1. Decryption and encryption of data are the responsibility of the \_\_\_\_\_\_\_\_\_\_\_\_\_ Layer.

A. Data Link

B. Presentation

C. Network

D. Transport

1. The header length of the UDP segment is\_\_\_\_\_\_\_\_\_.

A. 10 Byte

B. 8 Byte

C. 20 Byte

D. 16 Byte

1. One of the following protocols is different from the other protocols

A. Telnet B. FTP C. TCP D. HTTP E. SMTP

1. Which of the following can be used as a solution for network congestion solution?

A. Policies

B. Congestion notification

C. Buffer management

D. A and B

E. All

1. Routers work at which of the following OSI layers?

A. Transport

B. Physical

C. Network

D. Data-link

E. None

1. Which of the following protocols is used to monitor network devices such as hubs, switches, and routers?

A. SMTP

B. SNMP

C. RIP

D. OSPF

1. In CRC, there is no error if the remainder at the receiver is equal to \_\_\_\_\_\_\_

A. Zero

B. Nonzero

C. Quotient at the sender

D. Remainder at the sender

1. If a company decides to implement VPN service within the organization and for its customers, You desire to secure a connection. Which protocol should you use

A. HTTPS

B. IPsec

C. SSL

D. IGMP

1. Which of the following protocols is used to monitor network devices such as hubs, switches, and routers?

A. SMTP

B. SNMP

C. RIP

D. OSPF

1. Which one of the following can’t be considered a link layer service?

A. Flow control

B. Error detection

C. Error Correction

D. Segmentation

1. A piece of network equipment including its software resides on a managed network.

A. Managed Entity

B. Managed Device

C. Agent

D. None

1. Virtual circuit signaling protocol is not used in one of the following?

A. ATM

B. Internet

C. Frame relay

D. X.25

1. Company XYZ uses a network address of 192.168.4.0. It uses the mask of 255.255.255.224 to create subnets. What is the maximum number of usable hosts in each subnet?

A. 6 B. 30 C. 14 D. 62

1. Which of the following is an example of a private IP address, which is not to be used on the Internet?

A. 10.43.20.45 B. 132.101.42.5 C. 131.10.143.105 D. 195.10.50.105

1. \_\_\_\_\_\_\_\_\_\_refers to the techniques, which allow more than one message to be transferred via the same communication channel.

A. Switching B. multiplexing C. Ethernet D. Framing

1. A firewall is:

A. An established network performance reference point.

B. Software or hardware used to isolate a private network from a public network.

C. A virus that infects macros.

D. A predefined encryption key is used to encrypt and decrypt data transmissions.

1. Which of the following layer establishes, maintains, and synchronizes the interactions between communicating devices?

A. Application B. Transport C. Data-link D. Session

1. A number of bits sent in one second.

A. Bit Rate B. Bit Length C. Attenuation D. Distortion

1. A router normally connects LANs and WANs on the Internet and has a table that is used for making decisions about the route.

A. Address Translation B. Routing C. Switching D. None

1. \_\_\_\_\_\_\_\_\_\_ is responsible for IP addresses assigned to organizations that manage IP assignments for geographic regions such as Europe, Asia, and Latin America.

A. IEEE B. IANA C. ISO D. IETF

1. Network activity that allows to creation of multiple logical networks from a single address block.

A. IP addressing B. Subnetting C. VLSM D. multiplexing

1. The number of point-to-point links required in a fully connected network for 50 entities is

A. 1250 B. 1225 C. 2500 D. 50

1. In computer networks, the port number is used to identify \_\_\_\_\_\_\_.

A. Process

B. Computer

C. Network

D. All

1. Which task is the function of the presentation layer?

A. Addressing

B. Compression

C. Dialog Control

D. Authentication

1. \_\_\_\_\_\_\_\_\_\_ is the message created at the Internet Layer.

