**MCQ**

**Complete Syllabus**

Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets?

1. Ring
2. Local area
3. Hierarchical
4. Star

Answer:

 (d) Star

Explanation: The star topology is the best network topology for large businesses because it is simple to control and coordinate from the central computer.

Which of the following transmission directions listed is not a legitimate channel?

1. Simplex
2. Half Duplex
3. Full Duplex
4. Double Duplex

Answer: (d) Double Duplex

Explanation: Double duplex is not a legitimate channel for transmission in computer network.

 "Parity bits" are used for which of the following purposes?

1. Encryption of data
2. To transmit faster
3. To detect errors
4. To identify the user

Answer: (c) To detect errors

Explanation: The parity bit is also known as the check bit, and has a value of 0 or 1. It is used for error detection for blocks of data.

1. The \_\_\_\_\_\_\_ is the physical path over which a message travels.

A. Protocol

**B. Medium**

C. Signal

D. All the above

2. Ethernet uses a Physical address that is imprinted in NIC Card is

A.32 Bit

B. 64 Bit

**C. 6 Bit**

D. None of the above

3. Transmission media are usually categorized as -------

A.Fixed or unfixed

**B.Guided or unguided**

C. determinate or indeterminate

D. Metallic or nonmetallic

4. Signals can be \_\_\_\_\_\_\_\_

A. analog

B. digital

**C. either (a) or (b)**

D. None of the above.

5. What do you call a communicaiton system in which data cannot be sent in both direction at the same time?

A. Synchronous

**B. Half Duplex**

C. Asynchronous

D. Full Duplex

6. Physical or logical arrangement of network is \_\_\_\_\_\_\_\_\_\_  
**a) Topology**  
b) Routing  
c) Networking  
d) Control

7. Which network topology requires a central controller or hub?  
**a) Star**  
b) Mesh  
c) Ring  
d) Bus

8 Data communication system spanning states, countries, or the whole world is \_\_\_\_\_\_\_\_  
a) LAN  
**b) WAN**  
c) MAN  
d) PAN

9 \_\_\_\_\_\_\_ is a set of rules that governs data communication.

A. forum

B**.protocol**

C. standard

D.none of the above

10. \_\_\_\_\_\_\_ connection provides a dedicated link between two devices.

A. **point-to-point**

B.multipoint

C.primary

D. secondary

1. In \_\_\_\_\_\_\_\_\_ systems, resources are allocated on demand. **a) packet switching** b) circuit switchingc) line switching

d) frequency switching2. Most packet switches use this principle \_\_\_\_\_\_\_\_\_\_\_\_  
a) Stop and wait  
b**) Store and forward**  
c) Store and wait  
d) Stop and forward

3. What are the Methods to move data through a network of links and switches?  
a) Packet switching and Line switching  
b) Circuit switching and Line switching  
c) Line switching and bit switching  
**d) Packet switching and Circuit switching**

4. In line-or-sight propagation, very highfrequency signals are transmitted in straight lines directly from antenna to

A. sky

B. earth

**C. antenna**

D. planet

5. The omnidirectional antennas send out signals in

A. one direction

B. 2 directions

C. no direction

**D. all directions**

6. In the electromagnetic spectrum for wireless communication, the reserved range for Radio waves and microwaves is known as

A. **ground propagation**

B. sky propagation

C. line-of-sight propagation

**D. None**

7. 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

8. Line-of-sight propagation lies above

A. 3 KHz

B. 3**0 MHz**

C. 15 MHz

D. 2 Khz

**9** Unguided signals can travel from the source to destination in

Propagation of light is

A**. unidirectional**

B. bidirectional

C. multimode

D. single mode

10. Microwaves are used for

A. short-range communication

B. multicast communications

C. **unicast communication**

D. long range communication

8. The last address of IP address represents

A. Unicast address

B. Network address

C. Broadcast address

D. None of above

9. What is the usable size of Network bits in Class B of IP address?

A. 04

B. 08

C. 14

D. 16

10. 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

What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interferences?

1. Unshielded twisted pair
2. Optical fiber
3. Coaxial cable
4. Microwave

Answer: (b) Optical fiber

Explanation: The optical fiber is made of glass or plastic. In this cable, the transmission of data occurs in the form of light rather than the electric current, so this cable provides higher data transfer speed than other cables.

