View Answer

Answer:b

Explanation:None.

3. MAC address is of

- 1) 24 bits
- b) 36 bits
- c) 42 bits
- d) 48 bits

View Answer

Answer:d

Explanation:None.

4. What is autonegotiation?

- a) a procedure by which two connected devices choose common transmission parameters
- b) a security algorithm
- c) a routing algorithm
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

5. Ethernet in metropolitan area network (MAN) can be used as

- a) pure ethernet
- b) ethernet over SDH
- c) ethernet over MPLS
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

6. A point-to-point protocol over ethernet is a network protocol for

- a) encapsulating PPP frames inside ethernet frames
- b) encapsulating ethernet frames inside PPP frames
- c) for security of ethernet frames
- d) for security of PPP frames

View Answer

Answer:a

Explanation:None.

7. High speed ethernet works on

- a) coaxial cable
- b) twisted pair cable
- c) optical fiber
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

8. The maximum size of payload field in ethernet frame is

- a) 1000 bytes

- b) 1200 bytes
- c) 1300 bytes
- d) 1500 bytes

View Answer

Answer:d

Explanation:None.

9. What is interframe gap?

- a) idle time between frames
- b) idle time between frame bits
- c) idle time between packets
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

10. An ethernet frame that is less than the IEEE 802.3 minimum length of 64 octets is called

- a) short frame
- b) run frame
- c) mini frame
- d) man frame

View Answer

Answer:b

Explanation:None.

This set of Computer Networks Questions & Answers focuses on “Topology”.

1) Physical or logical arrangement of network is

- a) Topology
- b) Routing
- c) Networking
- d) None of the mentioned

View Answer

Answer: a

Explanation: None.

2) In this topology there is a central controller or hub

- a) Star
- b) Mesh
- c) Ring
- d) Bus

View Answer

Answer: a

Explanation: None.

3) This topology requires multipoint connection

- a) Star
- b) Mesh

- c) Ring
- d) Bus

View Answer

Answer: d

Explanation: None.

4) Data communication system spanning states, countries, or the whole world is

- a) LAN
- b) WAN
- c) MAN
- d) None of the mentioned

View Answer

Answer: b

Explanation: Wide area network(WAN) covers the whole of the world network.

5) Data communication system within a building or campus is

- a) LAN
- b) WAN
- c) MAN
- d) None of the mentioned

View Answer

Answer: a

Explanation: None.

6) Expand WAN

- a) World area network
- b) Wide area network
- c) Web area network
- d) None of the mentioned

View Answer

Answer: b

Explanation: None.

## Computer Networks Questions & Answers – Packet Switching & Circuit Switching

This set of Computer Networks Questions & Answers focuses on “Packet Switching and Circuit Switching”.

1) A local telephone network is an example of a \_\_\_\_\_ network

- a) Packet switched
- b) Circuit switched
- c) both of the mentioned
- d) none of the mentioned

View Answer

Answer: a

Explanation: None.

2) Most packet switches use this principle

- a) Stop and wait



- b) Store and forward
- c) Both of the mentioned
- d) None of the mentioned

View Answer

Answer: b

Explanation: The packet switch will not transmit the first bit to outbound link until it receives the entire packet.

3) If there are N routers from source to destination, total end to end delay in sending packet P(L->number of bits in the packet R-> transmission rate)

- a) N
- b)  $(N*L)/R$
- c)  $(2N*L)/R$
- d)  $L/R$

View Answer

Answer: b

Explanation: None.

4) Method(s) to move data through a network of links and switches

- a) Packet switching
- b) Circuit switching
- c) Line switching
- d) Both a and b

View Answer

Answer: d

Explanation: None.

5) The resources needed for communication between end systems are reserved for the duration of session between end systems in \_\_\_\_\_

- a) Packet switching
- b) Circuit switching
- c) Line switching
- d) Frequency switching

View Answer

Answer: b

Explanation: None.

6) As the resources are reserved between two communicating end systems in circuit switching, this is achieved

- a) authentication
- b) guaranteed constant rate
- c) reliability
- d) store and forward

View Answer

Answer: b

Explanation: None.

7) In \_\_\_\_\_ resources are allocated on demand.

- a) packet switching
- b) circuit switching
- c) line switching
- d) frequency switching

[View Answer](#)

Answer: a

Explanation: In packet switching there is no reservation.

Computer Networks Questions & Answers – IPv4

This set of Computer Networks Questions & Answers focuses on “IPv4”.

1. Which of the following is not applicable for IP?

- a) Error reporting
- b) Handle addressing conventions
- c) Datagram format
- d) Packet handling conventions

[View Answer](#)

Answer: a

Explanation: Error reporting is handled by ICMP.

2. Which of the following field in IPv4 datagram is not related to fragmentation?

- a) Flags
- b) Offset
- c) TOS
- d) Identifier

[View Answer](#)

Answer: c

Explanation: TOS-type of service identifies the type of packets.

3. The TTL field has value 10. How many routers (max) can process this datagram?

- a) 11
- b) 5
- c) 10
- d) 1

[View Answer](#)

Answer: c

Explanation: TTL field is decremented by one each time the datagram is processed by a router.

4. If the value in protocol field is 17, the transport layer protocol used is \_\_\_\_.

- a) TCP
- b) UDP
- c) Either of the mentioned
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: For TCP it is 6.

5. The data field can carry which of the following?

- a) TCP segment
- b) UDP segment
- c) ICMP messages
- d) None of the mentioned

[View Answer](#)

Answer: c

Explanation: Data field usually has transport layer segment, but it can also carry ICMP messages.

6. What should be the flag value to indicate the last fragment?

- a) 0
- b) 1
- c) TTL value
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: flag=0 indicates that it is the last fragment.

7. Which of these is not applicable for IP protocol?

- a) is connectionless
- b) offer reliable service
- c) offer unreliable service
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: Ip offers unreliable service.

8. Fragmentation has following demerits

- a) complicates routers
- b) open to DOS attack
- c) overlapping of fragments.
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: Fragmentation makes the implementation complex and also can create DOS attack.

9. Which field helps to check rearrangement of the fragments?

- a) offset
- b) flag
- c) TTL
- d) identifier

[View Answer](#)

Answer: a

Explanation: offset field specifies where the fragment fits in the original datagram.

## Computer Networks Questions & Answers – IPv6

This set of Computer Networks Questions & Answers focuses on “IPv6”.

1. The size of IP address in IPv6 is

- a) 4bytes
- b) 128bits
- c) 8bytes
- d) 100bits

[View Answer](#)

Answer: b

Explanation: An IPv6 address is 128 bits long.

2. The header length of an IPv6 datagram is \_\_\_\_.

- a) 10bytes
- b) 25bytes
- c) 30bytes
- d) 40bytes

[View Answer](#)

Answer: d

Explanation: IPv6 datagram has fixed header length of 40bytes, which results in faster processing of the datagram.

3. In the IPv6 header, the traffic class field is similar to which field in the IPv4 header?

- a) Fragmentation field
- b) Fast-switching
- c) ToS field
- d) Option field

[View Answer](#)

Answer: c

Explanation: This field enables to have different types of IP datagram.

4. IPv6 does not use \_\_\_\_\_ type of address

- a) Broadcast
- b) Multicast
- c) Anycast
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: Broadcast has been eliminated in IPv6.

5. These are the features present in IPv4 but not in IPv6.

- a) Fragmentation
- b) Header checksum
- c) Options
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: All the features are only present in IPv4 and not IPv6.

