

essay

NetExam

Sri Lanka Institute of Information Technology

- a) An organization has obtained the IP address block 170.50.0.0/16 and there is a requirement to create 264 subnets as follows:
255 subnets with 250 addresses in each.
2 subnets, with 60 addresses in each.
3 subnets with 10 addresses in each
4 subnets with 2 addresses in each.

Write down 6 subnets out of 255 subnets and all the other subnetwork addresses with the subnet masks using Variable Length Subnet Masking. (10 Marks)

b) Write the three types of IPv6 addresses. (3 Marks)

c) What is the EUI-64 Interface ID of the IPv6 address corresponding to the MAC address 6CA5:BFFE:024C. (2 Marks)

d) Write down the complete IPv6 addresses of the following compressed IPv6 addresses.

i. 52:8d30:0:2345::190

ii. Fe80::1

e) Write down the three methods of IPv4 and IPv6 coexistence (3 Marks)

a)	Network ID	Subnet mask
	170.50.0.0/24	255.255.255.0
	170.50.1.0/24	255.255.255.0
	170.50.2.0/24	255.255.255.0
	170.50.3.0/24	255.255.255.0
	170.50.4.0/24	255.255.255.0
	170.50.5.0/24	255.255.255.0

170.50.255.0/26	255.255.255.192
170.50.255.64/26	255.255.255.192
170.50.255.128/28	255.255.255.240
170.50.255.144/28	255.255.255.240
170.50.255.160/28	255.255.255.240

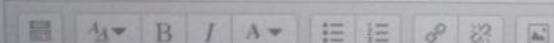
170.50.255.176/30	255.255.255.252
170.50.255.180/30	255.255.255.252
170.50.255.184/30	255.255.255.252
170.50.255.188/30	255.255.255.252

b) Unicast / multicast / anycast

c) 6Ea5:BFFF:FEFE.024C

d) i) 0052:8d30:0000:2345:0000:0000:0000:0190
ii) fe80:0000:0000:0000:0000:0000:0000:0001

e) Tunneling / Dual Stack / Translation



a. Network Address

Subnet Mask

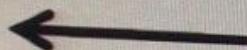
An ip packet/datagram has arrived with the following information in the header

Not yet answered

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1.00

Flag question

An IP Packet/ Datagram has arrived with the following information in the header. (in hexadecimal)



4A00 01A0 002A 0000 0906 0000 5A3C 0209 A40C 0E07

VER 4 bits	HLEN 4 bits	Service type 8 bits	Total length 16 bits									
Identification 16 bits			Flags 3 bits	Fragmentation offset 13 bits								
Time to live 8 bits	Protocol 8 bits		Header checksum 16 bits									
Source IP Address												
Destination IP Address												
Option												

Find the destination network address.

Select one:

- 90.0.0.0
- 90.60.2.9
- 90.60.0.0
- 164.12.14.7
- 164.12.0.0

Quiz nav

1	2	3
8	9	10
15	16	17
22	23	24
29	30	

Finish attempt ...

Time left 0:59:47



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Which fields of the ip header change from

Question 1

Not yet answered

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Flag question

Which fields of the IP header change from router to router?

Select one:

- Protocol and Time To Live value
- Fragmentation offset and Time To Live value
- Identification number and Service type
- Fragmentation offset and Service type
- Time To Live value Header Checksum

[Next page](#)

Finish attempt

Time left 0:5



Which command must be configured

Question 1

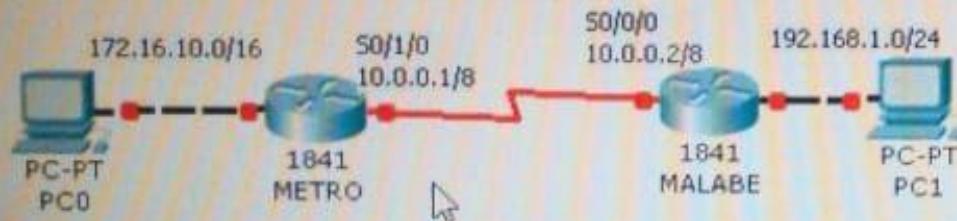
Not yet answered

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Flag question

Network addresses of MALABE and METRO LANs are given in the diagram.

Which command must be configured to allow communication from Metro (172.16.10.0/16) LAN to MALABE LAN (192.168.1.0/24)?



Select one:

- METRO #ip route 192.168.1.0 255.255.0.0 50/0/0
- METRO#ip route 192.168.1.0 255.255.255.0 10.0.0.2
- METRO(config)#ip route 192.168.1.0 255.255.255.0 10.0.0.1
- METRO(config)#ip route 192.168.1.0 255.255.255.0 10.0.0.2
- METRO#ip route 192.168.1.0 255.255.255.0 10.0.0.1

Question 2

Not yet answered

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The following diagram shows the routing table of Router1.

Router1#show ip route

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route

Gateway of last resort is not set

- C 10.0.0.0/8 is directly connected, Serial2/0
- C 12.0.0.0/8 is directly connected, Serial3/0
- C 172.16.0.0/16 is directly connected, FastEthernet0/0

Router1#

Which statement is correct?

Select one:

- A. RIP Protocol is used to configure the dynamic routes.
- B. Three networks directly connected to Router1.
- C. Default route is 172.16.0.0/16. +
- D. Only one static route with FastEthernet0/0 exit interface.

The following diagram shows the routing

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What does the following command allow

Question 4

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▼ Flag question

What does the following command allow you to perform next?

RouterA(config)#line vty 0 3

Select one:

- Set the console password.
- Shut down the router.
- Set the configurations
- Disable console connections.
- Set the Telnet password.

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What is the broadcast address for the network

Question 3

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What is the broadcast address for the network where the host 112.48.160.183/26 exists.

Answer:

112.48.160.183

112.48.160.183

112.48.160.183

112.48.160.183

112.48.160.183

112.48.160.183

112.48.160.183

112.48.160.183

112.48.160.183

0

Which two things can be determined by using

Which two things can be determined by using the ping command?

Select one or more:

- The average time it takes a packet to reach the destination and for the response to return to the source
- The number of routers between the source and destination device
- The destination device is reachable through the network
- The IP address of the router-nearest the destination device
- The average time it takes each router in the path between source and destination to respond

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What is split horizon

Question 4

Not yet answered

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Flag question

What is split horizon?

Select one:

- It defines the path to forward the IP data traffic
- It splits the traffic when you have a large bus (horizon) physical network.
- It holds the regular updates from broadcasting to a downed link.
- Information about a route should not be sent back in the direction from which the original update came.
- It prevents regular update messages from reinstating a route that has gone down.

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In distance vector routing,

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rag question

In distance vector routing, each node periodically shares its routing table with _____.

Select one:

- Every other node
- Its immediate neighbours
- One neighbour
- All of the above

Quiz

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Question 5

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A router interface has been assigned an IP address of 172.16.192.166 with a mask of 255.255.255.248. To which Subnet does the IP address belong?

Select one:

- 172.16.192.128
- 172.16.192.160
- 172.16.192.168
- 172.16.192.0
- 172.16.0.0

A router interface has been assigned an n

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Question 6

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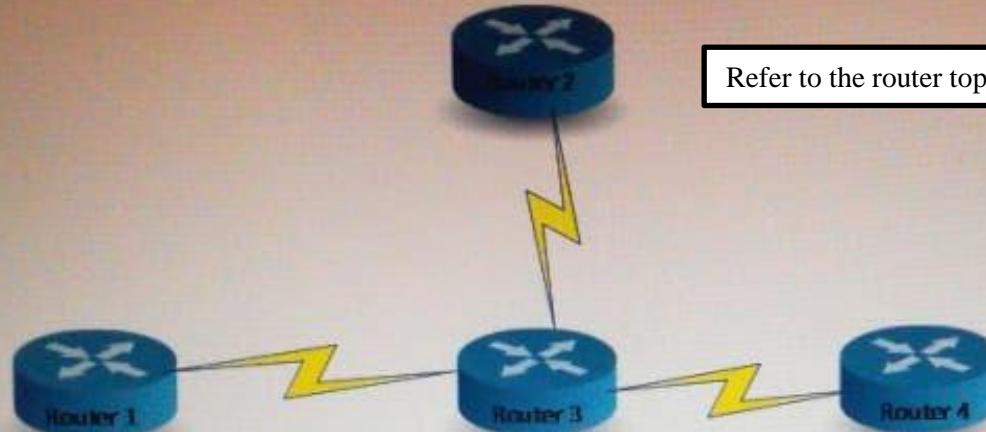
Flag question

Refer to the router topology shown in the diagram. Assuming that all routers are running RIP, which statements describe how the routers exchange their routing tables?

≡ Quiz navigation

1	2	3	4
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29	30		

Refer to the router topology shown



Finish attempt ...

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Select one:

- A. Router 1 exchanges with Router 3
- B. Router 1 exchanges with Router 4
- C. Router 1 exchanges with Router 2
- D. Router 4 exchanges with Router 3
- E. A and C above



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Is a group of networks and routers

Question 8

Not yet answered

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Flag question

_____ is a group of networks and routers under the authority of a single administration.

Select one:

- A. An autonomous system
- B. An area
- C. Both A and B
- D. None of the above

Next page

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Time left 0:

Refer to the figure. A new subnet with 60 hosts has been added to the network. Which subnet address should this network use to provide enough usable addresses while wasting the fewest addresses?



Refer to the figure.a new subnet with

Select one:

- A. 192.168.1.56/26
- B. 192.168.1.56/27
- C. 192.168.1.64/27
- D. 192.168.1.64/26

≡ Quiz navigation

1	2	3	4	5	6	7
8	9	10	11	12	13	14
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22	23	24	25	26	27	28
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Finish attempt...