A collection of hyperlinked documents on the internet forms the ?.?

1. World Wide Web (WWW)
2. E-mail system
3. Mailing list
4. Hypertext markup language

Answer: (a) World Wide Web (WWW)

Explanation: World Wide Web (WWW) creates a collection of hyperlinked documents on the Internet.

The location of a resource on the internet is given by its?

1. Protocol
2. URL
3. E-mail address
4. ICQ

Answer:(b) URL

Explanation: A URL (Uniform Resource Locator) is a database connection that describes the database's location on a computer network and the retrieval process. A URL is a different form of URI (Uniform Resource Identifier) although the two words are used interchangeably by many people.

The term HTTP stands for?

1. Hyper terminal tracing program
2. Hypertext tracing protocol
3. Hypertext transfer protocol
4. Hypertext transfer program

Which software prevents the external access to a system?

1. Firewall
2. Gateway
3. Router
4. Virus checker

Explanation:A firewall is a network securing software that prevents unauthorized users and dangerous elements from accessing the network. Software firewall acts as a filter for our network which prevents harmful information.

The maximum length (in bytes) of an IPv4 datagram is?

1. 32
2. 1024
3. 65535
4. 512

The length of an IPv6 address is?

1. 32 bits
2. 64 bits
3. 128 bits
4. 256 bits

Which of the following address belongs class A?

1. 121.12.12.248
2. 130.12.12.248
3. 128.12.12.248
4. 129.12.12.248

Which of the following IP addresses can be used as (a) loop-back addresses?

1. 0.0.0.0
2. 127.0.0.1
3. 255.255.255.255
4. 0.255.255.255

What is the maximum number of IP addresses that can be assigned to hosts on a local subnet that uses the 255.255.255.224 subnet mask?

1.14

2.15

3.16

4. 30

**Answer:** **Option D**

**Solution:**

A /27 (255.255.255.224) is 3 bits on and 5 bits off. This provides 8 subnets, each with 30 hosts. Does it matter if this mask is used with a Class A, B, or C network address? Not at all. The number of host bits would never change.

You have a network that needs 29 subnets while maximizing the number of host addresses available on each subnet. How many bits must you borrow from the host field to provide the correct subnet mask?

A. 2

B. 3

C. 4

D. 5

**Answer:** **Option D**

**Solution:**

A 240 mask is 4 subnet bits and provides 16 subnets, each with 14 hosts. We need more subnets, so let's add subnet bits. One more subnet bit would be a 248 mask. This provides 5 subnet bits (32 subnets) with 3 host bits (6 hosts per subnet). This is the best answer.

The private key in asymmetric key cryptography is kept by?

1. Sender
2. Receiver
3. Sender and Receiver
4. None of the these

Only the receiver keeps the private key. Its purpose is to ensure that the message can only be decrypted by the intended receiver.

In the cryptography, the sequence of the letters is rearranged by?

1. Transposition ciphers
2. Substitution ciphers
3. Both a and b
4. None of these

Transposition ciphers

Explanation: A predefined technique shuffles the sequence of letters in a plaintext message in the transposition ciphers.

A client of the DNS (Domain Name System) application is called \_\_\_\_\_.

1. DNS server
2. DNS Name
3. DNS resolver
4. DNS inquirer

Answer: (c) DNS resolver

Explanation: A DNS client is a device that is set up to send name resolution requests to the DNS server. It is also called the DNS resolver.

What is the size of the UDP header?

1. 8 bytes
2. 16 bytes
3. 20 bytes
4. 64 bytes

Answer: (a) 8 bytes

Explanation: The size of the UDP header is 64 bits (64 bit means 8 bytes). It is a simple transport layer communication protocol. It has four parameters: Source port, Destination port, Length, and Checksum.

Which of the following protocols is the connection-less protocol?