6. The \_\_\_\_ field determines the lifetime of IPv6 datagram

- a) Hop limit
- b) TTL
- c) Next header
- d) None of the mentioned

View Answer

Answer: a

Explanation: The Hop limit value is decremented by one by a router when the datagram is forwarded by the router. When the value becomes zero the datagram is discarded.

7. Dual-stack approach refers to

- a) Implementing Ipv4 with 2 stacks
- b) Implementing Ipv6 with 2 stacks
- c) Node has both IPv4 and IPv6 support
- d) None of the mentioned

View Answer

Answer: c

Explanation: dual-stack is one of the approach used to support IPv6 in already existing systems.

8. Suppose two IPv6 nodes want to interoperate using IPv6 datagrams but are connected to each other by intervening IPv4 routers. The best solution here is

- a) use dual-stack approach
- b) Tunneling
- c) No solution
- d) Replace the system

View Answer

Answer: b

Explanation: The IPv4 routers can form a tunnel.

9. Teredo is an automatic tunneling technique. In each client the obfuscated IPv4 address is represented by

bits

- a) 96 to 127
- b) 0 to 63
- c) 80 to 95
- d) 64 to 79

View Answer

Answer: a

Explanation: Bits 96 to 127 in the datagram represents obfuscated IPv4 address.

Computer Networks Questions & Answers – Internet

This section of our 1000+ Computer Networks MCQs focuses on Internet.

1. What is internet?

- a) a single network

- b) a vast collection of different networks
- c) interconnection of local area networks
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

2. To join the internet, the computer has to be connected to a

- a) internet architecture board
- b) internet society
- c) internet service provider
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

3. Internet access by transmitting digital data over the wires of a local telephone network is provided by

- a) leased line
- b) digital subscriber line
- c) digital signal line
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

4. ISP exchanges internet traffic between their networks by

- a) internet exchange point
- b) subscriber end point
- c) ISP end point
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

5. Which one of the following protocol is not used in internet?

- a) HTTP
- b) DHCP
- c) DNS
- d) none of the mentioned

View Answer

Answer:d

Explanation:None.

6. IPv6 addressed have a size of

- a) 32 bits
- b) 64 bits
- c) 128 bits

d) 265 bits

View Answer

Answer:c

Explanation:None.

7. Internet works on

- a) packet switching
- b) circuit switching
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

8. Which one of the following is not an application layer protocol used in internet?

- a) remote procedure call
- b) internet relay chat
- c) resource reservation protocol
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

9. Which protocol assigns IP address to the client connected in the internet?

- a) DHCP
- b) IP
- c) RPC
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

10. Which one of the following is not used in media access control?

- a) ethernet
- b) digital subscriber line
- c) fiber distributed data interface
- d) none of the mentioned

View Answer

Answer:d

Explanation:None.

### Computer Networks Questions & Answers – DHCP

This section of our 1000+ Computer Networks MCQs focuses on DHCP Protocol.

1. DHCP (dynamic host configuration protocol) provides \_\_\_\_\_ to the client.

- a) IP address
- b) MAC address
- c) url
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

2. DHCP is used for

- a) IPv6
- b) IPv4
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

3. The DHCP server

- a) maintains a database of available IP addresses
- b) maintains the information about client configuration parameters
- c) grants a IP address when receives a request from a client
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

4. IP assigned for a client by DHCP server is

- a) for a limited period
- b) for unlimited period
- c) not time dependent
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

5. DHCP uses UDP port \_\_\_\_ for sending data to the server.

- a) 66
- b) 67
- c) 68
- d) 69

View Answer

Answer:b

Explanation:None.

6. The DHCP server can provide the \_\_\_\_\_ of the IP addresses.

- a) dynamic allocation
- b) automatic allocation
- c) static allocation
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.



7. DHCP client and servers on the same subnet communicate via

- a) UDP broadcast
- b) UDP unicast
- c) TCP broadcast
- d) TCP unicast

View Answer

Answer:a

Explanation:None.

8. After obtaining the IP address, to prevent the IP conflict the client may use

- a) internet relay chat
- b) broader gateway protocol
- c) address resolution protocol
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

9. What is DHCP snooping?

- a) techniques applied to ensure the security of an existing DHCP infrastructure
- b) encryption of the DHCP server requests
- c) algorithm for DHCP
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

10. If DHCP snooping is configured on a LAN switch, then clients having specific \_\_\_\_\_ can access the network.

- a) MAC address
- b) IP address
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

Computer Networks Questions & Answers – Access Networks

This set of Computer Networks Questions & Answers focuses on “Access Networks”.

1) Which of this is not a constituent of residential telephone line?

- a) A high-speed downstream channel
- b) A medium-speed downstream channel
- c) A low-speed downstream channel
- d) None of the mentioned

View Answer

Answer: c

Explanation: The third part is ordinary two way telephone channel.

2) In DSL telco provides these services

- a) Wired phone access
- b) ISP
- c) All of the mentioned
- d) None of the mentioned

[View Answer](#)

Answer: c

Explanation: The same company which provides phone connection is also its ISP in DSL.

3) The function of DSLAM is

- a) Convert analog signals into digital signals
- b) Convert digital signals into analog signals
- c) Amplify digital signals
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: The DSLAM located in telco's Central Office does this function.

4) The following term is not associated with DSL

- a) DSLAM
- b) CO
- c) Splitter
- d) CMTS

[View Answer](#)

Answer: d

Explanation: Cable modem termination system is used in cable internet access.

5) HFC contains

- a) Fibre cable
- b) Coaxial cable
- c) Both of the mentioned
- d) None of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

6) Choose the statement which is not applicable for cable internet access

- a) It is a shared broadcast medium
- b) It includes HFCs
- c) Cable modem connects home PC to Ethernet port
- d) Analog signal is converted to digital signal in DSLAM

[View Answer](#)

Answer: d

Explanation: In cable access analog signal is converted to digital signal by CMTS.

7) Among the optical-distribution architectures that is essentially switched ethernet is

- a) AON

- b) PON
- c) NON
- d) None of the mentioned

View Answer

Answer: a

Explanation: Active optical networks are essentially switched ethernet.

- 8) StarBand provides
- a) FTTH internet access
  - b) Cable access
  - c) Telephone access
  - d) Satellite access

View Answer

Answer: d

Explanation: None.

- 9) Home Access is provided by
- a) DSL
  - b) FTTP
  - c) Cable
  - d) All of the mentioned

View Answer

Answer: d

Explanation: None.

- 10) ONT is connected to splitter using
- a) High speed fibre cable
  - b) HFC
  - c) Optical cable
  - d) None of the mentioned

View Answer

Answer: c

Explanation: None.

- 11) These factors affect transmission rate in DSL
- a) The gauge of the twisted-pair line
  - b) Degree of electrical interference
  - c) Shadow fading
  - d) Both a and b

View Answer

Answer: d

Explanation: Because DSL is made of twisted wire copper pair.

Computer Networks Questions & Answers – Physical Layer

This section of our 1000+ Computer Networks MCQs focuses on physical layer.

1. The physical layer concerns with
- a) bit-by-bit delivery
  - p) process to process delivery

- c) application to application delivery
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

2. Which transmission media has the highest transmission speed in a network?

- a) coaxial cable
- b) twisted pair cable
- c) optical fiber
- d) electrical cable

View Answer

Answer:c

Explanation:None.

3. Bits can be send over guided and unguided media as analog signal by

- a) digital modulation
- b) amplitude modulation
- c) frequency modulation
- d) phase modulation

View Answer

Answer:a

Explanation:None.

