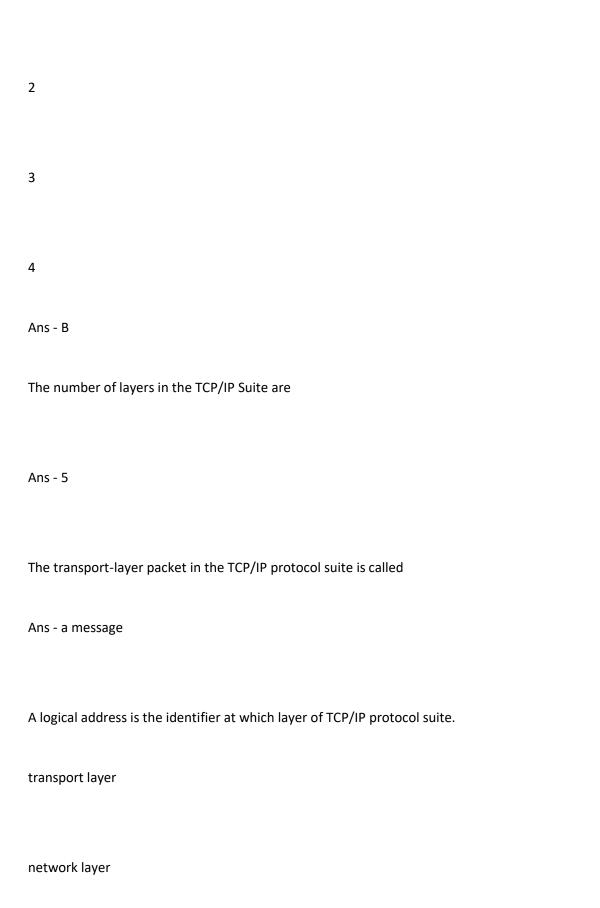The largest geographic area a wide area network (WAN) can span is

a town

a state

a country

the world

Ans - D

The transport-layer packet in the TCP/IP protocol suite is called

a message

a datagram

a segment or a user datagram

a frame

Ans - C

The data link layer includes

Data link control only

MAC sublayer only

Both DLC and MAC sublayer

None of the above

Ans - B

A link-layer switch is involved in ___ layers of the TCP/IP protocol suite.

1

2

3

4

Ans - B

The number of layers in the TCP/IP Suite are

Ans - 5

The transport-layer packet in the TCP/IP protocol suite is called

Ans - a message

A logical address is the identifier at which layer of TCP/IP protocol suite.

transport layer

network layer

data-link layer

application layer

Ans - B

A link-layer switch is involved in __ layers of the TCP/IP protocol suite.

Ans - 2

In TCP/IP, a message belonging to the transport layer is de-capsulated from a packet at which layer ?

network

transport

data link

physical

Ans - C

A router works at which of the layers

Ans - Network layer

The largest geographic area a wide area network (WAN) can span is

a town

a state

a country

the world

Ans - d

Which of this is not a guided media?

Fiber optical cable

Coaxial cable

Wireless LAN

Copper wire

Ans - c

Which of the following is not an example of Transmission media

Radio Waves

Micro Waves

Total internal refraction

All of the above

Ans - D

Total internal Reflection is a property associated with

Coaxial Cable

STP cable

UTP Cable

Optical Fiber Cable

Ans - D

If the frequency spectrum of a signal has a bandwidth of 500 Hz with the highest frequency at 600 Hz, what should be the sampling rate, according to the Nyquist theorem?

1200 samples/s

1000 samples/s

600 samples/s

500 samples/s

Ans - D

The application layer in the TCP/IP protocol suite is usually considered to be the combination of which layers in the OSI model ?

Application, transport, and session

Application, presentation, and session

Application, presentation, and network

Application, presentation, and transport

Ans - B

f signal is having frequency range from 100hz to 300hz what will be sampling frequency require for faithful reconstruction

600

500

1200

1000

What will be the values of SNRdB for a noiseless channel?

   0 dB

   1 dB

   10 dB

   Infinity

UTP is used often in which of the following applications

LAN

TV cable

Optical Fiber

All of the above

Ans - A

Coaxial cable consists of ___ concentric copper conductors

Ans - 2

Which layer is responsible for the delivery of a message from one process to another?

network

transport

physical

application

Ans - B

Digital to analog conversion takes place at

physical layer

Application layer

Network Layer

None of the above

Ans - A

If signal having maximum frequency of 99hz what will be the sampling rate required to achieve faithful reconstruction.