1. UDP
2. TCP
3. IP
4. BOTH 1,3

The packet of information at the application layer is called \_\_\_\_\_\_\_\_\_\_  
a) Packet  
b) Message  
c) Segment  
d) Frame

Answer: b  
Explanation: For Application, Presentation and Session layers there is no data format for message. Message is message as such in these three layers. But when it comes to Transport, Network, Data and Physical layer they have data in format of segments, packets, frames and bits respectively.

Electronic mail uses which Application layer protocol?  
a) SMTP  
b) HTTP  
c) FTP  
d) SIP

Answer: a  
Explanation: Email uses various protocols like SMTP, IMAP and POP. The most prominent one used in application layer is SMTP.

FTP is built on \_\_\_\_\_ architecture.  
a) Client-server  
b) P2P  
c) Data centric  
d) Service oriented

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

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

**a) Hop limit**

b) TTL

c) Next header

d) None of the mentioned

Each IP packet must contain

A. Only Source address

B. Only Destination address

C. Source and Destination address

D. Source or Destination address

Part B] Two mark MCQ

Note:- Each Question carry Two marks

**1. What is the difference between IPv4 and IPv6?**

Ans.a. The IPv4 address is written in hexadecimal value while the IPv6 address is written by dotted-decimal notation.  
b. In IPV4 source and destination address is 128 bits while in IPv6 it is 32 bits.  
c. **The IPv4 node has only stateful auto-configuration while the IPv6 node has both a** **stateful and a stateless address auto-configuration.**  
d. In IPv4 the IPsec support is required while in IPv6 it is optional.

**2. Three way handshake technique in TCP is used \_\_\_\_\_\_\_\_\_\_.**

a. to indicate the problems.  
b**. to solve the problem of delayed duplicate packet.**  
c. for data transmission  
d. all of the above

**3.**What is the difference between TCP and UDP?

a. TCP guarantees that a packet will reach the destination without any duplication while UDP does not provide this guarantee.  
b. The order of data will be same in TCP but that won't be so in UDP.  
c. TCP is unreliable protocol but UDP is a reliable protocol.  
d**. Only a and b**

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

(A) Classs A  
(B) Classs B  
(**C**) Classs C  
(D) Classs D

5. In the IPv4 addressing format, the number of networks allowed under Class C addresses is  
(A) 2^14  
(B) 2^7  
**(C) 2^21**  
(D) 2^24

Answer (C)

6. 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

7. 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

8. 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

9. 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**

10. 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**

1. Alternate and adaptive routing algorithm belongs to ……….  
A. static routing  
B. permanent routing  
C. standard routing **D. dynamic routing**

D

2. In OSI network architecture, the routing is performed by

**a. network layer**

b. data link layer

c. transport layer

d. session layer

A

3. 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**

D

4. 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

A

5. What is the function of a router?

a. converting the data from one format to another

**b. Forward the packet to the up links**

c. error detection in data

d. None of the above

B

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 outing link a packet is to be forwarded**

d. Forwards a packet to all outgoing links except the originated link

C

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**

D

8. If you want to nd the number of routers between a source and destination, the utility to be used is \_\_\_\_\_\_.

**a. route**

b. Ipcong

c. Ifcong

d. Traceroute

A

9. In \_\_\_\_\_\_\_ forwarding, the full IP address of a destination is given in the routing table.

a. next-hop

b. network-specic

**c. host-specic**

d. default

C

10. In \_\_\_\_\_\_\_ forwarding, the mask and destination addresses are both 0.0.0.0 in the routing table.

a. next-hop

b. network-specic

c. host-specic

**d. default**

D

The Open Shortest Path First(OSPF) protocol is an intra domain routing protocol based on …….. routing.  
A. distance vector  
**B. link state**  
C. path vector  
D. non distance vector

An/A ……….routing scheme is designed to enable switches to react to changing traffic patterns on the network.  
A. static routing  
B. fixed alternative routing  
C. standard routing  
**D. dynamic routing**

The Routing Information Protocol(RIP) is an intra domain routing based on ……..routing.  
A.distancevector  
B.linkstate  
C.pathvector  
D. distance code

To create a neighborhood relationship, a router running BGP sends an ………. message.  
**A.open**  
B.update  
C. keep alive

D. close

**In OSPF, a ……… link is a network with several routers attached to it.  
A.point-to-point   
B.transient  
C.stub  
D. multipoint**