A. Frame B. Packet C. Segment D. Datagram

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

A. DHCP B. DNS C. TCP D. HTTP

1. Among the following IPv4 address, which IP can be assigned for a host?

A. 10.255.255.255

B. 33.55.99.12

C. 200.124.1.0

D. 0.0.0.0

1. In order for subnetting to work, the router must be told which portion of the host ID to use for the subnet’s network ID, and this address is \_\_\_\_\_\_\_.

A. IP address B. MAC address C. Subnet mask D. port number

1. Which of the following is equivalent to /20 notation?

A. 255.224.0.0 B. 255.0.0.0 C. 255.255.255.192 D. 255.255.240.0

1. Which of the following is not an example of a private IP address?

A.10.172.168.1 B. 192.167.5.2 C. 10.0.1.254 D. 172.20.4.4

1. Which IPv4 address can be pinged to test the internal TCP/IP operation of a host.

A. 0.0.0.0 B. 192.168.1.1 C. 127.0.0.1 D. 255.255.255.255

1. A user opens three browsers on the same PC to access www.bdu.edu.et to search for certification course information. As the server replay, which information is used by the TCP/IP protocol stack in the PC to identify the destination web browser?

A. Destination IP address

B. Destination Port number

C. Source Port number

D. Source IP address

1. Which of the following layer establishes, maintains, and synchronizes the interactions between communicating devices?

A. Application B. Transport C. Data-link D. Session

1. Which address on a PC does not change, even if the PC is moved to different place or network?

A. MAC Address B. IP Address C. Default Gateway D. Logical Address

1. Which device is operating only in the physical Layer?

A. Switch B. Router C. Hub D. Firewall

1. The transport layer works \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for the entire message delivery.

A. Host-to-Host B. Device-to-Device C. Process-to-Process D. All

1. A type of topology in which one computer can have several alternative communication paths with all other computers on the network.

A. Star

B. Bus

C. Mesh

D. None

1. Which one of the following characteristics of network architecture refers to the capability of expanding to support new users without any performance impact?

A. Security

B. Quality of Service

C. Scalability

D. Fault tolerance

1. Additional to the data signal, the start and stop bit will be added in \_\_\_\_\_ data transmission.

A. Synchronous

B. Asynchronous

C. Both A&B

D. None

1. An important component of bus topology that protects the signal bounce problem?

A. Backbone Cable B. Terminator C. Server D. None

1. A basic element of a network platform which can transport messages from one device to another is called\_\_\_\_\_\_\_\_\_\_.

A. Rule

B. Message

C. Medium

D. Node

1. Which of the following is an example of a Metropolitan Area Network?

A. Bluetooth B. Ethernet C. DSL D. Internet

1. Gesture communication is an example of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ communication.

A. Verbal

B. Non-Verbal

C. Written

D. Visualizations

1. Which one of the following is NOT true about bus topology?

A. inexpensive

B. easy to design

C. easy to troubleshoot

D. termination needed

1. In \_\_\_\_\_ data transmission, both the communicating devices can send data signal in both direction.

A. Full-duplex

B. Half-duplex

C. Both A&B

D. None

1. An important component of bus topology which protect the signal bounce problem?

A. Backbone Cable B. Terminator C. Server D. None

1. A basic element of network platform which provide the functionality that directs and moves the messages through the network called \_\_\_\_\_\_\_\_\_\_.

A. Rule

B. Service

C. Medium

D. Process

1. Which of the following is an example of Metropolitan Area Network?

A. Bluetooth B. Ethernet C. DSL D. Internet

1. Which of the following is the media standard for most LAN installations?

A. Fiber B. UTP C. Coaxial D. All

1. What does fiber optic cable use to transmit data?

A. Electrical impulses B. Sound C. Light D. None

1. One of the following connectors is similar to the fiber optic ST connector.

A. RJ45 B. BNC C. RJ11 D. None

1. Which of the following network term refers to private network infrastructure?

A. intranet B. internet C. internetwork D. www

1. A type of topology in which one computer can have several alternative communication path with all other computers on the network.