Time left 0:46:55



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An organization is granted the ip address

Question 7

Not yet answered

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Flag question

An organization is granted the IP Address block 136.40.0.0 in class B. The administrator wants to create 7 subnets and it is required to take minimum number of bits to create subnetworks.

How many usable IP addresses are available for each subnetwork ?

Select one:

- 8190
- 4094
- 254
- 8192
- 4090

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Given a class B network of

Question 10

Not yet answered

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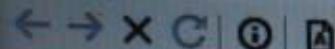
Flag question

Given a class B network of 155.44.0.0, what mask could be used to provide 15 networks each supporting 120 users.

Select one:

- 255.255.240.0
- 255.255.255.240
- 255.255.255.0
- 255.255.255.128
- 255.255.248.0

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**Question 11**

Not yet answered

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Flag question

The following diagram shows the

The following diagram shows the routing table of Router1.

Router1#show ip route

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route

Gateway of last resort is not set

- C 10.0.0.0/8 is directly connected, Serial2/0
- C 12.0.0.0/8 is directly connected, Serial3/0
- C 172.16.0.0/16 is directly connected, FastEthernet0/0

Router1#

Which statement is correct?

Select one:

- A. RIP Protocol is used to configure the dynamic routes.
- B. Only one static route with FastEthernet0/0 exit interface.
- C. Three networks directly connected to Router1.
- D. Default route is 172.16.0.0/16

≡ Quiz navigation

1	2	3	4	5	6
8	9	10	11	12	13
15	16	17	18	19	20
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Finish attempt...

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IT1901

Question 8

Not yet answered

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Flag question

You are configuring a network. You use a distance vector routing protocol. What could you use to prevent routing loops in the network?

- A. Spanning Tree Protocol
- B. Shortest path first tree
- C. Split horizon
- D. Hold-down timers

Select one:

- Only A
- Both A and D
- Only C
- Both C and D

You are configuring a network. You use a distance vector

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Two devices in the same local area network are

Question 12

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Flag question

Two devices in the same Local Area Network are having the following IP addresses.
Select the network to which they can belong to :

192.168.100.135 and 192.168.100.144

Select one or more:

- 192.168.100.128/24
- 192.168.100.1/25
- 192.168.100.128/25
- 192.168.100.0/25
- 192.168.100.0/24

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The first and the last bit combinations of the host

Question 10

Not yet answered

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1.00

Flag question

The first and the last bit combinations of the host ID section respectively represents :

Select one:

- Network Address and Broadcast Address
- Default Gateway Address and Network Address
- Network Address and Default Gateway Address
- Default Gateway Address and Broadcast Address
- Broadcast Address and Network Address





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Question 11

Not yet answered

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Flag question

At what point would a router , which is in the path to the destination

At what point would a router, which is in the path to the destination device, stop forwarding the packet?

Select one:

- When the values of both the Echo Request and Echo Reply messages reach zero
- When the router receives an ICMP Time Exceeded message
- When the value in the TTL field reaches zero
- When the RTT value reaches zero
- When the host responds with an ICMP Echo Reply message

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If the fragmentation offset has

Question 12

Not yet answered

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1.00

Flag question

If the fragmentation offset has a value of 160 in decimal.

Select one:

- The datagram is 160 Bytes in size.
- The first byte of the datagram is byte 1280.
- The first byte of the datagram is byte 160.
- The datagram has not been fragmented.
- The first byte of the datagram is byte 20





You have been asked to come up with a subnet

Question 13

Not yet answered

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Flag question

You have been asked to come up with a subnet mask that will allow four web servers to be on the same network while providing the maximum number of subnets. Which network address and subnet mask meet this requirement?

Select one:

- 192.168.252.16 255.255.255.252
- 192.168.252.16 255.255.255.240
- 192.168.252.8 255.255.255.248
- 192.168.252.8 255.255.255.252
- 192.168.252.0 255.255.255.252

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What is the maximum hop count for RIP



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Question 13

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P Flag question

What is the maximum hop count for RIP routes?

Select one:

- 16
- 255
- 15
- 256



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The routing uses the Dijkstra

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Question 14

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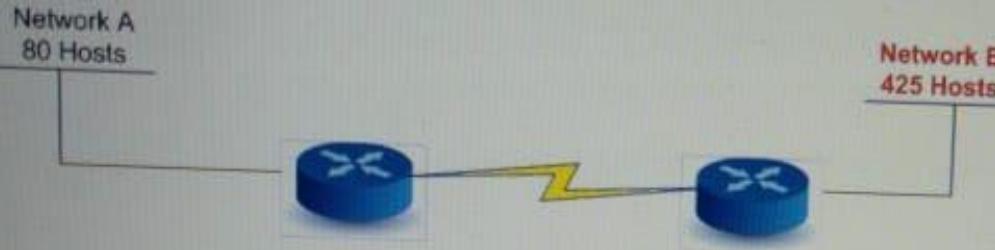
Flag question

The _____ routing uses the Dijkstra algorithm to build a routing table.

Select one:

- None of the above
- Distance-vector
- Path-vector
- Link-state

Refer to the figure. Which subnet mask will place all hosts on Network B in the same subnet with the least amount of wasted addresses?



Refer to the figure . which subnet mask will place

Select one:

- A. 255.255.252.0
- B. 255.255.255.0
- C. 255.255.248.0
- D. 255.255.254.0

Quiz navigation

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Finish attempt ...

Time left 0:34:17



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it19013

What is the maximum hop count

What is the maximum hop count for RIP routes?

Select one:

- 255
- 15
- 256
- 16

Next page

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1	2
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15	16
22	23
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it19013138 Fernando

What is the purpose of a default

Question 16

1 yes answered

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10

Flag question

What is the purpose of a default gateway?

Select one:

- Provides a permanent address to a computer
- Physically connects a computer to a network
- Identifies the logical address of a networked computer and uniquely identifies it to the rest of the network
- Identifies the network to which a computer is connected
- Identifies the device that allows local network computers to communicate with devices on other networks

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Finish attempt ...

Time left 0:31:56

1	2	3	4
8	9	10	11
15	16	17	18
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29	30		



Which fields of the ip header change from

Question 15

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1.00

Flag question

Which fields of the IP header change from router to router?

Select one:

- Time To Live value and Header Checksum
- Fragmentation offset and Service type
- Protocol and Time To Live value
- Identification number and Service type
- Fragmentation offset and Time To Live value





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079013138 Fernando B.A.M

Question 17

Not yet answered

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Flag question

You would like to configure IP RIP on your Cisco Router. Which of the following steps below are required to install IP RIP?

- A - Configure privilege level password
- B - Specify the routing protocol
- C - Specify the given destination network
- D - Specify directly connected networks
- F - Configure static Rip routes

Select one:

- All the steps are needed
- B only
- F and D only
- B and D only

You would like to configure ip rip on your

Quiz navigation

1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30			

Finish attempt...

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You have the following router table. Which of the followings are

Question 16

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Flag question

You have the following routing table. Which of the followings are learnt statically by R1 router ?

R1#show ip route

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area

N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2

E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP

i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area

* - candidate default, U - per-user static route, o - ODR

P - periodic downloaded static route

Gateway of last resort is not set

172.16.0.0/24 is subnetted, 3 subnets

S 172.16.1.0 [1/0] via 172.16.2.2

C 172.16.2.0 is directly connected, Serial0/0/0

C 172.16.3.0 is directly connected, FastEthernet0/0

S 192.168.1.0/24 [1/0] via 172.16.2.2

S 192.168.2.0/24 [1/0] via 172.16.2.2

1. Only 192.168.1.0/24
2. 192.168.2.0/24 and 172.16.1.0/24
3. 192.168.1.0/24 via 172.16.2.2
4. 172.16.0.0

Select one:

≡ Quiz nav

1 2 3

8 9 10

15 16 17

22 23 24

29 30

Finish attempt...

Time left 0:29:57

C 172.16.0.0 is directly connected, eth0
S 192.168.1.0/24 [1/0] via 172.16.2.2
S 192.168.2.0/24 [1/0] via 172.16.2.2

Select one

1. Only 192.168.1.0/24
2. 192.168.2.0/24 and 172.16.1.0/24
3. 192.168.1.0/24 via 172.16.2.2
4. 172.16.0.0

Select one:

- A. None of them correct
- B. 2 and 3 correct
- C. Both 2 and 4 correct
- D. 1 correct

Given the ip address and subnet mask of

Given the IP address and Subnet mask of 172.16.134.64 255.255.255.224, which of the following would describe this address?

Select one:

- Not a valid address.
- A broadcast address
- A private network address.
- A public network address.
- A usable host address.

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Finish attempt

Time left 0:28:32



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IT19013

Which of the following osi layer

Which of the following OSI layer is used by a Routing Protocol to determine the best path to a network?

Select one:

- Data Link
- Physical
- Network
- Presentation

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Finish attempt

Time left 0:26





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What is the default route on an ip

What is the default route on an IP network?

Select one:

- At the router, it is the route used to direct frames for which the next hop has not been explicitly listed in the routing table
- Any static route listing in a routing table
- When all conditions are equal, the best route for delivery of IP datagrams
- This is the route that will be chosen first by IP for delivery of a datagram
- The address of the nearest downstream neighbor in a Token ring network

≡ Quiz navigation

1	2	3	4
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Which of these addresses is the shortest

Question 17

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Which of these addresses is the shortest abbreviation for the IP address:

3FFE:1044:0000:0000:00AB:0000:0000:0057 ?