Ans - 198

Which of the following is not an analog-to-analog conversion?

AM

PCM

FM

PM

Ans - B

Byte stuffing is a process of adding 1 extra byte to identify

flag in the text message

escape character in the test message

Both flag and escape character in the test message

none of the above

Ans - C

What type of transmission impairment, signal loses strength due to the resistance of transmission medium ?

Noise

Distortion

Attenuation

All of the above

Ans - C

Which of the following is the multiple access protocol for channel access control?

Ans - C Both CSMA/CD & CSMA/CA

The size of preamble in MAC frame is

5 Byte

6 Byte

7 Byte

8 Byte

Ans - C

Which sublayer of the data link layer performs data link functions that depend upon the type of medium?

logical link control sublayer

media access control sublayer

network interface control sublayer

error control sublayer

Ans - b

Which of the following is not a cause of transmission impairment?

Distortion

Throughput

Noise

Attenuation

Ans - B

Burst errors are common in

Serial Communication

parallel Communication

Both A and B

None of the above

Ans - A

What will be the values of SNRdB for a noiseless channel?

0 dB

1 dB

10 dB

Infinity

Ans - D

IPv6 header size is

Ans - 40 bytes

A digital signal has 10 levels. How many bits are needed per level?

3

4

8

10

Ans - A

Datagram approach is a

Connection Oriented Service

Connectionless Service

Both A and B

None of the above

Ans - B

The maximum size of the payload in IPv6 datagram is

Ans - 65535

Which of the following IPv4 address is/are correct

128.010.10.5

192.256.10.5

Both A and B

None of the above

Ans - B

In which protocol, the chance of collision can be reduced if a station senses the medium before trying to use it ?

TDMA

CSMA

CDMA

FDMA

Ans - B

In a network layer, the total delay is

Propagation and Transmission Delay Only

Processing Delay Only

Queuing Delay Only

All of the above

Ans - D

In a Go-Back-N ARQ, if the window size is 63, what is the range of sequence numbers?

0 to 63

0 to 64

1 to 63

1 to 64

Ans - A

How much times of channel throughout of slotted ALOHA will be in comparison to pure ALOHA ?

same

double

three times

four times

Ans - B

An IPv4 class-C have a block size of ___ .

32

64

128

256

IPv4 address protocol system can use

dotted-decimal notation

binary notation

both dotted-decimal notation and binary notation

none of the above

In an IP packet, the value of HLEN is 516 and the value of the total length field is 002816. How many bytes of data are being carried by this packet?

10

20

30

40

Ans - B

Given a network 195.50.100.0 be divided into two equal subnetworks, the subnet mask will be
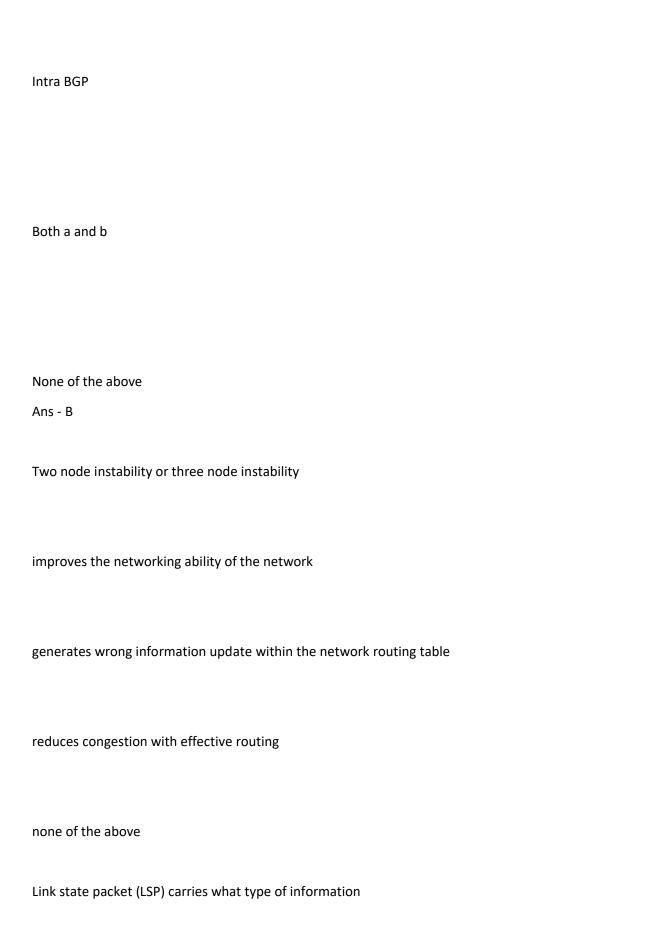
255.255.255.0

255.255.255.128

255.255.255.192

255.255.255.224

Ans - A

What is needed to determine the number of the last byte of a fragment?

total length

offset number

both offset number and the total length

None of the choices are correct

Ans - C

An class-D have _____ number of blocks .