A. Star

B. Bus

C. Mesh

D. Hybrid

E. None

1. The situation when both transmitter devices and receiver devices have to work in a timely manner is referred to as:

A. Synchronous

B. Asynchronous

C. Serial

D. Parallel

1. A large number of computers in a wide geographical area can be efficiently connected by using:

A. Coaxial cables

B. Communication satellites

C. Twisted pair cable

D. All

1. Which one of the following is not the advantage of a computer network?

A. Avoid software compatibility problem

B. Reduce hardware and software costs

C. Data security problems

D. All

1. Which one of the following is the most powerful transmission media than the others?

A. UTP

B. Coaxial

C. STP

D. Fiber optics

1. Which of the following characteristics of a network refers to expanding to support new users without any performance impact?

A. Security

B. Quality of Service

C. Scalability

D. Fault tolerance

1. Which protocol is used to exchange mail over the Internet?

A. SMTP B. HTTP C. FTP D. Telnet

1. Computer to Computer communication is:

A. Duplex

B. Half Duplex

C. Simplex

D. All except B

1. An essential component of bus topology that protects the signal bounce problem?

A. Backbone

B. Terminator

C. Cable

D. Server

E. None of the above

1. For constructing a network infrastructure in small office, what kind of network cable do we need to use?

A. Twisted pair cable B. fiber cable C. coaxial D. All

1. A type of topology in which one computer can have several alternative communication paths with all other computers on the network.

A. Star

B. Bus

C. Mesh

D. None

.

1. Which of the following characteristics of network architecture refers to expanding to support new users without any performance impact?

A. Security

B. Quality of Service

C. Scalability

D. Fault tolerance

1. Additional to the data signal, the start and stop bit will be added in \_\_\_\_\_ data transmission.

A. Synchronous

B. Asynchronous

C. Both A&B

D. None

1. Which of the following is an example of Metropolitan Area Network?

A. Bluetooth B. Ethernet C. DSL D. Internet

1. One of the following uses Asynchronous mode of transmission?

A. Ethernet B. Token ring C. SONET D. Telephone line

1. The situation when both transmitter devices and receiver devices have to work in timely manner is referred to as:

A. Synchronous

B. Asynchronous

C. Serial

D. Parallel

1. Which one of the following characteristics of a network refers the capability of expanding to support new users without any performance impact?

A. Security

B. Quality of Service

C. Scalability

D. Fault tolerance

1. Which protocol is used to exchange mail over the Internet?

A. SMTP B. HTTP C. FTP D. Telnet

1. Computer to Computer communication is:

A. Duplex B. Half Duplex C. Simplex D. None

1. An important component of bus topology which protect the signal bounce problem?

A. Backbone

B. Terminator

C. Cable

D. Server

1. The most common Unshielded Twisted-Pair connector is \_\_\_\_\_\_\_\_\_.

A.RJ11 B. RJ45 C. RG45 D. RG11

1. Encryption is handled by the \_\_\_\_\_\_\_\_\_ layer.

A. data link B. transport C. session D. presentation

1. Sharing time on a communications circuit among many devices is known as

A. Time-division multiplexing

B. Frequency-division multiplexing

C. Amplitude modulation

D. Phase modulation

1. The \_\_\_\_\_\_\_\_is a circuit-switched network, while the \_\_\_\_\_\_ is a packet-switched network.

A. Telephone, ATM

B. Satellite, Telephone

C. Telegraph and internet

D. internet and ATM

1. Which one of the following is belongs to Network layer protocols?

A. IP B. TCP C. DNS D. HTTP

1. Most networks employ devices for routing services. Routers work at which of the following OSI layers?

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

1. Which of the following is equivalent to /26 notation?

A. 255.224.0.0 B. 255.0.0.0 C. 255.255.255.192 D. 255.255.240.0

1. \_\_\_\_\_\_\_\_\_\_ refers the techniques, which allow more than one message to be transferred via the same communication channel.