Select one:

- 3FFE:1044::AB::57
- 3FFE:1044::00AB::0057
- 3FFE:1044:0000:0000:00AB::57
- 3FFE:1044:0:0:AB::57
- 3FFE:1044:0:0:00AB::0057
- 3FFE:1044:0000:0000:00AB::0057



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Which of the following statements is/are

Question 21

Not yet answered

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Which of the following statements is/are true about metrics used in routing protocol?

- A - A metric is the administrative distance of a routing protocol
- B - A metric is a measure of trustworthiness and availability of a route

Select one:

- None of the above
- B only
- Both of the above
- A only

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Which of the following would be correct if we borrowed

Question 18

Not yet answered

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Which of the following would be correct if we borrowed 8-bits when using the following IP information?

IP address 121.34.45.1

Subnet mask 255.0.0.0

Select one:

- Borrowing 8 host bits would yield 254 usable networks, with 65,534 usable hosts per network.
- Borrowing 8 host bits would yield 256 usable networks, with 65,534 usable hosts per network.
- A new mask of 255.255.0.0 would yield 256 usable networks with 1024 usable hosts per network.
- A new mask of 255.255.0.0 would yield 256 usable networks with 1022 usable hosts per network.



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lag question

You are configuring a network. You use a distance vector routing protocol. What could you use to prevent routing loops in the network?

- A. Spanning Tree Protocol
- B. Shortest path first tree
- C. Split horizon
- D. Hold-down timers

Select one:

- Both C and D
- Only A
- Both A and D
- Only C

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1	2	3	4
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15	16	17	18
22	23	24	25
29	30		

Finish attempt ...

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Time left 0:20:17



Which of these addresses is the shortest

Question 23

Not yet answered

Marked out of
1.00

Flag question

Which of these addresses is the shortest abbreviation for the IP address:

3FFE:1044:0000:0000:00AB:0000:0000:0057 ?

Select one:

- 3FFE:1044:0:0:AB::57
- 3FFE:1044:0:0:00AB::0057
- 3FFE:1044::AB::57
- 3FFE:1044:0000:0000:00AB::57
- 3FFE:1044:0000:0000:00AB::0057
- 3FFE:1044::00AB::0057

Next page

Finish

Time



Online Exams

Sri Lanka Institute of Information Technology

An ip fragment has arrived with an offset value

Question 19

Not yet answered

Marked out of
1.00

Flag question

An IP fragment has arrived with an offset value of 370. How many bytes of data were sent in the previous fragment/s?

Select one:

- 3000
- 370
- 740
- 0
- 2960

Next



Online Exams

Sri Lanka Institute of Information Technology

Which of the following commands will set the privileged

138

Question 24

Not yet answered
Marked out of
0.00

Flag question

Which of the following commands will set the privileged level high priority password as "sliit" in METRO router?

Select one:

- METRO#enable secret password sliit
- METRO(config)#enable secret password sliit
- METRO(config)#enable secret sliit
- METRO(config)#enable password secret sliit
- METRO>enable secret password sliit

Next page

Finish attempt

Time left: 0:17:4

1	2
8	9
15	16
22	23
29	30



Online Exams

Sri Lanka Institute of Information Technology

What is the second host ip address

Question 25

Not yet answered

Marked out of
1.00

Flag question

What is the second host IP address in the 150.17.45.60/30 subnet?

Select one:

- 150.17.45.61
- 150.17.45.62
- 150.17.45.60
- 150.17.45.63

Next page

Finish

Time

b



What does the following command allow you

n 26

answered

1 out of

question

What does the following command allow you to perform next?

RouterA(config)#line con 0

Select one:

- Set the configurations
- Set the console password.
- Set the Telnet password.
- Disable console connections.
- Shut down the router.



Next page





Online Exams

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In distance vector routing , each node periodically

Question 20

Not yet answered

Marked out of
1.00

Flag question

In distance vector routing, each node periodically shares its routing table with _____.

Select one:

- Every other node
- Its immediate neighbours
- One neighbour
- All of the above





Which statements are true regarding

Question 27

Not yet answered

Marked out of
1.00

Flag question

Which statements are true regarding IP addressing?

Select one:

- IP address 127.0.0.1 can be used for a host to direct traffic to itself.
- Network 172.32.0.0 is part of the private address space.
- Public addresses are blocked from Private Internet by router.
- NAT translates public addresses to private addresses destined for the internet.
- Only one company is allowed to use a specific private network address space.

Next page



Finish attempt...

Time left 0:12:45

1	2	3
8	9	10
15	16	17
22	23	24
29	30	



Which command must be configured

ion 28

et answered
ed out of

eg question

≡ Quiz n

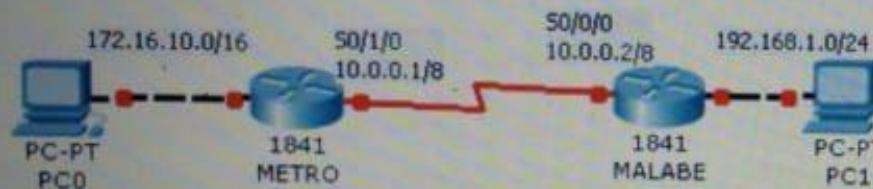
1	2
8	9
15	16
22	23
29	30

Finish attempt

Time left 0:11:4

Network addresses of MALABE and METRO LANs are given in the diagram.

Which command must be configured to allow communication from Metro (172.16.10.0/16) LAN to MALABE LAN (192.168.1.0/24)?



Select one:

- METRO#ip route 192.168.1.0 255.255.255.0 10.0.0.1
- METRO(config)#ip route 192.168.1.0 255.255.255.0 10.0.0.2
- METRO(config)#ip route 192.168.1.0 255.255.255.0 10.0.0.1
- METRO #ip route 192.168.1.0 255.255.0.0 50/0/0
- METRO#ip route 192.168.1.0 255.255.255.0 10.0.0.2

Next page

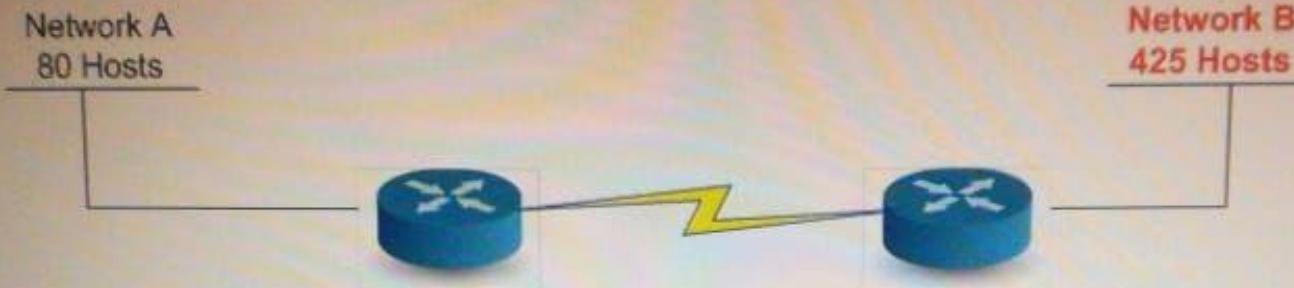
Question 21

Not yet answered

Marked out of
1.00

 Flag question

Refer to the figure. Which subnet mask will place all hosts on Network B in the same subnet with the least amount of wasted addresses?



Refer to the figure. Which subnet mask will place all hosts on network

Select one:

- A. 255.255.255.0
- B. 255.255.252.0
- C. 255.255.248.0
- D. 255.255.254.0



Question 22

1 question answered

1 question unanswered

0

Flag question

IGRP is a Cisco proprietary routing protocol that uses all routing protocols to determine the best path to a destination. Which are the default metrics for this routing protocol?

Select one:

- A. Maximum Transmission Unit
- B. Delay in line
- C. Bandwidth
- D. Link loading in bits-per-second
- E. A and B above
- F. B and C above



Online Exams

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What is the broadcast address for the network

What is the broadcast address for the network where the host 112.48.160.183/26 exists.

Answer:

Next page

1	
8	
15	
22	
29	30

Finish attempt

Time left 0



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You would like to configure IP on your

question 23

not yet answered

Marked out of

1.00

Flag question

You would like to configure IP RIP on your Cisco Router. Which of the following steps below are required to install IP RIP?

- A - Configure privilledge level password
- B - Specify the routing protocol
- C -Specify the given destination network
- D -Specify directly connected networks
- E -Configure static Rip routes

Select one:

- A All the steps are needed
- B F and D only
- C B only
- D B and D only

Next Page



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it19

Question 30

Not yet answered

Marked out of
1.00

Flag question

The routing uses the

The _____ routing uses the Dijkstra algorithm to build a routing table.

Select one:

- Path-vector
- Link-state
- None of the above
- Distance-vector

[Finish attempt](#)





Which fields are changed in an

Question 24

Not yet answered

Marked out of
1.00

Flag question

Which fields are changed in an IP header due to fragmentation?

Select one or more:

- Identification number
- Fragment Offset
- Source IP Address |
- Total Length
- More Fragments Flag
- Destination IP Address

Based on routing table shown below

Exponential Distrib...

Exponential Probab...

Binomial Probabilit...

Normal Distribution.

Question 7
Not yet answered
Marked out of 1.00

Flag question

Based on the routing table shown below, when the router receives a packet destined to traffic to?

Router#show ip route

Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
* - CDR, * - candidate default

Gateway of last resort is 10.22.18.1 to network 0.0.0.0

10.0.0.0/8 is variably subnetted, 4 subnets, 4 masks

C 10.22.18.1/24 is directly connected, FastEthernet0/0

S 10.0.0.0/8 [1/0] via 10.22.18.21

S 10.10.0.0/16 [1/0] via 10.22.18.31

S 10.10.10.0/24 [1/0] via 10.22.18.41

S 10.10.10.10/32 [1/0] via 10.22.18.51

S* 0.0.0.0/0 [1/0] via 10.22.18.1

counterclockwise

Select one:

10.22.18.1

10.22.18.41

10.22.18.21

10.22.18.51

10.22.18.0



Which is the following port

x +

omial Probabilit...