4. The portion of physical layer that interfaces with the media access control sublayer is called

- a) physical signalling sublayer
- b) physical data sublayer
- c) physical address sublayer
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

5. physical layer provides

- a) mechanical specifications of electrical connectors and cables
- b) electrical specification of transmission line signal level
- c) specification for IR over optical fiber
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

6. In asynchronous serial communication the physical layer provides

- a) start and stop signalling
- b) flow control
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

7. The physical layer is responsible for

- a) line coding
- b) channel coding
- c) modulation
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

8. The physical layer translates logical communication requests from the \_\_\_\_\_ into hardware specific operations.

- a) data link layer
- b) network layer
- c) transport layer
- d) application layer

View Answer

Answer:a

Explanation:None.

9. A single channel is shared by multiple signals by

- a) analog modulation
- b) digital modulation
- c) multiplexing
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

10. Wireless transmission can be done via

- a) radio waves
- b) microwaves
- c) infrared
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

### Computer Networks Questions & Answers – Network Layer

This section of our 1000+ Computer Networks MCQs focuses on network layer.

1. The network layer concerns with

- a) bits
- b) frames
- c) packets
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

2. Which one of the following is not a function of network layer?

- a) routing
- b) inter-networking
- c) congestion control
- d) none of the mentioned

View Answer

Answer:d

Explanation:None.

3. The 4 byte IP address consists of

- a) network address
- b) host address
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

4. In virtual circuit network each packet contains

- a) full source and destination address
- b) a short VC number
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

5. Which one of the following routing algorithm can be used for network layer design?

- a) shortest path algorithm
- b) distance vector routing
- c) link state routing
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

6. Multidestination routing

- a) is same as broadcast routing
- b) contains the list of all destinations
- c) data is not sent by packets
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

7. A subset of a network that includes all the routers but contains no loops is called

- a) spanning tree
- b) spider structure
- c) spider tree
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

8. Which one of the following algorithm is not used for congestion control?

- a) traffic aware routing
- b) admission control
- c) load shedding
- d) none of the mentioned

View Answer

Answer:d

Explanation:None.

9. The network layer protocol of internet is

- a) ethernet
- b) internet protocol
- c) hypertext transfer protocol
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

10. ICMP is primarily used for

- a) error and diagnostic functions
- b) addressing
- c) forwarding
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

Computer Networks Questions & Answers – Transport Layer

This section of our 1000+ Computer Networks MCQs focuses transport layer.

1. Transport layer aggregates data from different applications into a single stream before passing it to

- a) network layer
- b) data link layer
- c) application layer
- d) physical layer

View Answer

Answer:a

Explanation:None.

2. Which one of the following is a transport layer protocol used in internet?

- a) TCP
- b) UDP
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

3. User datagram protocol is called connectionless because

- a) all UDP packets are treated independently by transport layer
- b) it sends data as a stream of related packets
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

4. Transmission control protocol is

- a) connection oriented protocol
- b) uses a three way handshake to establish a connection
- c) receives data from application as a single stream
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

5. An endpoint of an inter-process communication flow across a computer network is called

- a) socket
- b) pipe
- c) port
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

6. Socket-style API for windows is called

- a) wsock
- b) winsock
- c) wins
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

7. Which one of the following is a version of UDP with congestion control?

- a) datagram congestion control protocol
- b) stream control transmission protocol



- c) structured stream transport
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

8. A \_\_\_\_\_ is a TCP name for a transport service access point.

- a) port
- b) pipe
- c) node
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

9. Transport layer protocols deals with

- a) application to application communication
- b) process to process communication
- c) node to node communication
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

10. Which one of the following is a transport layer protocol?

- a) stream control transmission protocol
- b) internet control message protocol
- c) neighbor discovery protocol
- d) dynamic host configuration protocol

View Answer

Answer:a

Explanation:None.

### Computer Networks Questions & Answers – Application Layer

This section of our 1000+ Computer Networks MCQs focuses on application layer.

1. The \_\_\_\_\_ translates internet domain and host names to IP address.

- a) domain name system
- b) routing information protocol
- c) network time protocol
- d) internet relay chat

View Answer

Answer:a

Explanation:None.

2. Which one of the following allows a user at one site to establish a connection to another site and then pass

keystrokes from local host to remote host?

- a) HTTP

- b) FTP
- c) telnet
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

3. Application layer protocol defines

- a) types of messages exchanged
- b) message format, syntax and semantics
- c) rules for when and how processes send and respond to messages
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

4. Which one of the following protocol delivers/stores mail to receiver server?

- a) simple mail transfer protocol
- b) post office protocol
- c) internet mail access protocol
- d) hypertext transfer protocol

View Answer

Answer:a

Explanation:None.

5. The ASCII encoding of binary data is called

- a) base 64 encoding
- b) base 32 encoding
- c) base 16 encoding
- d) base 8 encoding

View Answer

Answer:a

Explanation:None.

6. Which one of the following is an internet standard protocol for managing devices on IP network?

- a) dynamic host configuration protocol
- b) simple network management protocol
- c) internet message access protocol
- d) media gateway protocol

View Answer

Answer:b

Explanation:None.

7. Which one of the following is not an application layer protocol?

- a) media gateway protocol
- b) dynamic host configuration protocol
- c) resource reservation protocol

d) session initiation protocol

View Answer

Answer:c

Explanation:None.

8. Which protocol is a signalling communication protocol used for controlling multimedia communication sessions?

- a) session initiation protocol
- b) session modelling protocol
- c) session maintenance protocol
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

9. Which one of the following is not correct?

- a) application layer protocols are used by both source and destination devices during a communication session
- b) application layer protocols implemented on the source and destination host must match
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

10. When displaying a web page, the application layer uses the

- a) HTTP protocol
- b) FTP protocol
- c) SMTP protocol
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

Computer Networks Questions & Answers – Application Layer

This set of Computer Networks Questions & Answers focuses on “Application Layer”.

1) This is not a application layer protocol

- a) HTTP
- b) SMTP
- c) FTP
- d) TCP

View Answer

Answer: d

Explanation: TCP is transport layer protocol

2) The packet of information at the application layer is called

- a) Packet

- b) Message
- c) Segment
- d) Frame

View Answer

Answer: b

Explanation: None.

3) This is one of the architecture paradigm

- a) Peer to peer
- b) Client-server
- c) HTTP
- d) Both a and b

View Answer

Answer: d

Explanation: HTTP is a protocol.

4) Application developer has permission to decide the following on transport layer side

- a) Transport layer protocol
- b) Maximum buffer size
- c) Both of the mentioned
- d) None of the mentioned

View Answer

Answer: c

Explanation: None.

5) Application layer offers \_\_\_\_\_ service

- a) End to end
- b) Process to process
- c) Both of the mentioned
- d) None of the mentioned

View Answer

Answer: a

Explanation: None.

6) E-mail is

- a) Loss-tolerant application
- b) Bandwidth-sensitive application
- c) Elastic application
- d) None of the mentioned

View Answer

Answer: c

Explanation: Because it can work with available throughput.

7) Pick the odd one out

- a) File transfer
- b) File download
- c) E-mail
- d) Interactive games

View Answer

Answer: d

Explanation: Internet telephony is Loss-tolerant other applications are not.

8) Which of the following is an application layer service ?

- a) Network virtual terminal
- b) File transfer, access, and management
- c) Mail service
- d) All of the mentioned

View Answer

Answer: d

Explanation: None.

9) To deliver a message to the correct application program running on a host, the \_\_\_\_\_ address must be consulted

- a) IP
- b) MAC
- c) Port
- d) None of the mentioned

View Answer

Answer: c

Explanation: None.

10) This is a time-sensitive service

- a) File transfer
- b) File download
- c) E-mail
- d) Internet telephony

View Answer

Answer: d

Explanation: Internet telephony is Loss-tolerant other applications are not.