A. Switching B. multiplexing C. Ethernet D. Framing

1. Which of the following layer establishes, maintains, and synchronizes the interactions between communicating devices?

A. Application B. Transport C. Data-link D. Session

1. \_\_\_\_\_\_\_\_\_\_ is responsible for IP address assigned to organizations that manage IP assignments for geographic regions such as Europe, Asia, and Latin America.

A. IEEE B. IANA C. ISO D. IETF

1. MAC address helps in

A. Multimedia Access Control.

B. Media Access Control.

C. Mobile Access Control.

D. Master Access point Control

1. Which one of the following layer is not included within the TCP/IP architecture directly?

A.Application

B.Presentation

C.Transport

D.Network Access E. Physical

1. Decryption and encryption of data are the responsibility of the \_\_\_\_\_\_\_\_\_\_\_\_\_ Layer.

A.Data Link

B.Presentation

C.Network

D.Transport

1. One of the following cannot be found on the header lines of HTTP request message.

A.Host

B.User-Agent

C.Content-length

D.Connection

1. One of the following protocol is different from the other protocols

A.Telnet B. FTP C. TCP D. HTTP E. SMTP

1. Which port number is used by DNS protocol?

A.21

B.53

C.25

D.80

1. Which one of the following uses UDP as the underlying transport layer protocol?

A.File transfer

B.E-mail

C.Remote terminal access

D.Internet telephony

1. The whole communication between client and server to transmit a file may take\_\_\_\_\_\_\_. .

A.2RTT

B.RTT + transmit time

C.2RTT + transmit time

D.RTT

1. Which one of the following uses UDP as the underlying transport layer protocol?

A.File transfer

B.E-mail

C.Remote terminal access

D.Internet telephony

1. The status code in HTTP response message, which indicate request succeeded.

A.331

B.400

C.200

D.404

1. Which one of the following is not true about having centralized DNS?

A.High Traffic volume

B. Maintenance

C.Single point of failure

D.Load Distribution

1. The status code in HTTP response message, which indicate bad request.

A.331 B.400 C.200 D.404

1. Which one of the following interconnecting device, which acts as an interface that enables communication between dissimilar network?