1

64

128

255

Discarding policy is associated with _____ congestion control categories.

Open Loop

Closed Loop

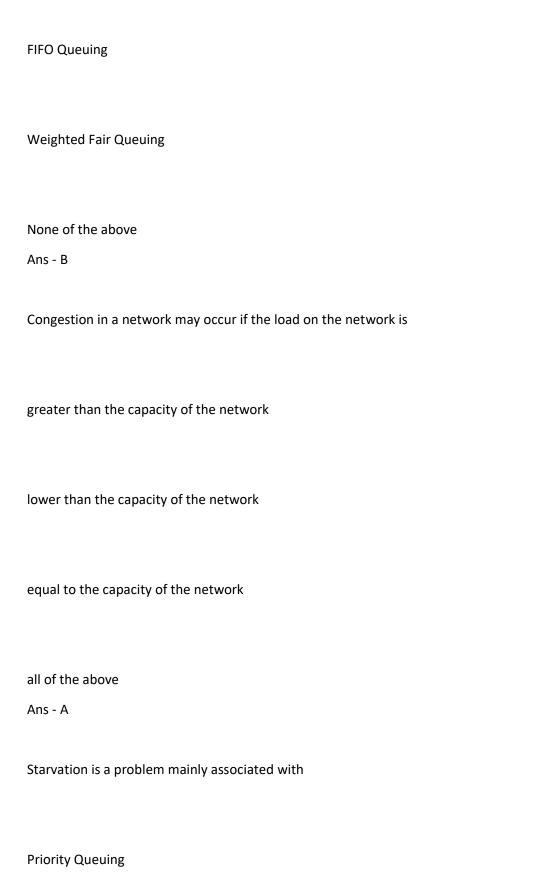Both A and B

None of the above

Ans - A

The idea of address aggregation was designed to alleviate the increase in routing table entries when using which type of addressing.

classful

classless

classful or classless

None of the above

Ans - B

n link state routing, link state packet (LSP) is generated

periodically

randomly

when there is no change in topology

All of the above

Ans - A

In a Routing Information Protocol (RIP)