11) Transport services available to applications in one or another form

- a) Reliable data transfer
- b) Timing
- c) Security
- d) All of the mentioned

View Answer

Answer: d

Explanation: None.

12) Electronic mail uses this Application layer protocol

- a) SMTP
- b) HTTP
- c) FTP
- d) SIP

View Answer

Answer: a

Explanation: None.

### Computer Networks Questions & Answers – HTTP

This set of Computer Networks Questions & Answers focuses on “HTTP”.

1. The number of objects in a Web page which consists of 4 jpeg images and HTML text is \_\_\_\_\_

- a) 4
- b) 1
- c) 5
- d) None of the mentioned

[View Answer](#)

Answer: c

Explanation: 4 jpeg images + 1 base HTML file.

2. The default connection type used by HTTP is \_\_\_\_\_

- a) Persistent
- b) Non-persistent
- c) Either of the mentioned
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3. The time taken by a packet to travel from client to server and then back to the client is called \_\_\_\_\_

- a) STT
- b) RTT
- c) PTT
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: RTT stands for round-trip time.

4. The HTTP request message is sent in \_\_\_\_\_ part of three-way handshake.

- a) First
- b) Second
- c) Third
- d) None of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

5. In the process of fetching a web page from a server the HTTP request/response takes \_\_\_\_\_ RTTs.

- a) 2
- b) 1
- c) 4

d) 3

[View Answer](#)

Answer: b

Explanation: None.

6. The first line of HTTP request message is called \_\_\_\_

a) Request line

b) Header line

c) Status line

d) Entity line

[View Answer](#)

Answer: a

Explanation: The line followed by request line are called header lines and status line is the initial part of response message.

7. The values GET, POST, HEAD etc are specified in \_\_\_\_ of HTTP message

a) Request line

b) Header line

c) Status line

d) Entity body

[View Answer](#)

Answer: a

Explanation: It is specified in the method field of request line in the HTTP request message.

8. The \_\_\_\_\_ method when used in the method field, leaves entity body empty.

a) POST

b) GET

c) Both of the mentioned

d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

9. The HTTP response message leaves out the requested object when \_\_\_\_ method is used

a) GET

b) POST

c) HEAD

d) PUT

[View Answer](#)

Answer: c

Explanation: None.

10. Find the oddly matched HTTP status codes

a) 200 OK

b) 400 Bad Request

c) 301 Moved permanently

d) 304 Not Found

[View Answer](#)

Answer: d

Explanation: 404 Not Found.

11. Which of the following is not correct ?

- a) Web cache doesn't have its own disk space
- b) Web cache can act both like server and client
- c) Web cache might reduce the response time
- d) Web cache contains copies of recently requested objects

View Answer

Answer: a

Explanation: None.

12. The conditional GET mechanism

- a) Imposes conditions on the objects to be requested
- b) Limits the number of responses from a server
- c) Helps to keep a cache up to date
- d) None of the mentioned

View Answer

Answer: c

Explanation: None.

13. Which of the following is present in both an HTTP request line and a status line?

- a) HTTP version number
- b) URL
- c) Method
- d) None of the mentioned

View Answer

Answer: a

Explanation: None.

Computer Networks Questions & Answers – Network Utilities

This set of Computer Networks Questions & Answers focuses on “Network Utilities”.

1) Ping can

- a) Measure round-trip time
- b) Report packet loss
- c) Report latency
- d) All of the mentioned

View Answer

Answer: d

Explanation: None.

2) Ping sweep is a part of

- a) Traceroute
- b) Nmap
- c) Route
- d) Ipconfig

View Answer

Answer: b



Explanation: A ping sweep is a method that can establish a range of IP addresses which map to live hosts and are mostly used by network scanning tools like nmap.

3) ICMP is used in

- a) Ping
- b) Traceroute
- c) Ifconfig
- d) Both a and b

View Answer

Answer: d

Explanation: None.

4) \_\_\_\_\_ command is used to manipulate TCP/IP routing table.

- a) route
- b) Ipconfig
- c) Ifconfig
- d) Traceroute

View Answer

Answer: a

Explanation: None.

5) If you want to find the number of routers between a source and destination, the utility to be used is.

- a) route
- b) Ipconfig
- c) Ifconfig
- d) Traceroute

View Answer

Answer: d

Explanation: None.

6) Which of the following is related to ipconfig in Microsoft Windows ?

- a) Display all current TCP/IP network configuration values
- b) Modify DHCP settings
- c) Modify DNS settings
- d) All of the mentioned

View Answer

Answer: d

Explanation: None.

7) This allows to check if a domain is available for registration.

- a) Domain Check
- b) Domain Dossier
- c) Domain Lookup
- d) None of the mentioned

View Answer

Answer: a

Explanation: None.

8) Choose the wrong statement

- a) Nslookup is used to query a DNS server for DNS data
- b) Ping is used to check connectivity
- c) Pathping combines the functionality of ping with that of route
- d) Ifconfig can configure TCP/IP network interface parameters

[View Answer](#)

Answer: c

Explanation: Pathping combines the functionality of ping with that of traceroute (tracert).

#### Computer Networks Questions & Answers – FTP

This set of Computer Networks Questions & Answers focuses on “FTP”.

1) Expansion of FTP is

- a) Fine Transfer Protocol
- b) File Transfer Protocol
- c) First Transfer Protocol
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

2) FTP is built on \_\_\_\_\_ architecture

- a) Client-server
- b) P2P
- c) Both of the mentioned
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3) FTP uses \_\_\_\_\_ parallel TCP connections to transfer a file

- a) 1
- b) 2
- c) 3
- d) 4

[View Answer](#)

Answer: b

Explanation: Control connection and data connection.

4) Identify the incorrect statement

- a) FTP stands for File Transfer Protocol
- b) FTP uses two parallel TCP connections
- c) FTP sends its control information in-band
- d) FTP sends exactly one file over the data connection

[View Answer](#)

Answer: c

Explanation: FTP is out-of-band as it has separate control connection.

5) If 5 files are transferred from server A to client B in the same session. The number of TCP connection between A and B is

- a) 5
- b) 10
- c) 2
- d) 6

[View Answer](#)

Answer: d

Explanation: 1 control connection and other 5 for five file transfers.

6) FTP server

- a) Maintains state
- b) Is stateless
- c) Has single TCP connection for a file transfer
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

7) The commands, from client to server, and replies, from server to client, are sent across the control connection in \_\_\_\_ bit ASCII format

- a) 8
- b) 7
- c) 3
- d) 5

[View Answer](#)

Answer: b

Explanation: None.

8) Find the FTP reply whose message is wrongly matched

- a) 331 – Username OK, password required
- b) 425 – Can't open data connection
- c) 452 – Error writing file
- d) 452 – Can't open data connection

[View Answer](#)

Answer: d

Explanation: None.

9) Mode of data transfer in FTP, where all the is left to TCP

- a) Stream mode
- b) Block mode
- c) Compressed mode
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10) The password is sent to the server using \_\_\_\_\_ command

- a) PASSWD
- b) PASS
- c) PASSWORD
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

Computer Networks Questions & Answers – Network Attacks

This set of Computer Networks Questions & Answers focuses on “Network Attacks”.

1) The attackers a network of compromised devices known as

- a) Internet
- b) Botnet
- c) Telnet
- d) D-net

[View Answer](#)

Answer: b

Explanation: None.

2) Which of the following is a form of DoS attack ?