The ……… protocol allows the administrator to assign a cost, called the metric, to each route.  
**A.OSPF**   
B.RIP  
C.BGP  
D. BBGP

1. TCP/IP model does not have \_\_\_\_\_\_ layer but OSI model have this layer.  
**a) session layer**  
b) transport layer  
c) application layer  
d) network layer

2 . Which layer is used to link the network support layers and user support layers?  
a) session layer  
b) data link layer  
c) **transport layer**  
d) network layer

3. Transmission data rate is decided by \_\_\_\_\_\_\_\_\_\_\_\_  
a) network layer  
**b) physical layer**  
c) data link layer  
d) transport layer

4 . Which address is used to identify a process on a host by the transport layer?  
a) physical address  
b) logical address  
c) **port address**  
d) specific address

5. Which of the following methods is/are used in Message switching?

a.Store and Forward  
b.Switch to Switch  
c.**Both a and b**  
d.None of the above

6. Which of the following methods is/are used in Packet switching?

a.Datagram Packet Switching  
b.Virtual-circuit Packet Switching  
**c.Both a and b**  
d.None of the above

7. Bridge works in which layer of the OSI model?

A. Appliation layer

B. Transport layer

C. Network layer

**D. Datalink layer**

8. 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**

9. Repeater operates in which layer of the OSI model?

**A. Physical layer**

B. Data link layer

C. Network layer

D. Transport layer

10. Layer-2 Switch is also called

A. Multiport Hub

B. Multiport Switch

**C. Multiport Bridge**

D. Multiport NIC

1. Which connection does the OSI model support in networking?

a.Connection-oriented  
b.Connectionless  
**c.Both a and b**  
d.None of the above

2.` The protocol data unit(PDU) for the application layer in the Internet stack is  
(A) Segment  
(B) Datagram  
(C) **Message**  
(D) Frame

3. 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

4. Which layer is responsible for process to process delivery in a general network model?  
a) network layer **b) transport layer**  
c) session layer  
d) data link layer

5. Which of the following policies is/are related to Network layer?

a.Window policy  
b.Traffic shapingc.Traffic policing **d.Packet services**

6. What is the difference between Virtual Circuit and Datagram?

a.The quality of service is easy in Virtual Circuit while it is difficult in Datagram.  
b.**In the connection oriented service, a connection is called as Virtual Circuit while in the connectionless service, the independent packets are called as Datagrams.**  
c.The services are independent in Virtual Circuit but that won't be so in Datagrams.  
d.Both a and b

7. Which address is used on the internet for employing the TCP/IP protocols?  
a) physical address and logical address  
b) port address  
c) specific address  
d) **all of the mentioned**

8.  Which layer provides the services to user?  
**a) application layer**  
b) session layer  
c) presentation layer  
d) physical layer

9. what is/are the advantages of the TCP/IP?

a.TCP/IP provides reliable communication across the internet.  
b.Information on the internet is carried in packets.  
c.TCP/IP is a robust and scalable network.  
d.**All of the above.**

**10.** 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**

Checksums use \_\_\_\_\_\_\_\_\_\_ arithmetic.

1. two's complement arithmetic
2. one's complement arithmetic
3. either (a) or (b)
4. none of the above

ans B

If the Hamming distance between a dataword and the corresponding codeword is three, there are \_\_\_\_\_\_\_\_\_\_ bits in error.

1. 3
2. 4
3. 5
4. none of the above

ANS: A

In \_\_\_\_\_\_\_\_\_\_ error correction, the receiver asks the sender to send the data again.

1. backward
2. retransmission
3. forward
4. none of the above

ANS: B

In cyclic redundancy checking, the divisor is \_\_\_\_\_\_\_\_\_\_ the CRC.

1. The same size as
2. one bit less than
3. one bit more than
4. none of the above

ANS: C

In cyclic redundancy checking, what is the CRC?

1. The divisor
2. The quotient
3. The dividend
4. The remainder

ANS D

The \_\_\_\_\_\_\_\_\_\_ between two words is the number of differences between corresponding bits.