A. Gateway B. Bridge C.Switch D.Router

1. Which one of the following layers is not available on end-hosts (computers)?

a. Application

b. Transport

c. Network

d. Physical

e. None

1. Host-to-host is at Network layer, process-to-process is at:

a. Application layer

b. Transport layer

c. Media access layer

d. Physical layer

e. None

1. Which one of the following is a service provided by the transport layer?

a. Process addressing

b. Host addressing

c. Physical addressing

d. Network addressing

e. None

1. UDP is connectionless meaning:

a. It works only on wireless networks

b. It works even if there is no medium of communication

c. It doesn’t need sender and receiver addressing

d. The two ends are not required to agree for the data exchange

e. None

1. What is the size of UPD header?

a. 4 bytes

b. 8 bytes

c. 20 bytes

d. 48 bytes

e. None

1. TCP does not support broadcast and multicast because:

a. It is a point-to-point protocol

b. Broadcasting doesn’t require reliability

c. Because network layer enforces this rule

d. The designers of TCP forgot to include TCP

e. None

1. What is the port number of SMTP protocol?

a. 21

b. 25

c. 55

d. 143

e. None

1. We know the size of a TCP header is 20 bytes. Why do we need to include header length on every segment?

a. Header length might be changed during fragmentation

b. Header length depends on the bandwidth

c. Header lengths depends on the size of data field

d. Header lengths depends on optional fields

e. None

1. Which one of the following is not network layer service?

a. Path determination

b. Forwarding

c. Call setup for virtual circuit networks

d. TCP connection establishment

e. None

1. How many different host addresses (including broadcast address) are there in the subnet 10.132.10.0/28?

a. 4

b. 16

c. 28

d. 255

e. None

1. What is the motivation for implementing NAT?

a. IP address scarcity

b. Security

c. Network failure recovery

d. Routing algorithm

e. None

1. How man bits are used for IPv6 address?

a. 16 bits

b. 32 bits

c. 48 bits

d. 128 bits

e. None

1. Which one of the following does not have impact on congestion?

a. Routing algorithm

b. Packet life time

c. Packet queuing and servicing policy

d. Packet processing order

e. None

1. From the four QoS parameters, email is highly sensitive to:

a. Reliability

b. Delay

c. Jitter

d. Bandwidth

e. None

1. ICMP protocol is applicable at :

a. Physical layer

b. Data link layer

c. Network layer

d. Transport layer

e. None

1. Which one of the following is not a service provided by link layer of the TCP/IP protocol stack?

a. Framing and link access

b. Reliable delivery from end-host to end-host

c. Flow control between directly connected nodes

d. Error detection and correction between directly connected nodes

e. None

1. What do you call the PDU at the link layer of the TCP/IP protocol stack?

a. Datagram

b. Segment

c. Message

d. Frame

e. None

1. Which one of the following is not a multiple access protocol of shared media?

a. Channel partitioning

b. Point-to-point protocol

c. Random access protocol

d. Taking turns

e. None

1. Time Division Multiple access is:

a. Channel partitioning protocol

b. Point-to-point protocol

c. Random access protocol

d. Taking turns

e. None

1. What is ARP?

a. Address Routing Protocol

b. Access Resource Protocol

c. Active Routing Protocol

d. Address Resolution Protocol

e. None

1. What type of medium is commonly used by Gigabit Ethernet?

a. UTP cable

b. Coaxial cable

c. Fiber optic

d. Bluetooth

e. None

1. Layer-2 devices are plug-and-play and no configuration is required because:

a. They are difficult to configure

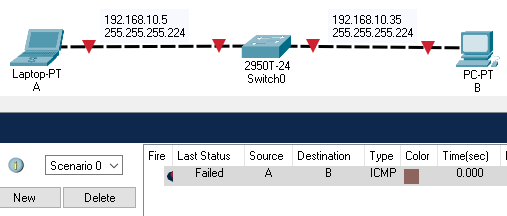
b. They are all-knowing devices

c. Manufacturing companies don’t distribute the password

d. Most of them are wireless

e. None

1. What is an Ad-hoc wireless network?
2. A wireless communication with central server for authentication
3. A wireless technology with Gigabit backbone to datacenter
4. A wireless technology with peer-to-peer setup without center device
5. A wireless communication between a client and a stationary access point.
6. None
7. Which topology requires a dedicated point-to-point connection between only the two neighboring devices.
8. Star
9. Bus
10. Mesh
11. Ring