all networks are equal

networks may or may not be equal

all network are unequal

None of the above

Ans - B

which of the following do not stands for I-BGP

Internal BGP

Intra BGP

Both a and b

None of the above

Ans - B

Two node instability or three node instability

improves the networking ability of the network

generates wrong information update within the network routing table

reduces congestion with effective routing

none of the above

Link state packet (LSP) carries what type of information

node identity

list of links

sequence number

All of the above

Distance vector Routing Table updates can be done

periodically only

based on the trigger of a change in network only

Can be a combination of periodic as well as triggered update

randomly only

Ans - C

Two node instability is problem of which protocol

Routing Information Protocol

Distance vector routing

Link state routing

Open Shortest Path First

Ans - C

Starvation is a problem mainly associated with

Priority Queuing

FIFO Queuing

Weighted Fair Queuing

None of the above

Ans - B

Congestion in a network may occur if the load on the network is

greater than the capacity of the network

lower than the capacity of the network

equal to the capacity of the network

all of the above

Ans - A

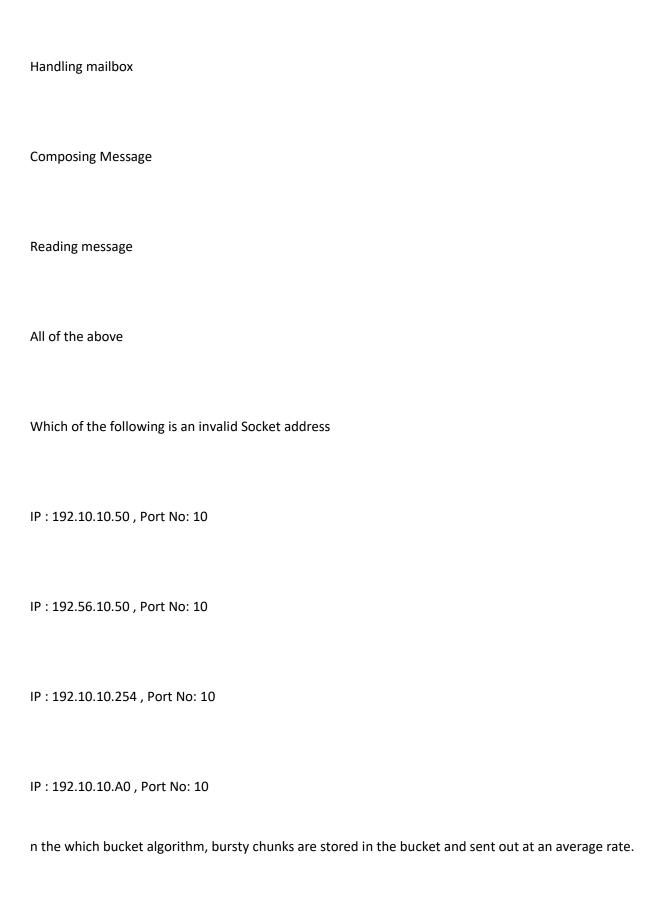Starvation is a problem mainly associated with

Priority Queuing

FIFO Queuing

Weighted Fair Queuing

None of the above

Ans - A

You have a network that needs 79 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?

4

5

6

7

Ans - D

Leaky Bucket is an example of

Traffic shaping technique

Scheduling Technique

Resource reservation Technique

Admission Control Technique

Ans - A

which of the following are correct steps for Path Vector Routing

Initialization

Sharing

Updating

all of the above

Ans - D

The subnet mask of 20.30.50.0/25 is?

255.255.128.0

255.255.255.128

255.0.0.0

255.255.255.127

Ans - C

If a packet passes through 100 networks to reach the destination, the total cost is _____ hop counts.

100

10

1000

99

Ans - A

In a network, Which of the following is/are a type of traffic profile

Constant Bit Rate

Burst Bit Rate

Variable Bit Rate

All of the above

Ans - D

ICMP,IGMP and ARP protocols belongs to which layer of TCP/IP suite

Application

Transport

Network

Data link

UDP is

connectionless

unreliable

both unreliable and connectionless

none of the above

The Routing Information Protocol (RIP) is an intradomain routing based on _____ routing.

Ans - Distance vector

Which of the following is correct as per Services of user agent

Handling mailbox

Composing Message

Reading message

All of the above

Which of the following is an invalid Socket address

IP : 192.10.10.50 , Port No: 10

IP : 192.56.10.50 , Port No: 10

IP : 192.10.10.254 , Port No: 10

IP : 192.10.10.A0 , Port No: 10

n the which bucket algorithm, bursty chunks are stored in the bucket and sent out at an average rate.

leaky

token

either (a) or (b)

neither (a) nor (b)

Ans - A

What is the default prefix length for class A in CIDR notation?

Ans - 8

Which of the following can be considered as Generic domain label

biz

int

mil

all of the above

The header of the user datagram format of the UDP includes

Port number

total length

checksum

All of the above

Ans - C

The domain name space (tree) do not include

generic domains

country domains

inverse domain

none of the above

Which parameter decides the variation in delay for packets belonging to the same flow.

Jitter

Delay

Reliability

Bandwidth

Ans - A

TCP segment format use _____ bits for source port address

8

16

32

64

In distance vector routing, each node periodically shares its routing table with _____ and whenever there is a change.

every other node

its immediate neighbors

one neighbor

None of the choices are correct

Ans - B

Virtual Connection Circuit is under

Ans - TCP

Which was originally developed to provide a loop-free method of exchanging routing information between autonomous systems.

OSPF

BGP

RIP

EIGRP

Ans - B

TCP segment format use _____ bits for sequence number

8

16

32

64

Which supports the simultaneous use of multiple unequal cost paths to a destination?

EIGRP

RIP

OSPF

BGP

Ans - A

SCTP is a

connection-oriented protocol

connection-less protocol

both the above options are right

none of the above

Ans - B

UDP is an acronym for _____.

Ans - User data protocol

Who provides service to the user to make the process of sending or receiving a message easier.

A UA

An MTA

An MAA

None of the choices are correct

Ans - A

The domain name system is maintained by

distributed database system

a single server

a single computer

none of the above

Ans - A

An e-mail message contains the _____ and the _____.

header; body

header; envelop

envelop; body

None of the choices are correct

Ans - A