1. Hamming code
2. Hamming distance
3. Hamming rule
4. none of the above

ANS B

The \_\_\_\_\_\_\_\_\_\_ of errors is more difficult than the \_\_\_\_\_\_\_\_\_\_.

1. correction; detection
2. detection; correction
3. creation; correction
4. creation; detection

ANS A

The divisor in a cyclic code is normally called the \_\_\_\_\_\_\_\_\_\_.

1. degree
2. generator
3. redundancy
4. none of the above

ANS B

The Hamming distance between equal codewords is \_\_\_\_\_\_\_\_\_\_.

1. 1
2. n
3. 0
4. none of the above

ANS C

We add r redundant bits to each block to make the length n = k + r. The resulting n-bit blocks are called \_\_\_\_\_\_\_\_\_\_.

1. datawords
2. blockwords
3. codewords
4. none of the above

ANS C

Which error detection method uses one's complement arithmetic?

1. Simple parity check
2. Two-dimensional parity check
3. CRC
4. Checksum

ANS D

Which constructor of Datagram Socket class is used to create a datagram socket and binds it with the given Port Number?  
a) Datagram Socket(int port)  
b) Datagram Socket(int port, Int Address address)  
c) Datagram Socket()  
d) Datagram Socket(int address)

Answer: b  
Explanation: Datagram Socket (int port, Int Address address) is used to create a datagram socket. A datagram socket is created for connection-less communication between the server and the client. There is no accept() method in this class.

 The client in socket programming must know which information?  
a) IP address of Server  
b) Port number  
c) Both IP address of Server & Port number  
d) Only its own IP address

Answer: c  
Explanation: The client in socket programming must know IP address of Server as it has to use that IP address in order to initialize the socket class constructor. That is how the client requests a connection to the server.

Answer:a  
Explanation: An FTP connection includes a Server and a Client which wish to share a number of data files. The server can transfer files with multiple clients at the same time while the client communicates with only one server at a time.

**FTP uses \_\_\_\_\_\_\_\_\_ parallel TCP connections to transfer a file.  
a) 1  
b) 2  
c) 3**  
d) 4

Answer:b  
Explanation: Control connection using FTP port: 21, and data connection using FTP port: 20. The FTP session is started or ended using port 21 and the actual data i.e. files are sent through port 20.

FTP server \_\_\_\_\_\_\_\_\_\_\_\_\_  
a) **Maintains state information**  
b) Is stateless  
c) Has single TCP connection for a file transfer  
d) Has UDP connection for file transfer

Answer:a  
Explanation: FTP server maintains state information of every control connection to keep track of the active and inactive connections in the session. This helps the server decide which connection to terminate, in case the connection is inactive for too long.

DHCP (dynamic host configuration protocol) provides \_\_\_\_\_\_\_\_\_\_ to the client.  
a) IP address  
b) MAC address  
c) Url  
d) None of the mentioned

Answer:a  
Explanation: We use DHCP to allow the hosts to acquire their ip addresses dynamically which is better than visiting each and every host on the network and configure all of this information manually.

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

Answer:d  
Explanation: Whenever a DHCP server gets a request from a client it responds with a DHCP offer containing IP address being offered, network mask offered, the amount of time that the client can use and keep it, the ip address of the DHCP server making this offer.

**IP assigned for a client by DHCP server is  
a) for a limited period  
b) for an unlimited period  
c) not time dependent  
d) none of the mentioned****View Answer**

Answer:a  
Explanation: The IP address offered to a client is only for a limited period of time. There is actually a certain amount of time that the client can use and keep this IP address.

DHCP uses UDP port \_\_\_\_\_\_\_\_\_ for sending data to the server.  
a) 66  
b) 67  
c) 68  
d) 69

Answer:b  
Explanation: 67 is the UDP port number that is used as the destination port of a server. Whereas UDP port number 68 is used by the client

The DHCP server can provide the \_\_\_\_\_\_\_ of the IP addresses.  
a) dynamic allocation  
b) automatic allocation  
c) static allocation  
d) all of the mentioned

Answer:d  
Explanation: When a host acquires multiple offers of IP addresses from different DHCP servers, the host will broadcast a dhcp request identifying the server whose offer has been accepted.