12. If one computer becomes a at one time and remains a server at another time, such a network application architecture is called\_\_\_\_\_\_.
13. Ring topology
14. Bus topology
15. Client/server
16. Peer-to-peer
17. Transmission impairment that refers to loss of strength of a signal is \_\_\_\_\_.
18. Attenuation
19. Distortion
20. Noise
21. None
22. \_\_\_\_\_\_\_\_ defines how a particular pattern to be interpreted, and what action is to be taken based on that interpretation.
23. Syntax
24. Semantics
25. Accuracy
26. Reliability
27. Which service of a data-link layer imposes a mechanism to avoid overwhelming the receiver by sending too much data which can’t be absorbed by the receiver?
28. Flow control
29. Error control
30. Access control
31. Framing
32. Which of the following networks uses very expensive network equipment/infrastructure and can be managed by multiple administrations.
33. MAN
34. LAN
35. WAN
36. None
37. In a synchronous transmission, the transmitter and receiver pace are \_\_\_\_\_\_\_.
38. Zero
39. Fixed
40. Variable
41. A function of the data rate
42. What is the signal encoding for Fiber optics cable?
43. Electrical impulses
44. Electromagnetic waves
45. Pulses of light
46. Radio waves
47. Communication between a computer and a keyboard is an example of \_\_\_\_\_\_ transmission.
48. Half-duplex
49. Full-duplex
50. Simplex
51. Automatic
52. Circuit switching takes place at the\_\_\_\_\_\_\_\_ layer.
53. Data link
54. Physical
55. Network
56. Transport
57. In \_\_\_\_\_\_\_, the resources need to be reserved during setup phase; the resources remain dedicated for the entire duration of data transfer phase until the teardown phase.
58. Packet switching
59. Circuit switching
60. Datagram switching
61. None of the above
62. The process of transmitting two or more different signals simultaneously on the same medium is called \_\_\_.
63. Switching
64. Layering
65. Segmentation
66. None
67. In \_\_\_\_\_\_\_\_\_, resources are allocated on demand.
68. Datagram switching
69. Circuit switching
70. Message switching
71. None of the above
72. Every NIC has a unique serial number called a\_\_\_.
73. WAN
74. MAC address
75. IP address
76. Default gateway
77. A network where there is no resource reservation is called\_\_\_\_\_\_\_.
78. Circuit-Switched Networks
79. message-switched networks
80. Packet-switched networks
81. Satellite network
82. In IEEE 802.11 frames, the value of 11 and its distribution system is\_\_\_\_.
83. Local Area Network
84. Wireless Area Network
85. Metropolitan Network
86. None of the given
87. The \_\_\_\_\_\_\_\_\_ standard describes the upper part of the data link layer.
88. IEEE 802.2
89. IEEE 802.3
90. IEEE 802.11
91. IEEE 802.5
92. \_\_\_\_\_\_\_\_\_\_protocol is widely used on LAN in the MAC sub layer.
93. CSMA/CA
94. TCP
95. CSMA/CD
96. GSM
97. \_\_\_\_\_\_\_ are wireless network standard with a data rate of only 11 Mbps.
98. IEEE 802.11a
99. IEEE803.11g
100. IEEE803.11a
101. IEEE802.11b
102. Wireless transmission can be done via\_\_\_\_.
     1. Radio waves
     2. Microwaves
     3. Infrared
     4. All of the mentioned
103. The wireless LAN specification is defined by IEEE, called, \_\_\_\_\_\_\_which covers the data link and physical layer
104. IEEEE 802.2
105. IEEE 802.11
106. IEEE 802.3
107. IEEE 802.5
108. \_\_\_\_\_\_\_ is the most widely used local area network protocol.
     1. Token Ring
     2. Token Bus
     3. Ethernet
     4. none of the above
109. What command would you use on a windows system to find your IP address at the command line?
110. ifconfig
111. ipconfig
112. intconfig
113. Addconfig
114. \_\_\_\_\_\_\_ is the process of separating network functions in communication environment.
115. Segmentation
116. Encapsulation
117. Layering Task
118. Internetworking
119. In \_\_\_\_\_\_\_, the resources need to be reserved during setup phase; the resources remain dedicated for the entire duration of data transfer phase until the teardown phase.
     1. Packet switching
     2. Circuit switching
     3. Datagram switching
     4. None of the above
120. Which processes does TCP, but not UDP, use?
121. a. Windowing
122. b. Acknowledgements
123. c. Both a and b
124. d. Destination Port
125. A network administrator is connecting hosts A and B directly through their Ethernet interfaces, as shown in the illustration. Ping attempts between the hosts are failed. What could be the reason for the disconnectivity between these nodes?