- a) Vulnerability attack
- b) Bandwidth flooding
- c) Connection flooding
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

3) The DoS attack is which the attacker establishes a large number of half-open or fully open TCP connections at the target host

- a) Vulnerability attack
- b) Bandwidth flooding
- c) Connection flooding
- d) All of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

4)The DoS attack is which the attacker sends deluge of packets to the targeted host

- a) Vulnerability attack
- b) Bandwidth flooding
- c) Connection flooding
- d) All of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5) Packet sniffers involve

- a) Active receiver
- b) Passive receiver
- c) Both of the mentioned
- d) None of the mentioned

View Answer

Answer: b

Explanation: They do not inject packets into the channel.

6) Sniffers can be deployed in

- a) Wired environment
- b) WiFi
- c) Ethernet LAN
- d) All of the mentioned

View Answer

Answer: d

Explanation: None.

7) Firewalls are often configured to block

- a) UDP traffic
- b) TCP traffic
- c) Both of the mentioned
- d) None of the mentioned

View Answer

Answer: a

Explanation: None.

Computer Networks Questions & Answers – Security In The Internet

This section of our 1000+ Computer Networks MCQs focuses on Security In The Internet.

1. IPSec is designed to provide the security at the

- a) transport layer
- b) network layer
- c) application layer
- d) session layer

View Answer

Answer: b

Explanation: None.

2. In tunnel mode IPsec protects the

- a) entire IP packet
- b) IP header
- c) IP payload
- d) none of the mentioned

View Answer

Answer: a

Explanation:None.

3. Network layer firewall works as a

- a) frame filter
- b) packet filter
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

4. Network layer firewall has two sub-categories as

- a) stateful firewall and stateless firewall
- b) bit oriented firewall and byte oriented firewall
- c) frame firewall and packet firewall
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

5. WPA2 is used for security in

- a) ethernet
- b) bluetooth
- c) wi-fi
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

6. An attempt to make a computer resource unavailable to its intended users is called

- a) denial-of-service attack
- b) virus attack
- c) worms attack
- d) botnet process

View Answer

Answer:a

Explanation:None.

7. Extensible authentication protocol is authentication framework frequently used in

- a) wired personal area network
- b) wireless networks
- c) wired local area network
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

8. Pretty good privacy (PGP) is used in

- a) browser security

- b) email security
- c) FTP security
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

9. PGP encrypts data by using a block cipher called

- a) international data encryption algorithm
- b) private data encryption algorithm
- c) intrenet data encryption algorithm
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

10. When a DNS server accepts and uses incorrect information from a host that has no authority giving that information, then it is called

- a) DNS lookup
- b) DNS hijacking
- c) DNS spoofing
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

Computer Networks Questions & Answers – Security In The Internet

This section of our 1000+ Computer Networks MCQs focuses on Security In The Internet.

1. IPSec is designed to provide the security at the

- a) transport layer
- b) network layer
- c) application layer
- d) session layer

View Answer

Answer:b

Explanation:None.

2. In tunnel mode IPsec protects the

- a) entire IP packet
- b) IP header
- c) IP payload
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

3. Network layer firewall works as a

- a) frame filter
- b) packet filter
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

4. Network layer firewall has two sub-categories as

- a) stateful firewall and stateless firewall
- b) bit oriented firewall and byte oriented firewall
- c) frame firewall and packet firewall
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

5. WPA2 is used for security in

- a) ethernet
- b) bluetooth
- c) wi-fi
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

6. An attempt to make a computer resource unavailable to its intended users is called

- a) denial-of-service attack
- b) virus attack
- c) worms attack
- d) botnet process

View Answer

Answer:a

Explanation:None.

7. Extensible authentication protocol is authentication framework frequently used in

- a) wired personal area network
- b) wireless networks
- c) wired local area network
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

8. Pretty good privacy (PGP) is used in

- a) browser security
- b) email security
- c) FTP security



d) none of the mentioned

[View Answer](#)

Answer:b

Explanation:None.

9. PGP encrypts data by using a block cipher called

a) international data encryption algorithm

b) private data encryption algorithm

c) internet data encryption algorithm

d) none of the mentioned

[View Answer](#)

Answer:a

Explanation:None.

10. When a DNS server accepts and uses incorrect information from a host that has no authority giving that information, then it is called

a) DNS lookup

b) DNS hijacking

c) DNS spoofing

d) none of the mentioned

[View Answer](#)

Answer:c

Explanation:None.

### Computer Networks Questions & Answers – Wireless LAN

This section of our 1000+ Computer Networks MCQs focuses on Wireless LAN.

1. What is the access point (AP) in wireless LAN?

a) device that allows wireless devices to connect to a wired network

b) wireless devices itself

c) both (a) and (b)

d) none of the mentioned

[View Answer](#)

Answer:a

Explanation:None.

2. In wireless ad-hoc network

a) access point is not required

b) access point is must

c) nodes are not required

d) none of the mentioned

[View Answer](#)

Answer:a

Explanation:None.

3. Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?

a) CDMA

b) CSMA/CA

- c) ALOHA
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

4. In wireless distribution system

- a) multiple access point are inter-connected with each other
- b) there is no access point
- c) only one access point exists
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

5. A wireless network interface controller can work in

- a) infrastructure mode
- b) ad-hoc mode
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:In infrastructure mode WNIC needs access point but in ad-hoc mode access point is not required.

6. In wireless network an extended service set is a set of

- a) connected basic service sets
- b) all stations
- c) all access points
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

7. Mostly \_\_\_\_\_ is used in wireless LAN.

- a) time division multiplexing
- b) orthogonal frequency division multiplexing
- c) space division multiplexing
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

8. Which one of the following event is not possible in wireless LAN.

- a) collision detection
- b) Acknowledgement of data frames
- c) multi-mode data transmission
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

9. What is Wired Equivalent Privacy (WEP) ?

- a) security algorithm for ethernet
- b) security algorithm for wireless networks
- c) security algorithm for usb communication
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

10. What is WPA?

- a) wi-fi protected access
- b) wired protected access
- c) wired process access
- d) wi-fi process access

View Answer

Answer:a

Explanation:None.

Computer Networks Questions & Answers – WiMAX

This section of our 1000+ Computer Networks MCQs focuses on WiMAX.

1. WiMAX stands for

- a) wireless maximum communication
- b) worldwide interoperability for microwave access
- c) worldwide international standard for microwave access
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

2. WiMAX provides

- a) simplex communication
- b) half duplex communication
- c) full duplex communication
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

3. WiMAX uses the

- a) orthogonal frequency division multiplexing
- b) time division multiplexing
- c) space division multiplexing
- d) all of the mentioned

View Answer

Answer:a

Explanation:None.

4. Which one of the following modulation scheme is supported by WiMAX?

- a) binary phase shift keying modulation
- b) quadrature phase shift keying modulation
- c) quadrature amplitude modulation
- d) all of the mentioned

View Answer

Answer:d

Explanation:None.

5. WiMAX MAC layer provides an interface between

- a) higher transport layers and physical layer
- b) application layer and network layer
- c) data link layer and network layer
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

6. For encryption, WiMAX supports

- a) advanced encryption standard
- b) triple data encryption standard
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

7. WiMAX provides

- a) VoIP services
- b) IPTV services
- c) both (a) and (b)
- d) none of the mentioned

View Answer

Answer:c

Explanation:None.

8. Devices that provide the connectivity to a WiMAX network are known as

- a) subscriber stations
- b) base stations
- c) gateway
- d) none of the mentioned

View Answer

Answer:a

Explanation:None.

9. WiMAX is mostly used for

- a) local area network
- b) metropolitan area network
- c) personal area network
- d) none of the mentioned

View Answer

Answer:b

Explanation:None.