ST Normal Distribution...

ST Poisson Distributio...

ST Standar...

Online Exams

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What of the following port states are stable or reused when STP had completed convergence?

estions. Ilaga ew...

Port States

Listening

Learning

Forwarding

Blocking

Disabled

Discarding

Translating

Learning

Forwarding

Discarding

Translating

Learning

Which can be used in distance



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Question 9

Not yet answered

Marked out of
1.00

Flag question

Which can be used in distance vector routing protocols to prevent routing loops?

- A. Spanning Tree Protocol
- B. Shortest path first tree
- C. Split horizon
- D. Hold-down timers

Select one:

- Only C
- Both C and D
- Both A and D
- Only A

Which type of cable is used

Which type of cable is used to connect to a Cisco Console port?

Select one:

- TIA 568B
- Crossover
- Rollover
- Straight Through

Identify the value of

54556_677496797456665022

Exponential Probab...

Binomial Probabilit...

Normal Distribution...

Poi...



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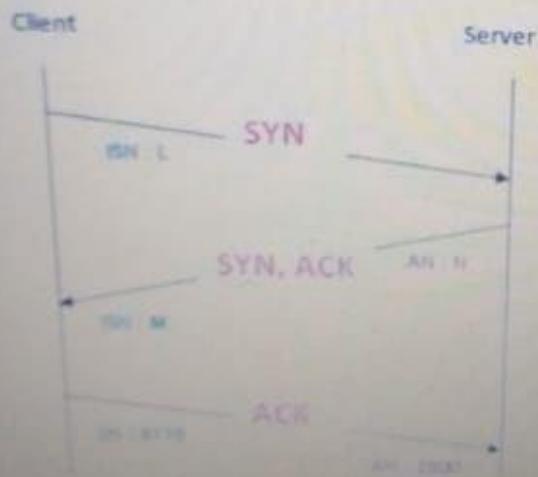
Question 9

Not yet answered

Marked out of
4.00

Flag question

Identify the values of L, M, N respectively for the following connection establishment process b



The owner of a company is concerned

X Telegram Web +

797456665022

ential Probab... ST Binomial Probabilit... ST Normal Distribution... ST Poisson Distributio...

Online Exams

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The owner of a company is concerned about security on your network and wants to make sure that no one can happen to view a configuration on your router. What command will encrypt all passwords on the router?

Select one:

- Router(config)#enable secret password
- Router(config)#service password-encryption
- Router#service password-encryption
- Router#enable secret password

Provide answers to the questions

X Telegram Web +

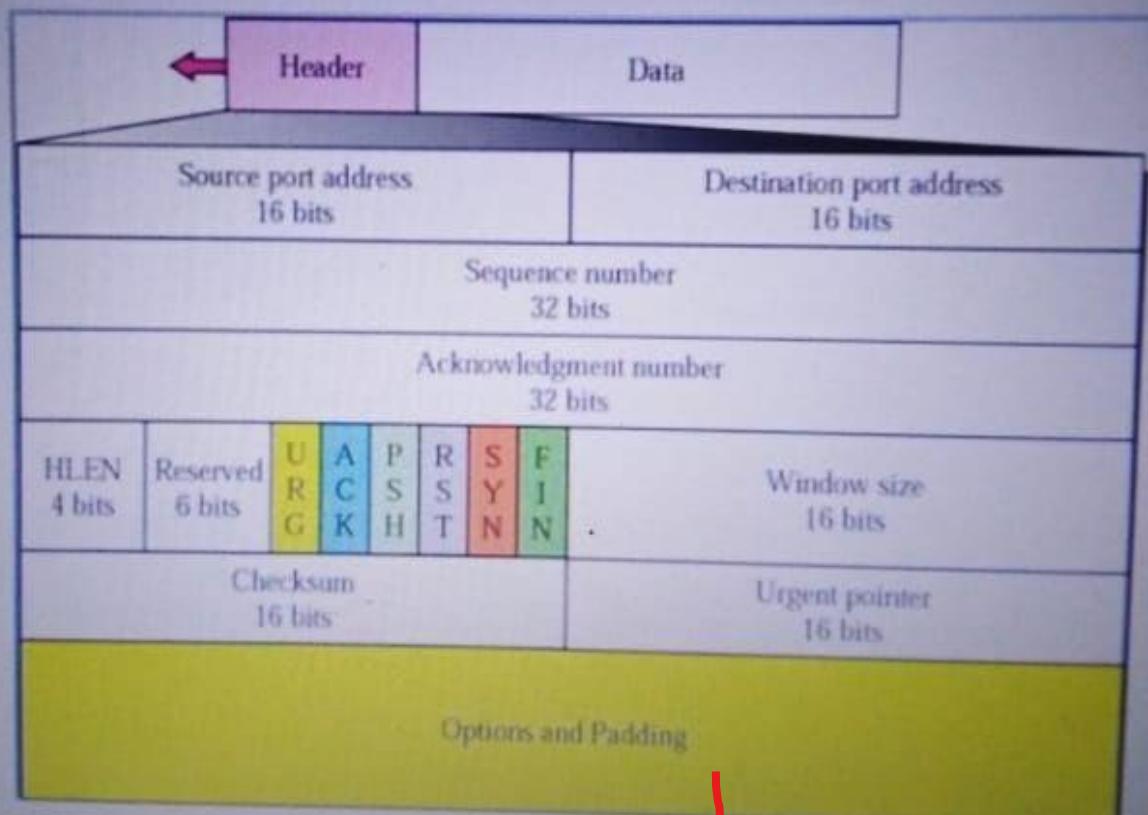
54556_677496797456665022

Exponential Probab... Binomial Probabilit... Normal Distribution... Poisson Distributio...

Provide answers to the questions given below.

9C400017000007D000000C51E0121000000000000 . . .

TCP Header Format:



1. The Acknowledgement number is (in Decimal):

2. The Sequential number is (in Decimal):

Which of the following port states

(35) WhatsApp Telegram Web

.org/#/im?p=s1494654556_677496797456665022

Exponential Distrib... Exponential Probab... Binomial Probabilit... Normal Distribution...

Sri Lanka Institute of Information Technology

Which of the following port states are stable states used when ST

Select one or more:

- Listening
- Learning
- Blocking
- Discarding
- Forwarding



Online Exams

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Question 26

Not yet answered

Marked out of
1.00

Flag question

_____ is a group of networks and routers under the authority of a single administration.

Select one:

- A. An autonomous system
- B. An area
- C. Both A and B
- D. None of the above

Is a group of networks and





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Question 27

Not yet answered

Marked out of
1.00

Flag question

Which two things can be determined by using the ping command?

Select one or more:

- The average time it takes a packet to reach the destination and for the response to return to the source
- The IP address of the router nearest the destination device
- The average time it takes each router in the path between source and destination to respond
- The number of routers between the source and destination device
- The destination device is reachable through the network

Which two things can be



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Question 28

Not yet answered

Marked out of
1.00

Flag question

What does the following command allow you to perform next?

RouterA(config)#line vty 0 3

Select one:

- Set the configurations.
- Set the console password.
- Disable console connections.
- Shut down the router.
- Set the Telnet password.

What does the following



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Question 29

Not yet answered

Marked out of
1.00

Flag question

Which of the following OSI layer is used by a Routing Protocol to determine the best path to a network?

Select one:

- Presentation
- Data Link
- Physical
- Network

Which of the following osi



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Question 30

Not yet answered

Marked out of
1.00

Flag question

If the first byte of a Datagram is 2000

Select one:

- The datagram is 2000 Bytes in size.
- The datagram has not been fragmented
- The fragmentation offset of the datagram is 2000
- The fragmentation offset of the datagram is 250.
- The fragmentation offset of the datagram is 16000

If the first byte of a



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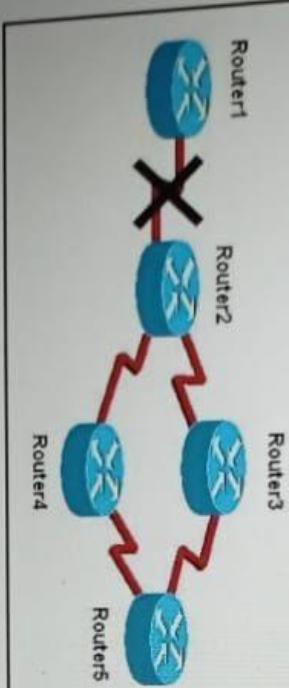
11918714 Upamad

Question 30

yet answered
marked out of
10

Flag question

The graphic shows a network that is configured to use RIP routing protocol. Router2 detects that the link to Router1 has gone down. It then advertises the network for this link with a hop count metric of 16. Which routing loop prevention mechanism is in effect?



The graphic shows a network

≡ Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	21
25	26	27	28	29
3	4	5	6	7

Finish attempt...
Time left: 001:03

Finish attempt

The following table indicates the values of the M bit and the Fragmentation Offset field of the IP header.

MF	Fragment Offset
1	0
1	$I=0$
0	$I=0$
0	0

P
Q
R
S

From the above four types of packets (denoted as P,Q,R and S) , which packet can be an unfragmented original packet with the size which is smaller than the MTU of the layer 2 ?

Select one

- S
- Q
- P
- R

The following table

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Which of the following bridge IDs wins election as root, assuming that

Select one:

- 40961 0200.1111.1111
- 4097 0200.2222.2222
- 32768 0200.1111.1111
- 4093 0200.3333.3333
- 28169 0200.5555.5555

Which of the following bridge



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Which set of commands is recommended to prevent the use of a hub in the access port of a network switch?