DHCP client and servers on the same subnet communicate via \_\_\_\_\_\_\_\_\_  
a) UDP broadcast  
b) UDP unicast  
c) TCP broadcast  
d) TCP unicast

Answer:a  
Explanation: DHCP actually employs a connectionless service, which is provided by UDP, since TCP is connection oriented. It is implemented with two UDP port numbers 67 and 68 for its operations.

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

Answer:c  
Explanation: ARP abbreviation for address resolution protocol is used for mapping IP addresses to MAC addresses that are present in the local network.

\_\_\_\_\_\_\_ allows you to connect and login to a remote computer  
a) Telnet  
b) FTP  
c) HTTP  
d) SMTP

Answer:a  
Explanation: Telnet provides access to the command-line interface on a remote computer. One can login to the computer from the command-line interface.

Which one of the following protocol is used to receive mail messages?  
a) SMTP  
b) Post Office Protocol (POP)  
c) Internet Message Access Protocol (IMAP)  
d) all of the above

Answer:d  
Explanation: FTP is used to share files. SMTP, POP and IMAP are the protocols used to send and receive mails on the internet.

 An email client needs to know the \_\_\_\_\_\_\_\_\_ of its initial SMTP server.  
a) IP address  
b) MAC address  
c) URL  
d) Name

Answer:a  
Explanation: The client needs to know the IP of its initial SMTP server as it has to send the mail first to that server and then the server forwards the mail ahead on behalf of the user.

The functionalities of the presentation layer include \_\_\_\_\_\_\_\_\_\_\_\_  
a) Data compression  
b) Data encryption  
c) Data description  
d) All of the mentioned

Answer:d  
Explanation: Some functions of the presentation layer include character-code translation, data conversion, data encryption and decryption, and data translation. It connects the application layer with the layers below converting the human readable text and media to machine readable format and vice-versa.

Which address is used on the internet for employing the TCP/IP protocols?  
a) physical address and logical address  
b) port address  
c) specific address  
d) all of the mentioned

Answer:d  
Explanation: The physical, logical, port and specific addresses are used in TCP/IP protocol. All the addressing schemes, that is physical (MAC) and logical address, port address and specific address are employed in both TCP/IP model and OSI model. In TCP/IP, the addresses are more focused on the internet implementation of these addresses.

The physical layer is concerned with \_\_\_\_\_\_\_\_\_\_\_  
a) bit-by-bit delivery  
p) process to process delivery  
c) application to application delivery  
d) port to port delivery

Answer:a  
Explanation: Physicl layer deals with bit to bit delivery in networking. The data unit in the physical layer is bits. Process to process delivery or the port to port delivery is dealt in the transport layer. The various transmission mediums aid the physical layer in performing its functions.

The 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

Answer:d  
Explanation: Anything dealing with a network cable or the standards in use – including pins, connectors and the electric current used is dealt in the physical layer (Layer 1). Physical layer deals with bit to bit delivery of the data aided by the various transmission mediums.

Firewalls are often configured to block \_\_\_\_\_\_\_\_\_\_\_  
a) UDP traffic  
b) TCP traffic  
c) Sensitive traffic  
d) Best-effort traffic

Answer:a  
Explanation: UDP is more vulnerable to attacks, so firewalls are often configured to block suspicious UDP traffic.

A DNS client is called \_\_\_\_\_\_\_\_\_  
a) DNS updater  
b) DNS resolver  
c) DNS handler  
d) none of the mentioned

Answer:b  
Explanation: DNS client also known as DNS resolver also known as DNS lookup helps to resolve DNS requests using an external DNS server.

The HTTP request message is sent in \_\_\_\_\_\_\_\_\_ part of three-way handshake.  
a) First  
b) Second  
c) Third  
d) Fourth

Answer:c  
Explanation: In first step client sends a segment to establish a connection with the server. In the second the step the client waits for the acknowledgement to be received from the server. After receiving the acknowledgement, the client sends actual data in the third step.

 The first line of HTTP request message is called \_\_\_\_\_\_\_\_\_\_\_\_\_  
a) Request line  
b) Header line  
c) Status line  
d) Entity line

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

https://www.sanfoundry.com/computer-networks-mcqs-smtp/