10. Which one of the following frequency is not used in WiMAX for communication?

- a) 2.3 GHz
- b) 2.4 GHz
- c) 2.5 GHz
- d) 3.5 GHz

View Answer

Answer:b

Explanation:None.

## Solved Multiple Choice Questions on Computer networking

### Solved MCQ of Computer networking Set-1

**1. The computer network is**

- A) Network computer with cable
- B) Network computer without cable
- C) Both of the above
- D) None of the above

**2. FDDI used which type of physical topology?**

- A) Bus
- B) Ring
- C) Star
- D) Tree

**3. FTP stands for**

- A) File transfer protocol
- B) File transmission protocol
- C) Form transfer protocol
- D) Form transmission protocol

**4. Ethernet system uses which of the following technology.**

- A) Bus
- B) Ring
- C) Star
- D) Tree

**5. Which of the following are the network services?**

- A) File service
- B) Print service
- C) Database service
- D) All of the above

**6. If all devices are connected to a central hub, then topology is called**

- A) Bus Topology
- B) Ring Topology
- C) Star Topology
- D) Tree Topology

**7. FDDI stands for**

- A) Fiber Distributed Data Interface
- B) Fiber Data Distributed Interface
- C) Fiber Dual Distributed Interface
- D) Fiber Distributed Data Interface

**8. Which of the following is an application layer service?**

- A) Network virtual terminal
- B) File transfer, access and management
- C) Mail service
- D) All of the above

**9. Which is the main function of transport layer?**

- A) Node to node delivery
- B) End to end delivery
- C) Synchronization
- d) Updating and maintaining routing tables

**10. The..... layer change bits onto electromagnetic signals.**

- A) Physical
- B) Transport
- C) Data Link
- D) Presentation

**11. In mesh topology, relationship between one device and another is .....**

- A) Primary to peer
- B) Peer to primary
- C) Primary to secondary
- D) Peer to Peer

**12. The performance of data communications network depends on .....**

- A) Number of users
- B) The hardware and software
- C) The transmission
- D) All of the above

**13. Find out the OSI layer, which performs token management.**

- A) Network Layer
- B) Transport Layer
- C) Session Layer
- D) Presentation Layer

**14. The name of the protocol which provides virtual terminal in TCP/IP model is.**

- A) Telnet

B) SMTP

C) HTTP

**15. The layer one of the OSI model is**

A) Physical layer

B) Link layer

C) Router layer

D) Broadcast layer

**16. What is the name of the network topology in which there are bi-directional links between each possible node?**

A) Ring

B) Star

C) Tree

D) Mesh

**17. What is the commonly used unit for measuring the speed of data transmission?**

A) Bytes per second

B) Baud

C) Bits per second

D) Both B and C

**18. Which of the communication modes support two way traffic but in only once direction of a time?**

A) Simplex

B) Half-duplex

C) Three - quarter's duplex

D) Full duplex

**19. The loss in signal power as light travels down the fiber is called .....**

A) Attenuation

B) Propagation

C) Scattering

D) Interruption

**20. Which of the following TCP/IP protocols is used for transferring files form one machine to another.**

A) FTP

B) SNMP

C) SMTP

D) RPC

**Answers:**

|                                               |                                |
|-----------------------------------------------|--------------------------------|
| <b>1. C) Both of the above</b>                | <b>11. D) Peer to Peer</b>     |
| <b>2. B) Ring</b>                             | <b>12. D) All of the above</b> |
| <b>3. A) File transfer protocol</b>           | <b>13. C) Session Layer</b>    |
| <b>4. A) Bus</b>                              | <b>14. A) Telnet</b>           |
| <b>5. D) All of the above</b>                 | <b>15. A) Physical layer</b>   |
| <b>6. C) Star Topology</b>                    | <b>16. D) Mesh</b>             |
| <b>7. A) Fiber Distributed Data Interface</b> | <b>17. B) Baud</b>             |
| <b>8. C) Mail service</b>                     | <b>18. B) Half-duplex</b>      |
| <b>9. B) End to end delivery</b>              | <b>19. A) Attenuation</b>      |
| <b>10. A) Physical</b>                        | <b>20. A) FTP</b>              |

## Set-2

**1. A network that needs human beings to manually route signals is called....**

- A) Fiber Optic Network      B) Bus Network  
C) T-switched network      D) Ring network

**2. TCP/IP ..... layer corresponds to the OSI models to three layers.**

- A) Application  
B) Presentation  
C) Session  
D) Transport

### 3. Which of the transport layer protocols is connectionless?

- A) UDP  
B) TCP  
C) FTP  
D) Nvt

**4. Which of the following applications allows a user to access and change remote files without actual transfer?**

- A) DNS  
B) FTP  
C) NFS  
D) Telnet

**5. The data unit in the TCP/IP layer called a .....**

- A) Message  
B) Segment  
C) Datagram  
D) Frame

**6. DNS can obtain the .....of host if its domain name is known and vice versa.**

- A) Station address                      B) IP address  
C) Port address                         D) Checksum

7. Which of the following OSI layers correspond to TCP/IP's application layer?

- A) Application  
B) IP Address  
C) Session  
D) All of the above

**8. Devices on one network can communicate with devices on another network via a .....**

- A) File Server  
C) Printer Server
- B) Utility Server  
D) Gateway

9. A communication device that combines transmissions from several I/O devices into one line is a

- A) Concentrator  
B) Modifier  
C) Multiplexer  
D) Full duplex file

**10. Which layers of the OSI determines the interface often system with the user?**

- A) Network  
B) Application  
C) Data link  
D) Session

**11. Which of the following of the TCP/IP protocols is the used for transferring files from one machine to another?**

- A) FTP  
B) SMTP  
C) SNMP  
D) Rpe

**12. In which OSI layers does the FDDI protocol operate?**

- A) Physical  
B) Data link  
C) Network  
D) A and B

**13. In FDDI, data normally travel on .....**

- A) The primary ring  
B) The Secondary ring  
C) Both rings  
D) Neither ring

**14. The..... layer of OSI model can use the trailer of the frame for error detection.**

- A) Physical  
C) Transport
- B) Data link  
D) Presentation

**15. In a ..... topology, if there are n devices in a network, each device has n-1 ports for cables.**

- A) Mesh  
B) Star  
C) Bus  
D) Ring

**16. Another name for Usenet is**

- A) Gopher                      B) Newsgroups



C) Browser

D) CERN

**17. The standard suit of protocols used by the Internet, Intranets, extranets and some other networks.**

A) TCP/IP

B) Protocol

C) Open system

D) Internet work processor

**18. State whether the following is True or False.**

i) In bus topology, heavy Network traffic slows down the bus speed.

ii) It is multipoint configuration.

A) True, True

B) True, False

C) False, True

D) False, False

**19. Which of the following is the logical topology?**

A) Bus

B) Tree

C) Star

D) Both A and B

**20. Which of the following is/ are the drawbacks of Ring Topology?**

A) Failure of one computer, can affect the whole network

B) Adding or removing the computers disturbs the network activity.

C) If the central hub fails, the whole network fails to operate.