Select one:

- switch(config-if)#switchport mode trunk
switch(config-if)#switchport port-security maximum 1
- switch(config-if)#switchport mode access
switch(config-if)#switchport port-security mac-address 1
- switch(config-if)#switchport mode access
switch(config-if)#switchport port-security maximum 1
switch(config-if)#switchport mode trunk
witch(config-if)#s~~t~~chport port-security mac-address 1

Which set of commands is recommended

An IP packet contains 3800 bytes of standard header and data. Identification number of this IP packet is 25200. Ethernet protocol is used in the Data Link Layer and the MTU of the Ethernet frame is 1500 bytes.

How many IP Fragments are created?

Select one:

- 3
- 2
- 5
- 1
- 4

An ip packet contains

Next page

3

Session 10

Set 1: IP Header and Fragmentation

Question 10

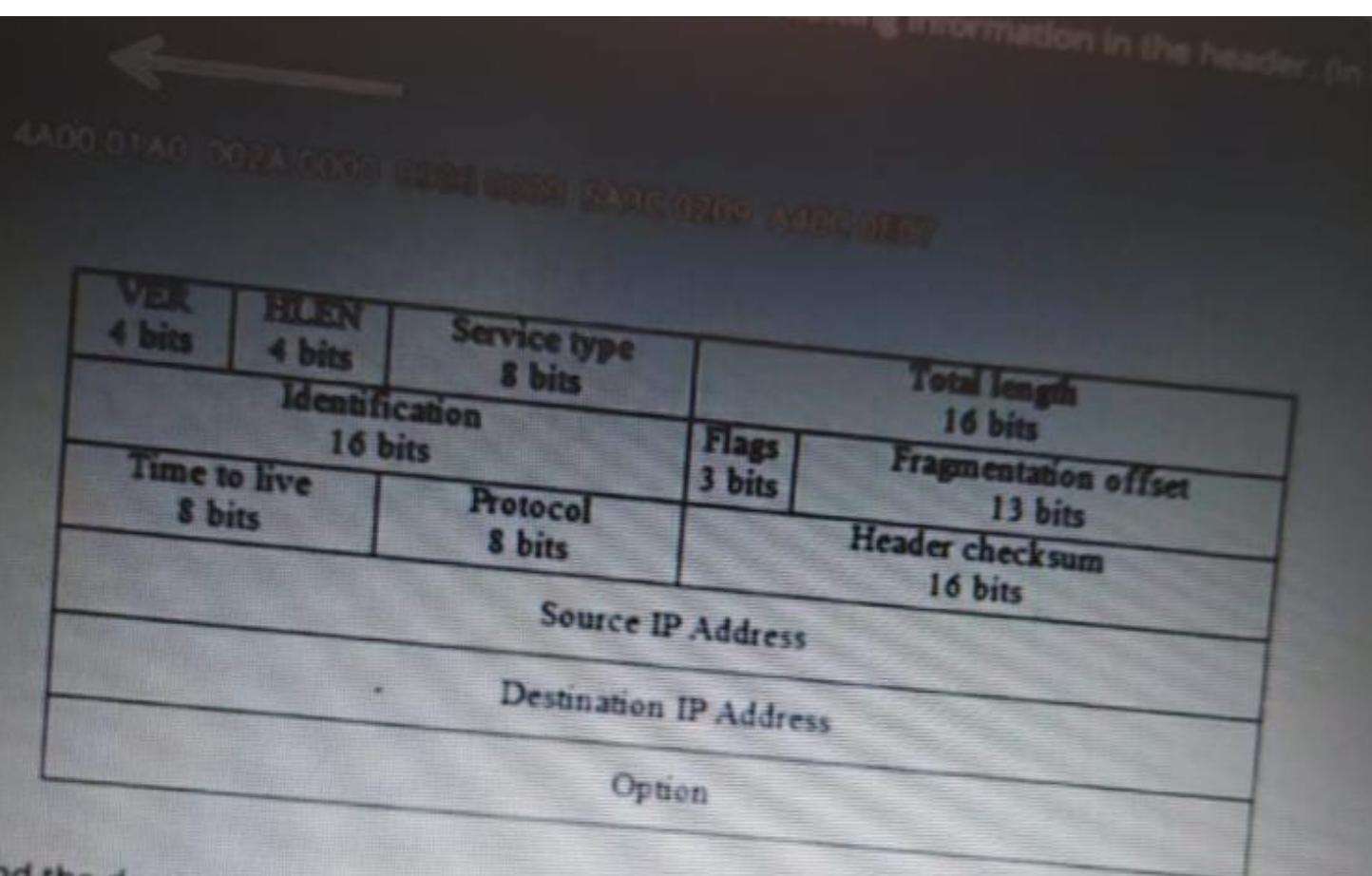
The following table indicates the values of the M bit and the Fragmentation Offset field of the IP header.

MF	Fragment Offset
1	0
1	1=0
0	1=0
0	0

- P
- Q
- R
- S

From the above four types of packets (denoted as P, Q, R and S), which packet can be an unfragmented original packet with the size smaller than the size of the layer 2?

The following



Find the destination network address.

Select one:

164.12.14.7

90.0.0.0

90.60.2.9

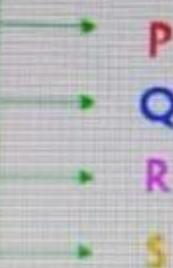
164.12.0.0

90.638.1

Find the destination network

The following table indicates the values of the M bit and the Fragmentation Offset field of the IP header.

MF	Fragment Offset
1	0
1	$f=0$
0	$f=0$
0	0



From the above four types of packets (denoted as P,Q,R and S) , which packet can be an unfragmented original packet with the size which is smaller than the MTU of the layer 2 ?

Select one:

The following table

5

0

P



Online Exams

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4

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estion

Identify the purpose of ICMP?

Identify the purpose of icmp

Select one:

Send error and control messages

Collision detection

Transporting routing updates

Avoiding routing loops

A device has the IP address of 192.168.20.166/27.

What is the last usable IP address of the network of the above?

Select one:

- 192.168.20.254
- 192.168.20.158
- 192.168.20.191
- 192.168.20.159
- 192.168.20.255
- 192.168.20.190

A device has the ip address

A router with a Maximum Transmission Unit (MTU) of 196 bytes has received an IP packet of size with an IP header of length 20 bytes. Some values of the fields in the IP header of the fragments are given below.

**Fragment
Offset**

20	176
----	-----

0

20	176
----	-----

22

20	148
----	-----

44

What is the HLEN of the IP Header of the second fragment?

Select one:

- 5
- 20
- 176
- 44
- 4
- 160

A router with a ma

ANSWER

In distance vector routing, each node periodically shares its routing table with _____.

Select one:

- Every other node
- Its immediate neighbours
- One neighbour
- Selected Multiple Neighbours

In a distance vector routing , each node



Online Exams

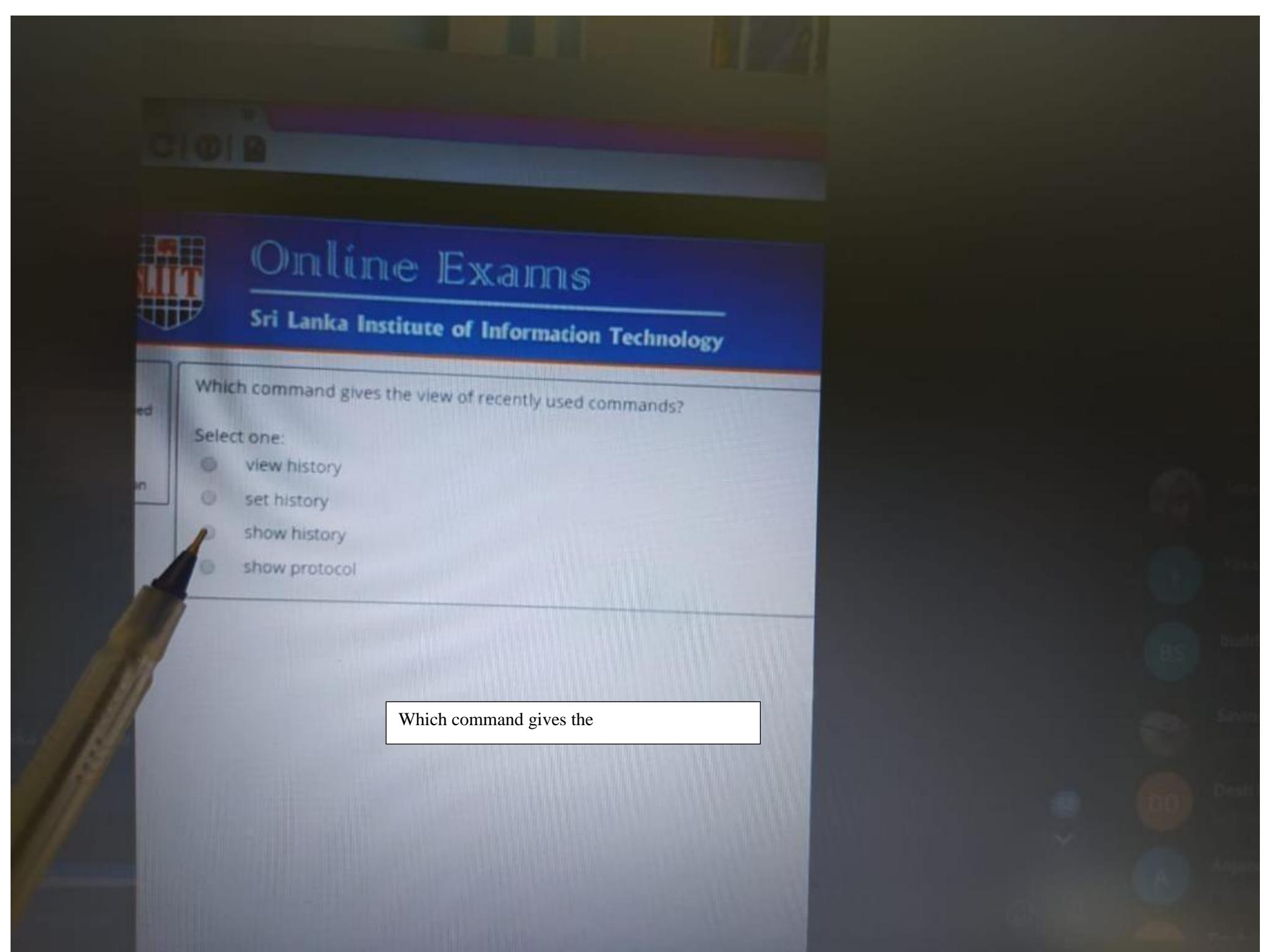
Sri Lanka Institute of Information Technology

Which command gives the view of recently used commands?