1. The two IP addresses are located in different subnets
2. The connection path (physical path) is inappropriate
3. Due to the class of the network
4. There is no problem in the given network
5. For which of the following would you not need to provide a crossover cable?
6. Connecting uplinks between Switches
7. Connecting Computers to Routers
8. Connecting Routers to Switches
9. Connecting Hubs to Switches
10. Which of the following wireless media used for Remote controls for TVs and Indoor wireless LANs.
11. Microwaves B. Radio waves C. Infrared waves D. Wi-fi
12. \_\_\_\_\_\_\_ refers to the structure or format of the data, meaning and the order in which they are presented in data communication.
13. Syntax
14. Timing
15. Semantics
16. All of the above
17. What is the signal encoding for each Fiber optics cable?
18. Electrical impulses
19. Pulses of light
20. Radio waves
21. . Electromagnetic waves
22. Transmission impairment that refers to changes of format/shape of a signal is \_\_\_\_\_.
23. Attenuation
24. Distortion
25. Noise
26. None
27. The range of addresses that can be used in the first octet of Class D addresses are \_\_\_.
28. 192-223
29. 240-255
30. 224-239
31. 8128-191
32. What is the prefix length notation for the subnet mask 255.255.255.248?
33. /30
34. /27
35. /28
36. /29
37. To which class this IP address 241.0.200.141 belongs?
38. Class B
39. Class A
40. Class E
41. Class D
42. \_\_\_\_\_\_ is a networking technique that enables us to transfer two or more different data signals simultaneously on the same communication channel.
43. Switching
44. Layering Task
45. Multiplexing
46. None
47. Which one of the following is true regarding multiplexing techniques?
48. In TDM all the signals operate at the same time with different frequencies
49. In FDM all the signals operate with same frequency at different times
50. Multiplexing is sharing of a medium and its link by several devices
51. All
52. Which one of the following is different from the other?
53. 172.16.35.12
54. 188.17.12.14
55. 130.17.12.24
56. 126.17.12.254
57. \_\_\_\_\_\_\_ refers to the way a network is laid out, either physically or logically
58. Line configuration
59. Topology
60. Transmission mode
61. Modulation mode

1. Which of the following is a basic network topology?
2. A Star
3. Mesh
4. Ring
5. all of the above
6. Which of the following is a basic network topology?
7. A. Tree
8. B. point-to-point
9. C. multipoint
10. D. all of the above

1. Which of the following is a basic network topology?

A half-duplex

B. multipoint

C. ring

D. all of the above

1. In a\_\_\_\_\_\_\_\_\_\_\_ relationship, the link is shared equally between devices
2. A. peer-to-peer
3. B. point-to-point
4. C. primary-secondary
5. D. master-slave

1. In a\_\_\_\_\_\_\_\_\_\_\_ relationship, one device controls traffic and the others must transmit through it
2. A. peer-to-peer
3. B. point-to-point
4. C. primary-secondary
5. D. full duplex

1. An Unauthorized access is network \_\_\_*\_* issue

a. Performance

b. Reliability

c. Security

d. Accountability

1. The rules that govern data communication is called *\_*\_\_\_.

a. Syntax

b. Protocol

c. Standards

d. Semantics

1. Topology that is multi-point is\_\_\_\_\_.

a. Star

b. Mesh

c. Ring

d. Bus

1. As the frequency increases the period

a. Increases

b. Remains unchanged

c. Decreases

d. Changes inconsistently

1. Error Control is a function of

a. Physical Layer

b. Network Layer

c. Datalink Layer

d. None of the above

1. HDLC is

a. High Density Layer Control

b. High Definition Layer Control

c. High-level Data Link Control

d. None of the above

1. Checksum is used to

a. Detect errors in the data

b. Recover the data from errors

c. Both a and b.

d. None of the above

1. Go-Back-N Protocol ensures

a. Retransmission of all frames

b. Retransmission of only corrupted frames

c. Retransmission of corrupted frames and subsequent frames.

d. All the above

1. A Local Area Network(LAN ) is confined to

a. Large area

b. Small area

c. Both a and b.

d. None of the above

1. Baseband LAN is a

a. Single channel, analog LAN

b. Multichannel, analog LAN

c. Single channel, digital LAN

d. Multichannel, digital LAN

1. IEEE 802.2 standard works on

a. Connectionless mode

b. Connection-oriented mode

c. Both a and b .

d. None of the above.