D) Both of A and B

**Answers:**

|                                 |                                |
|---------------------------------|--------------------------------|
| <b>1. C) T-switched network</b> | <b>11. A) FTP</b>              |
| <b>2. A) Application</b>        | <b>12. D) A and B</b>          |
| <b>3. A) UDP</b>                | <b>13. A) The primary ring</b> |
| <b>4. C) NFS</b>                | <b>14. A) Physical</b>         |
| <b>5. D) Frame</b>              | <b>15. A) Mesh</b>             |
| <b>6. B) IP address</b>         | <b>16. B) Newsgroups</b>       |
| <b>7. D) All of the above</b>   | <b>17. A) TCP/IP</b>           |
| <b>8. D) Gateway</b>            | <b>18. A) True, True</b>       |
| <b>9. C) Multiplexer</b>        | <b>19. C) Star</b>             |
| <b>10. B) Application</b>       | <b>20. D) Both of A and B</b>  |

## Set-3

**1. Which of the following is not the layer of TCP/IP protocol?**

A) Application Layer

B) Session Layer

C) Transport Layer

D) Internetwork layer

**2. address use 7 bits for the <network> and 24 bits for the <host> portion of the IP address.**

A) Class A

B) Class B

C) Class C

D) Class D

**3. addresses are reserved for multicasting.**

A) Class B

B) Class C

C) Class D

D) Class E

**4. State the following statement is true or false.**

i) In class B addresses a total of more than 1 billion addresses can be formed.



|                                  |                                         |
|----------------------------------|-----------------------------------------|
| 4. B) True, True<br>5. A) i only | 9. B) 100 BASE-TX<br>10. A) 1000 BASE-T |
|----------------------------------|-----------------------------------------|

## Set-4

**1. is a high performance fiber optic token ring LAN running at 100 Mbps over distances up to 1000 stations connected.**

- A) FDDI
- B) FDDT
- C) FDDR
- D) FOTR

**2. Which of the following are Gigabit Ethernet?**

- A) 1000 BASE-SX
- B) 1000 BASE-LX
- C) 1000 BASE-CX
- D) All of the above

**3. is a collective term for a number of Ethernet Standards that carry traffic at the nominal rate of 1000 Mbits/s against the original Ethernet speed of 10 Mbit/s.**

- A) Ethernet
- B) Fast Ethernet
- C) Gigabit Ethernet
- D) All of the above

**4. is another kind of fiber optic network with active star for switching.**

- A) S/NET
- B) SW/NET
- C) NET/SW
- D) FS/NET

**5. The combination of ..... and ..... is often termed the local address or the local portion of the**

**IP Address.**

- A) Network number and host number
- B) Network number and subnet number
- C) Subnet number and host number.
- D) All of the above

**6. State whether true or false.**

- i) A connection oriented protocol can only use unicast addresses.
- ii) The any cast service is included in IPV6.

- A) True, False
- B) True, True
- C) False, True
- D) False, False

**7. .... implies that all subnets obtained from the same network use the subnet mask.**

- A) Static subnetting
- B) Dynamic Subnetting
- C) Variable length subnetting
- D) Both B and C

**8. The most important and common protocols associated TCP/IP internetwork layer are.**

- i) Internet Protocol (IP) ii) Internet Control Message Protocol (ICMP)
- iii) Bootstrap Protocol (BOOTP) iv) Dynamic Host Configuration Protocol (DHCP)
- V) Address Resolution Protocol (ARP)

- A) i, ii, iii, and iv only

- B) ii, iii, iv and v only
- C) i, iii, iv and v only
- D) All i, ii, iii, iv and v only

**9. .... is responsible for converting the higher level protocol addresses to physical Network Addresses.**

- A) Address Resolution Protocol (ARP)
- B) Reverse Address Resolution Protocol (RARP)
- C) Bootstrap Protocol (BOOTP)
- D) Internet Control Message Protocol (ICMP)

**10. Which of the following is not a mechanism that DHCP supports for IP address allocation?**

- A) Automatic allocation
- B) Static allocation
- C) Dynamic allocation
- D) Manual allocation

**Answers:**

|                         |                                     |
|-------------------------|-------------------------------------|
| 1. A) FDDI              | 6. B) True, True                    |
| 2. D) All of the above  | 7. A) Static subnetting             |
| 3. B) Fast Ethernet     | 8. D) All i, ii, iii, iv and v only |
| 4. A) S/NET             | 9. A) Address..... Protocol (ARP)   |
| 5. C) Subnet... number. | 10. B) Static allocation            |

## Set-5

**1..... is a high performance fiber optic token ring LAN running at 100 Mbps over distances upto 1000 stations connected.**

- A) FDDI
- B) FDDT
- C) FDDR
- D) FOTR

**2. Which of the following are Gigabit Ethernet?**

- A) 1000 BASE-SX
- B) 1000 BASE-LX
- C) 1000 BASE-CX
- D) All of above

**3is a collective term for a number of Ethernet Standards that carry traffic at the nominal rate of 1000 Mbit/s against the original Ethernet speed of 10 Mbit/s.**

- A) Ethernet
- B) Fast Ethernet
- C) Gigabit Ethernet
- D) All of the above

**4is another kind of fiber optic network with an active star for switching.**

- A) S/NET
- B) SW/NET
- C) NET/SW
- D) FS/NET

**5. The combination of ..... And .....is often termed the local address of the local portion of the IP address.**

- A) Network number and host number
- B) Network number and subnet number
- C) Subnet number and host number
- D) All of the above

**6..... implies that all subnets obtained from the same subnet mask.**

- A) Static subnetting
- B) Dynamic subnetting
- C) Variable length subnetting
- D) Both B and C

**7. State whether true or false.**

- i) A connection oriented protocol can only use unicast addresses.
- ii) The anycast service is included in IPV6.
- A) True, True
- B) True, False
- C) False, True
- D) False, False

**8. The most important and common protocols associated TCP/IP internetwork layer are.**

|                                 |                                                |
|---------------------------------|------------------------------------------------|
| i) Internet protocol(IP)        | ii) Internet control Message Protocol(ICMP)    |
| iii) Bootstrap Protocol (BooTP) | iv) Dynamic Host Configuration Protocol (DHCP) |

v) Address Resolution Protocol (ARP)

- A) i, ii, iii and iv only
- B) i, iii, iv and v only
- C) ii, iii, iv and v only
- D) All i, ii, iii, iv and v

**9.....is responsible for converting the higher level protocol addresses (IP addresses) to physical network addresses.**

- A) Address Resolution Protocol (ARP)
- B) Reverse Address Resolution Protocol (RARP)
- C) Bootstrap Protocol (BOOTP)
- D) Internet Control Message Protocol (ICMP)

**10. Which of the following is not a mechanism that DHCP supports for IP address allocation?**

- A) Automatic allocation
- B) Static allocation
- C) Dynamic allocation
- D) Manual allocation

**Answers:**

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| <b>1. A) FDDI</b>                    | <b>6. A) Static subnetting</b>        |
| <b>2. D) All of above</b>            | <b>7. A) True, True</b>               |
| <b>3. B) Fast Ethernet</b>           | <b>8. D) All i, ii, iii, iv and v</b> |
| <b>4. A) S/NET</b>                   | <b>9. A) Address .....(ARP)</b>       |
| <b>5. C) Subnet .... host number</b> | <b>10. B) Static allocation</b>       |

## Set-6

**1. The examples of Interior Gateway Protocols (IGP) are.**

|                                    |                                        |
|------------------------------------|----------------------------------------|
| i) Open Short Path First (OSPF)    | ii) Routing Information Protocol (RIP) |
| iii) Border Gateway Protocol (BGP) |                                        |

- A) i only
- B) i, and ii only
- C) i and iii only
- D) All i, ii and iii

**2. FTP server listens to connections on port .....**

- A) 19 and 20
- B) 20 and 21
- C) 21 and 22
- D) 20 and 22

**3. Which of the following operations can be performed by using FTP.**

|                               |                         |
|-------------------------------|-------------------------|
| i) Connect to a remote host   | ii) Select directory    |
| iii) Define the transfer mode | iv) List file available |