Select one:

- view history
- set history
- show history
- show protocol

Which command gives the



The following table indicates the values of the M bit and the Fragmentation Offset field of the IP header.

MF	Fragment Offset	
1	0	P
1	$f \neq 0$	Q
0	$f \neq 0$	R
0	0	S

From the above four types of packets (denoted as P,Q,R and S) , which packet can be an unfragmented original packet with the size which is smaller than the MTU of the layer 2 ?

Select one:

- A
- B
- C
- D

The following table



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Question 4

yet answered

Marked out of

0

Flag question

You are a system administrator and you want to deny access to a group of computers with addresses 172.30.16.0 to 172.30.3. What wildcard mask would you use?

Select one:

- 0.0.255.255
- 0.0.255.255
- 0.0.127.255
- 0.0.31.255
- 0.0.15.255

You are a system administrator

Online Exams

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9
answered
1 out of
question

Which of the following is NOT true about Network Switches?

Select one:

- They divide networks into segments.
- They are able to choose the best route to a remote destination.
- They do not allow frames that are destined for the local network to cross the Router.
- They filter frames by inspecting MAC addresses.

Which of the following is not



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Question 5

yet answered

marked out of

flag question

Which statement(s) about IPv4 and IPv6 addresses are true?

1. An IPv6 address is 32 bits long, represented in hexadecimal.
2. An IPv6 address is 128 bits long, represented in decimal.
3. An IPv4 address is 32 bits long, represented in decimal.
4. An IPv6 address is 128 bits long, represented in hexadecimal.

Select one:

- 1 and 2
- 1 and 3
- 3 and 4
- 2 and 4

Which statement(s) about



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9
Powered
by
of
Question

A Company has the 210.106.14.0 /24 network. How many usable subnetworks and usable host addresses this would provide?

Select one:

- 4 networks with 64 hosts
- 1 network with 254 hosts
- 6 networks with 30 hosts
- 2 networks with 128 hosts

A company has the

Next page

Online Exams

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----- Is an interdomain routing protocol using distance vector routing.

Select one:

- BGP
- RIP
- OSPF

None of the above

Is an interdomain routing protocol using

Consider classful addressing and

broadcast address of 25.10.100.200.

Select one:

- 25.0.0.0
- 25.10.100.255
- 25.255.254.255
- 25.255.255.255



Which of the following is NOT true about Network Switches?

Select one:

- They filter frames by inspecting MAC addresses.
- They divide networks into segments.
- They do not allow frames that are destined for the local network to cross the Router.
- They are able to choose the best route to a remote destination.

Which of the following is



network final paper 2... x | (36) WhatsApp x | Telegram Web x +

■ web.telegram.org/#/im?p=s14946S4556_677496797456665022

CourseWeb | Sri L... Exponential Distrib... Exponential Probab... Binomial Probabilit... Normal Distribution... Poisson Distrib...

Online Exams

Sri Lanka Institute of Information Technology

What is the subnet mask on subnet15 given a prefix notation of 12.0.0.0/12?

Select one:

- 255.255.0.0
- 255.240.0.0
- 12.47.255.255
- 255.255.13.0

What is the subnet mask

ASUS

pp

X Telegram Web

554556_677496797456665022

rib... Exponential Probab... ST Binomial Probabilit... ST Normal Distribution...

 Online Exams
Sri Lanka Institute of Information Tech

If the first byte of a Datagram is 4000

Select one:

- The fragmentation offset of the datagram is 32000
- The fragmentation offset of the datagram is 4000
- The fragmentation offset of the datagram is 500
- The datagram has not been fragmented
- The datagram is 2000 Bytes in size.

If the first byte of a datagram

Photo 355 of 356

Online Exams

Sri Lanka Institute of Information Technology

Consider a TCP client and a TCP server running on two different machines. If the client terminates the connection and a _____P_____ segment is sent to the server, which is received by the client-side TCP.

Identify 'P' and 'Q' respectively

Select one:

- FIN & FIN
- FIN & RST
- FIN & ACK
- ACK & FIN
- FIN & FIN+ACK

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12:11 PM

Photo 319 of 558

www.snapdeal.com



A device has the IP address of 192.168.20.166/26.
What is the last usable IP address of the network of the above device?

Select one:

- 192.168.20.190
- 192.168.20.159
- 192.168.20.158
- 192.168.20.254
- 192.168.20.191
- 192.168.20.255

A device has the ip address of

556_677496797456665022

Exponential Probab...

Binomial Probabilit...

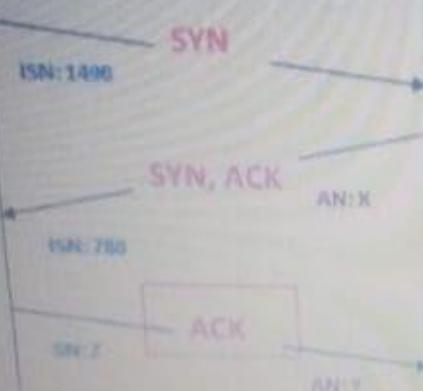
Normal Distribution...

Poisson

Moodle

→ X C O I A

Flag question

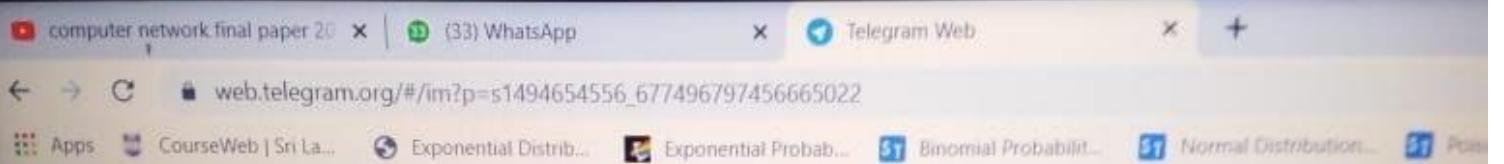


The Common Handshake of TCP

SYN - Synchronizes sequence numbers
ACK - Acknowledges sequence number
FIN - Finishes the connection

SYN - Hoses the connection
ACK - Acknowledges sequence number
FIN - Finishes the connection

SYN ACK FIN SYN FIN



Online Exams

Sri Lanka Institute of Information Technology

Find the sub-network address for the IP address of 201.14.78.65 and the subnet mask 255.255.255.128.

Select one:

- 201.14.78.64
- 201.14.78.255
- 201.14.78.95
- 201.14.78.124

Find the subnet network

Photo 245 of 550

ASUS

n.org/#/im?p=s1494654556_677496797456665022

x | (32) WhatsApp x Telegram Web x +

Exponential Distrib... Exponential Probab... Binomial Probabilit... Normal Distribution...

COLLEGE OF INFORMATION TECHNOLOGY

Which statement(s) about IPv6 addresses is/are true?

1. Leading zeros are required.
2. Two colons (:) are used to represent successive hexadecimal fields.
3. Two colons (:) are used to separate fields.

Select one:

Which statement about ipv6

- 1 Only
- 2 Only
- 2 and 3 Only
- 1 and 3 Only
- 1 and 2 Only

Photo 730 of 500



Online Exams

Sri Lanka Institute of Information Technology

Question 4

Not yet answered

Marked out of
1.00

Flag question

Which is not a valid type of routing

Select one:

- Default routing
- Custom routing
- Static routing
- Dynamic routing

Which is not valid



QUESTION

Sri Lanka Institute of Information Technology

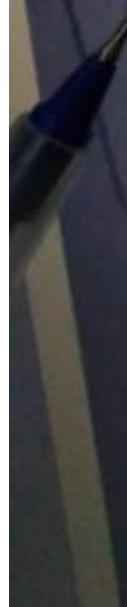
Which can be used in distance vector routing protocols to prevent routing loops?