1. Size of source address field iu an Ethernet frame is

a. 2 bytes

b. 6 bytes

c. 4 bytes

d. 3 bytes

1. In which type of switching all packets of a message follow same

channel

a. Datagram packet switching

b. Virtual circuit switching

c. Message switching

d. None of the above.

1. \_\_\_\_\_\_\_\_\_\_ is a device that connects n inputs to m outputs.

a. Modem

b. Cross point

c. Cross bar

d. RAM

1. How many OSI layers are covered in X.25 standard?

a. Two

b. Three

c. Six

d. Seven

1. \_\_\_\_\_\_\_\_\_is a unique identifier which indicates a particular

Virtual Circuit on a network.

a. Virtual Channel number

b. Virtual Path identifier

c. Virtual Channel identifier

d. None of the above

1. An IP address consists of \_\_\_\_\_\_bits.

a. 4

b. 8

c. 32

d. Any of the above

1. Identify the class of IP address 191.1.2.3

a. Class A

b. Class B

c. Class C

d. Class D

1. An ARP reply is *to \_\_*

a. Unicast; one host

b. Unicast; all hosts

c. Multicast; One host

d. Broadcast; all host

1. Which of the following function does UDP perform?

a. Process to process communication

b. Host to host communication

c. End to end reliable data delivery

d. All the above

1. Out-of-band data is called ………………….
2. The urgent data
3. The lost dataP
4. Internet data
5. None of the above
6. The maximum size of an IP datagram is ……….
7. 65,537
8. 65,536
9. 65,538
10. None of the above
11. How many layers in XNS?
12. 5
13. 6
14. 4
15. None of the above
16. What are the nodes of SNA?
17. End-user
18. Logical Unit
19. Physical Unit and Datalink
20. all of the above
21. The maximum size of an IP datagram is ……….
22. 65,537
23. 65,536
24. 65,538
25. None of the above
26. How many layers in XNS?
27. 5
28. 6
29. 4
30. None of the above
31. What are the nodes of SNA?
32. End-user
33. Logical Unit
34. Physical Unit and Datalink
35. all of the above
36. SNA network is classified into two types. They are………..
37. Subarea Network and APPN(Advanced Peer-to-Peer Networking (APPN))
38. Only Sub area Network
39. Advanced Peer-to-Peer Networking (APPN)
40. None of the above
41. GDS stands for ………….
42. Generalized Data Stream
43. Generalized Date Stream
44. General Data Stream
45. None of the above
46. The Unix system deals with two important API ………….
47. BSD –Berkeley Software Distribution and Transport Layer Interface (TLI)
48. only BSD –Berkeley Software Distribution
49. only Transport Layer Interface
50. None of the above
51. The connection-oriented and connectionless services are provided by which protocol?
52. Linux protocol
53. unix domain protocols
54. both a) and b)
55. None of the above
56. Which method is often called a “reliable” network service?
57. Connection-oriented
58. object-oriented
59. both a) and b)
60. None of the above
61. The client in socket programming must know information ………….

a. The IP address of Server

b. Port number

c. Both IP address of Server & Port number

d. Only its own IP address

1. What is the size of MAC Address?

a. 16-bits

b. 32-bits

C. 48-bits

d. 64-bits

1. Which of the following term describes PDU encapsulated at Transport Layer?

a. Frame

b. Packet

c. Data

d. Segment

1. A list of protocols used by a system, one protocol per layer, is called ***\_\_***

a) protocol architecture

b) protocol stack

c) protocol suite

d) protocol system

1. Connector RJ-45 contains?

a. Two pins

b. Four pins

5 University Academy

c. Eight pins

d. Ten pins

1. A set of rules that governs data communication is called

a. Protocols

b. Standards

c. RFCs

d. Servers