- A) i, and ii only
- B) i, ii and iii only
- C) ii, iii and iv only
- D) All i, ii, iii and iv

**4. A ..... is a set of information that is exchanged between a client and web browser and a web server during an HTTP transaction.**

- A) info set
- B) client info
- C) cookie
- D) transkie

**5. Match the following HTTP status code to their respective definitions.**

|          |                          |
|----------|--------------------------|
| i) 400   | a) OK                    |
| ii) 500  | b) Not found             |
| iii) 200 | c) Continue              |
| iv) 100  | d) Internal server error |

- A) i-b, ii-d, iii-a, iv-c
- B) i-a, ii-b, iii-c, iv-d
- C) i-b, ii-c, iii-a, iv-d
- D) i-b, ii-a, iii-c, iv-d

**6. Loopback address ..... of IPv6 address is equivalent to the IPV4 loopback address 127.0.0.1.**

- A) (: : 1)
- B) (: : )
- C) (: : 0)
- D) (1 : : )

**7. Unspecified address.....of IPV6 address is equivalent to the IPV4 unspecified address 0.0.0.0.**

- A) (: : 1)
- B) (: : )
- C) (: : 0)
- D) (1 : : )

**8. A simple cabling method, known as the.....topology allows about 30 computers on a maximum cable length of about 600 feet.**

- A) Ring
- B) Bus
- C) Star
- D) Mesh

**9. The..... layer is responsible for resolving access to the shared media or resources.**

- A) Physical

- B) Mac sub layer
- C) Network
- D) Transport

**10. A WAN typically spans a set of countries that have data rates less than..... Mbps.**

- A) 2
- B) 1
- C) 4
- D) 100

**Answers:**

|                                     |                            |
|-------------------------------------|----------------------------|
| <b>1. B) i, and ii only</b>         | <b>6. A) (: : 1)</b>       |
| <b>2. B) 20 and 21</b>              | <b>7. B) (: : )</b>        |
| <b>3. D) All i, ii, iii and iv</b>  | <b>8. B) Bus</b>           |
| <b>4. C) cookie</b>                 | <b>9. B) Mac sub layer</b> |
| <b>5. A) i-b, ii-d, iii-a, iv-c</b> | <b>10. B) 1</b>            |

## Solved MCQ of Internet Security

### Set-1

**1. Which of the following are the solutions to network security?**

|                    |                     |
|--------------------|---------------------|
| i) Encryption      | ii) Authentication  |
| iii) Authorization | iv) Non-repudiation |

- A) i, ii and iii only
- B) ii, iii and iv only
- C) i, iii and iv only
- D) All i, ii, iii and iv

**2.....is to protect data and passwords.**

- A) Encryption
- B) Authentication
- C) Authorization
- D) Non-repudiation

**3. The following protocols and system are commonly used to provide various degrees of security services in computer network.**

|                                       |                                 |          |
|---------------------------------------|---------------------------------|----------|
| i) IP filtering                       | ii) Reverse Address Translation |          |
| iii) IP security Architecture (IPsec) | iv) Firewalls                   | v) Socks |

- A) i, ii, iii and iv only
- B) i, iii, iv and v only
- C) ii, iii, iv and v only
- D) All i, ii, iii, iv and v

**4. A firewall is installed at the point where the secure internal network and untrusted external network meet which is also known as .....**

- A) Chock point
- B) meeting point
- C) firewall point
- D) secure point

**5. Which of the following is / are the types of firewall?**

- A) Packet Filtering Firewall
- B) Dual Homed Gateway Firewall
- C) Screen Host Firewall
- D) All of the above

**6. The components of IP security includes .....**

- A) Authentication Header (AH)
- B) Encapsulating Security Payload (ESP)
- C) Internet key Exchange (IKE)
- D) All of the above

**7..... is used to carry traffic of one protocol over network that does not support that protocol directly.**

- A) Tunneling
- B) Transferring
- C) Trafficking
- D) Switching

**8. In..... Mode, the authentication header is inserted immediately after the IP header.**

- A) Tunnel
- B) Transport
- C) Authentication
- D) Both A and B

**9. State true or false.**

- i) Socks are a standard for circuit level gateways.
- ii) The NAT is used for small number of the hosts in a private network.

- A) True, False
- B) False, True
- C) True, True
- D) False, False

**10. A .....is an extension of an enterprise's private intranet across a public Network such as the Internet across a public Network such as the Internet, creating a secure private connection.**

- A) VNP
- B) VPN
- C) VSN
- D) VSPN

**Answers:**

|                                     |                                |
|-------------------------------------|--------------------------------|
| <b>11. D) All i, ii, iii and iv</b> | <b>16. D) All of the above</b> |
| <b>12. A) Encryption</b>            | <b>17. A) Tunneling</b>        |
| <b>13. B) i, iii, iv and v only</b> | <b>18. A) Tunnel</b>           |
| <b>14. A) Chock point</b>           | <b>19. C) True, True</b>       |
| <b>15. D) All of the above</b>      | <b>20. B) VPN</b>              |

## Set-2

**1. The primary goal of the..... protocol is to provide a private channel between communicating application, which ensures privacy of data authentication of the partners, and integrity.**

- A) SSL
- B) ESP
- C) TSL
- D) PSL

**2. The.....is used to provide integrity check, authentication and encryption to IP datagram.**

- A) SSL
- B) ESP
- C) TSL
- D) PSL

**3. In.....mode, a common technique in packet-switched networks consists of wrapping a**



**packet in a new one.**

- A) Tunneling
- B) Encapsulation
- C) Both A and B
- D) None of the above

**4. The..... Is a collection of protocols designed by Internet Engineering Task Force(IETF)**

**to provide security for a packet at the Network level.**

- A) IPsec
- B) Netsec
- C) Packetsec
- D) Protocolsec

**5. At the lower layer of SSL, a protocol for transferring data using a variety of predefined cipher and authentication combinations called the .....**

- A) SSL handshake protocol
- B) SSL authentication protocol
- C) SSL record protocol
- D) SSL cipher protocol

**6. While initiating SSL session, the client code recognizes the SSL request and establishes a connection through TCP Port.....to the SSL code on the server.**

- A) 420
- B) 1032
- C) 443
- D) 322

**7. On the upper layer of SSL, a protocol for initial authentication and transfer of encryption keys, called the .....**

- A) SSL handshake protocol
- B) SSL authentication protocol
- C) SSL record protocol
- D) SSL cipher protocol

**8. State whether the following statement are true.**

- i) An application-level gateway is often referred to as a proxy.
  - ii) In proxy, a direct connection is established between the client and destination server.
- A) True, False
  - B) False, True
  - C) True, True
  - D) False, False

**9. In packet-filtering router, the following information can be external from the packet header.**

|                          |                            |
|--------------------------|----------------------------|
| i) Source IP address     | ii) Destination IP address |
| iii) TCP/UDP source port | iv) ICMP message type      |

v) TCP/UDP destination port

- A) i, ii, iii and iv only
- B) i, iii, iv and v only
- C) ii, iii, iv and v only
- D) All i, ii, iii, iv and v

**10.....mode is used whenever either end of a security association is gateway.**

- A) Tunnel
- B) Encapsulating
- C) Transport
- D) Gateway

**Answers:**

|                                                                                                                             |                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. A) SSL</b><br><b>2. B) ESP</b><br><b>3. C) Both A and B</b><br><b>4. A) IPsec</b><br><b>5. C) SSL record protocol</b> | <b>6. C) 443</b><br><b>7. A) SSL handshake protocol</b><br><b>8. A) True, False</b><br><b>9. D) All i, ii, iii, iv and v</b><br><b>10. A) Tunnel</b> |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|