- A. Spanning Tree Protocol
- B. Shortest path first tree
- C. Split horizon
- D. Hold-down timers

Select one:

- Both C and D
- Only A
- Only C
- Both A and D

Which can be used in



Which of the following statements is/are true about metrics used in routing p

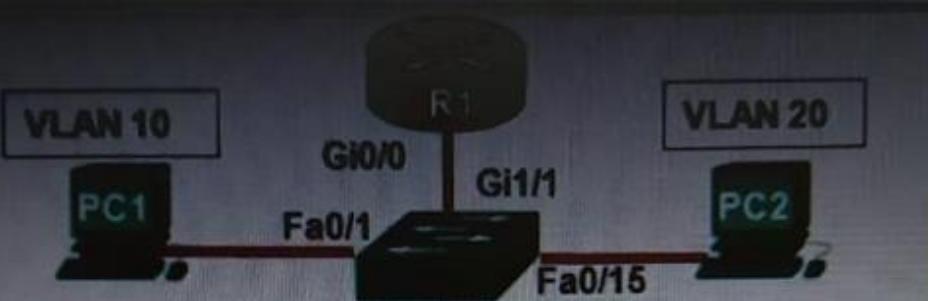
- A - A metric is the administrative distance of a routing protocol
- B - A metric is a measure of trustworthiness of a routing protocol
- C - A metric is a measure of trustworthiness of a route

Select one:

- C only
- A only
- B only
- A and C only
- A and B only

Which of the following statements

QUESTION 1
A network administrator is verifying the configuration of interface Gi0/0 on router R1 and finds out that PC1 cannot communicate with PC2.



```
R1# show running-config

interface GigabitEthernet0/0
no ip address
!
interface GigabitEthernet0/0.5
encapsulation dot1Q 5
ip address 172.16.10.254 255.255.255.0
!
interface GigabitEthernet0/0.20
encapsulation dot1Q 20
ip address 172.16.20.254 255.255.255.0
!
<output omitted>
```

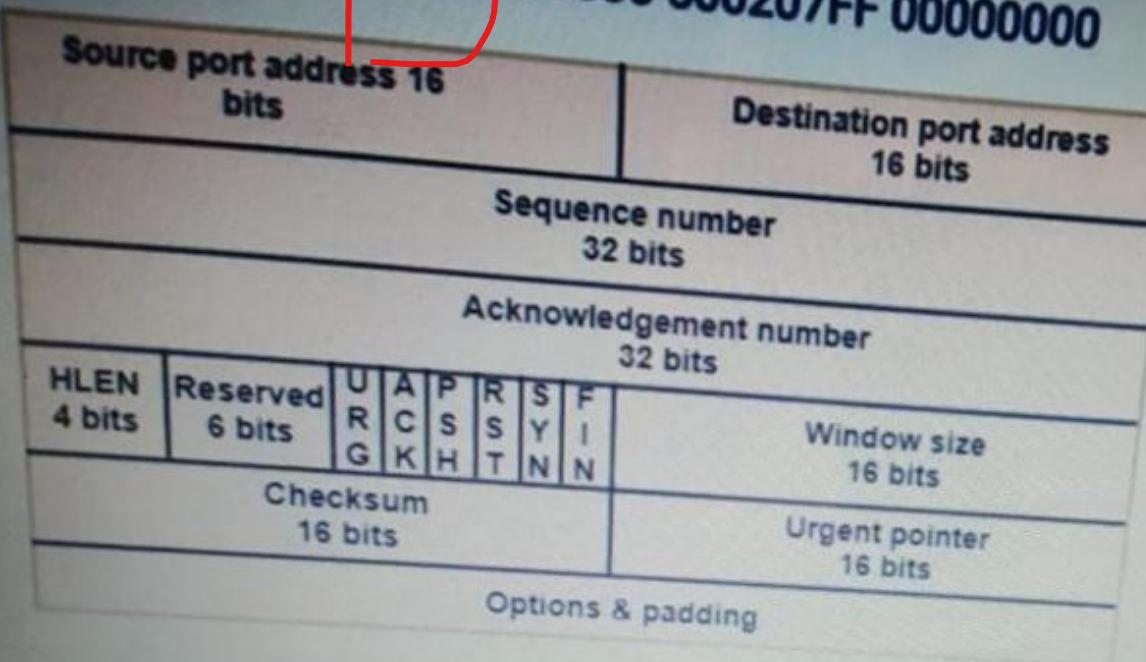
cause of the problem?

Select one:

- There is no IP address configured on the interface Gi0/0
- The encapsulation dot1Q 5 command contains the wrong VLAN
- The no shutdown command is not entered on subinterfaces
- Gi0/0 is not configured as a trunk port
- The command interface GigabitEthernet0/0.5 was entered incorrectly

Cause of the problem

05320017 00000001 00000000 500207FF 00000000



What is the destination port number in Decimal ?

What is the destination port

23



Online Exams

Sri Lanka Institute of Information Technology

In which of the following modes in Cisco's IOS can issue show commands normally?

Select one:

- Privileged
- Interface Configuration
- Line Configuration
- User and Privileged
- Global Configuration
- USER

In which of the following modes

Identify the values of X,M,Z respectively for the following connection

Client

Server

SN : 1200
AN : L

FIN

SN : 1490

AN : X

ACK

SN : M

AN : Y

FIN

SN : N

AN : Z

ACK

1 2 3 4 5 6 7 8 9 0

Select one:

Identify the values of

1201,1491,1492

1491,1201,1491

1491,1201,1492

1201,1201,1492

1291,1201,1491

23

4:05 PM

Rashi Perera 

SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

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Which TCP based timer/timers prevents a long idle connection?

Select one or more:

Persistence

Keepalive

Retransmission

Time waited

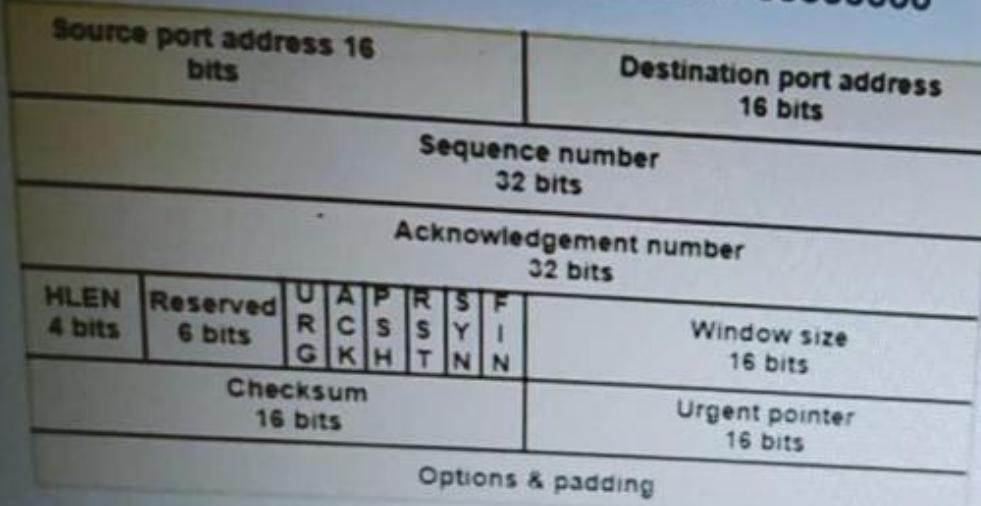
Which TCP based timer/timers

Please help

SHAN

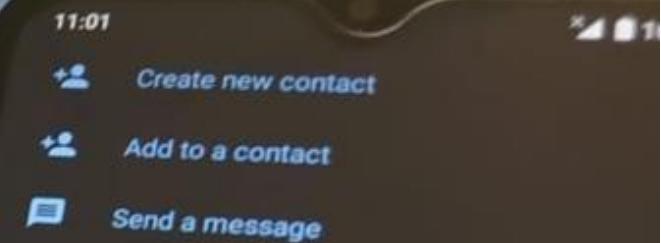
The following is a dump of a TCP header in hexadecimal format.

05A50017 00000001 00000000 500207FF 00000000



What is the source port number in Decimal ?

What is the port source port number



Which of the following statement/s is/are TRUE regarding the Spanning Tree Algorithm?

Select one or more:

- STP (Spanning Tree Protocol) automatically removes layer 2 switching loops by creating the redundant links.
- A designated port is the port that has the lowest port cost value to get on a given network, compared to other ports on that segment.
- The Root port is the port that directly connects to the Root Bridge, or has the shortest path to the Root Bridge.
- A non-designated port is a port that has the higher port cost than the designated port. STP marks the non-designated port as the forwarding port.
- Path cost is an accumulated value of the port costs from the Root Bridge to other switches in the network

Which of the following statements/is/are

Consider classful address

Consider classful addressing and choose the broadcast address of 25.10.100.200.

Select one:

- 25.0.0.0
- 25.10.100.255
- 25.255.254.255
- 25.255.255.255

Question 26

Not yet answered

Marked out of 2.0

9%
Flag question

The following is a dump of a TCP header in hexadecimal format.

05A50017 00000001 00000000 D00207FF 00000000

Source port address 16 bits		Destination port address 16 bits	
Sequence number 32 bits			
Acknowledgement number 32 bits			
HLEN 4 bits	Reserved 5 bits	U A P R S F R G S S Y I G M H T H H	Window size 16 bits
Checksum 16 bits		Urgent pointer 16 bits	
Options & padding			

The following is a dump of a

What is the value of the window field in bytes (in decimal) ?

Answer:

2047

- a) Discuss the advantages of UDP over TCP protocol. (4 Marks)
- b) Briefly explain the Well-known port numbers including the number range. (3 Marks)
- c) Explain how a client TCP process goes through different states when establishing a connection with a server and exchange data and terminate the connection. Start from the CLOSED state. (5 Marks)
- d) Briefly explain 'Time-Waited' timer. (4 Marks)
- e) Briefly explain the three situations in which the Reset control field in the TCP header ("Reset" control field is set to 1) is used. (4 Marks)

essay

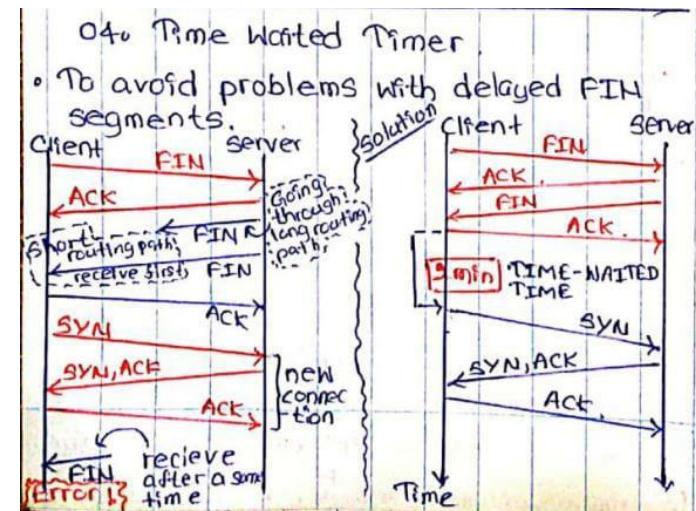
Discuss the advantages

UDP is faster than TCP and broadcast and multicast transmission are available with udp.
UDP dont need Connection establishment

a.

port number ranging 0-1023 called as well Known port numbers.Well known ports use to identify a network service on a private ip network or public internet

- a) UDP is faster, simpler and more efficient than TCP
 UDP is light weight
 UDP supports Broadcasting, but TCP is not.
- b) Port numbers from 0 to 1023 are reserved for common TCP/IP applications and are called well-known ports.
 The use of well-known ports allows client applications to easily locate the corresponding server application processes on other hosts.
 (it assigned for Standard Server Processes.)
- c) server and client starting from close state
 client send SYN to server.
 then client become SYN_SENT state
 when server received SYN server become SYN_RCVD state.
 server send SYN,ACK to the client.
 when client receive SYN,ACK client become ESTABLISHED state.
 then client send ACK to the server.
 then server also become ESTABLISHED state.
- d) Time-waited timer :- used to avoid problems with delayed FIN segments.
- e) request for an unidentified port.
 client or server has a problem
 the other side TCP is idle for a long time



D)

You have typed the command **clock** on a Cisco router and pressed enter/return you received the response as follows:

% Incomplete command.

How can you receive help on this command?

You have typed the command

Select one:

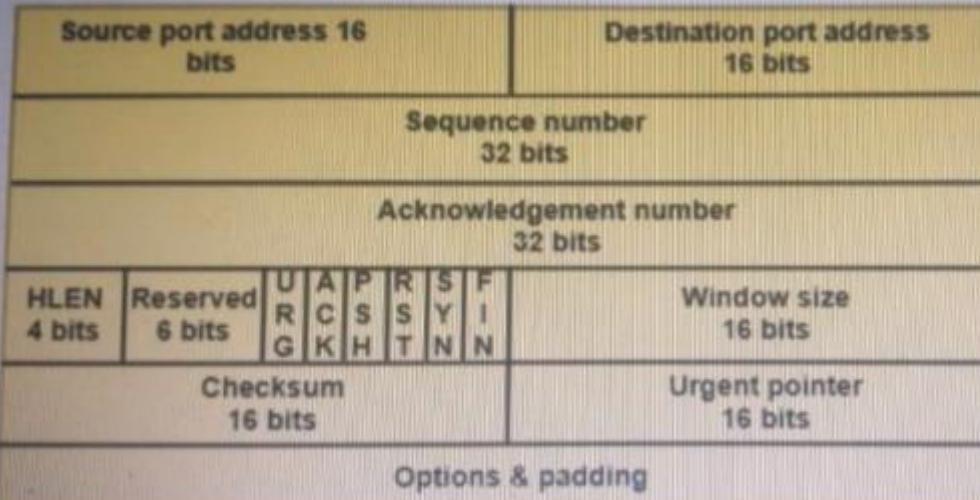
- Type "help" followed by the command to see the command parameter
- Enter a question mark to display all console commands
- Type "history" to review the prompt before the error
- Re enter the command followed by a question mark to view key words

The following is a dump of a TCP header in hexadecimal format.

05A50017 00000001 00000000 D00207FF 00000000

The following is a dump of

size



22

What is the size of the options field in Bytes (in Decimal) ?

What does a VLAN do?

What does vlan do

Select one or more:

- Provides multiple collision domains on one switch port
- Provide network segmentation
- Acts as the fastest port to all servers
- Breaks up broadcast domains in a layer 2 switch internetwork
- Breaks up collision domains in a layer 2 switch internetwork

Which set of commands is recommended to prevent the use of a hub in the access port of a network switch?

Select one:

- switch(config-if)#switchport mode trunk
switch(config-if)#switchport port-security maximum 1
- switch(config-if)#switchport mode trunk
switch(config-if)#switchport port-security mac-address 1
- switch(config-if)#switchport mode access
switch(config-if)#switchport port-security mac-address 1

Which set of commands is

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

Select one:

- TOS
- Identification Number
- Offset
- Flags

Which of the following field

Five employees in the production department work on different shifts with their laptops and share the same Ethernet port in the network switch of the office. Which set of commands would allow only these laptops to use the Ethernet port and create violation log entry without shutting down the port if a violation occurs?

Select one:

- switchport port-security maximum 5
switchport port-security mac-address sticky
switchport port-security violation protect
- switchport mode access
switchport port-security maximum 5
switchport port-security mac-address sticky
- switchport mode access
switchport port-security
switchport port-security maximum 5
switchport port-security mac-address sticky
switchport port-security violation restrict
- switchport mode access
switchport port-security
- switchport port security
switchport mode access
switchport port-security maximum 5
switchport port-security mac-address sticky
switchport port-security violation protect

Five employees in the

College of Information Technology

Which of the following bridge IDs wins election as root, assuming that the switches with these bridge IDs are in the same network?

Select one:

- 32769:0200.1111.1111
- 4097:0200.1111.1111
- 32769:0200.2222.2222
- 40961:0200.1111.1111
- 4097:0200.2222.2222

Which of the following

Which of the following port states are stable states used when STP has completed convergence?

Select one or more:

- Discarding
- Listening
- Blocking
- Forwarding
- Learning

Which of the following port states are stable

Start typing here...

An organization has a class B network and wishes to form subnets for 64 departments. The subnet mask would be:

Select one:

- 255.255.3.0
- 255.255.64.0
- 255.255.252.0
- 255.255.0.0

255.255.252.0

An organization has a class b

Q1. Which of the following IEEE 802.1D port states are stable states used when STP has completed convergence? (Choose three answers.)

- a. Blocking ✓
- b. Forwarding ✓
- c. Listening
- d. Learning
- e. Discarding

Which of the following ieee

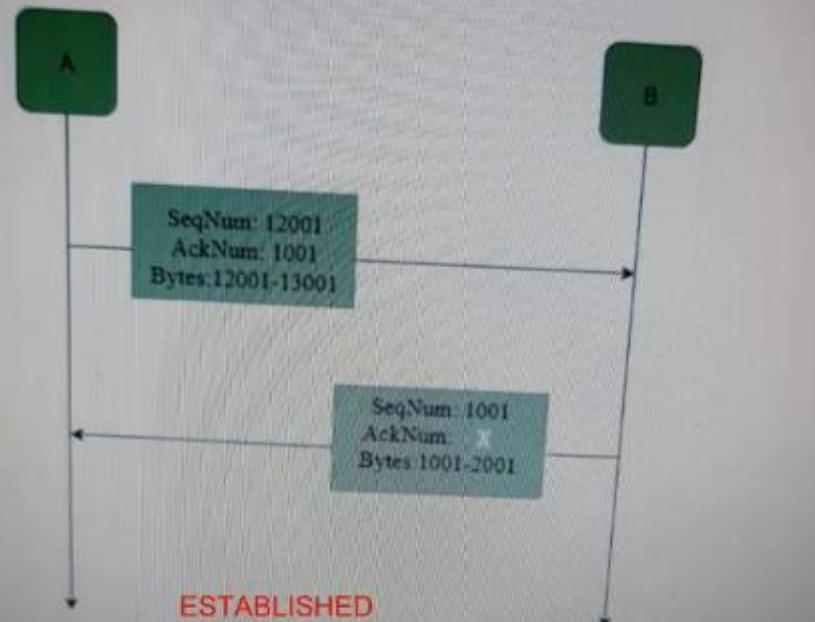
How many Access Control Lists are allowed per Router Interface ?

Select one:

- One standard ACL and One Extendard ACL
- Unlimited
- Two per port , per direction
- One per port , per direction

How many access control lists

Machine A and B of the following diagram is in which TCP state ?



Select One

ESTABLISHED

CLOSE_WAIT

TIME_WAIT

LISTEN

SYN_RECV

SYN_SENT

Machine a and b

Which of the following VTP modes allow VLANs to be configured on a switch?

Select one or more:

- Server
- Dynamic
- Static
- Transparent
- Client

Which of the following VTP modes allow VLANs to be configured on a switch?

Server
client or transport

Which of the following statements about ACLs is/are true?

Select one or more:

- ACLs will check the packet against all entries looking for a match. ✓
- ACLs go bottom-up through the entries looking for a match ✗
- An ACL must have at least one permit action, else it just blocks all traffic. ✗
- ACLs go top-to-bottom through the entries looking for a match ✓
- An ACL has an implicit permit at the end of ACL. ✗

Which of the following statements

A network administrator is using the router-on-a-stick method to configure inter-VLAN routing. Switch port Gi1/1 is used to connect to the router. Which command should be entered to prepare this port for the task?

Select one:

- Router(config)# switchport mode trunk
- Switch(config)# interface gigabitethernet 1/1
Switch(config-if)# switchport mode Access
Switch(config-if)# switchport Access VLAN ALL
- Router(config)# interface gigabitethernet 1/1
Router(config-if)# switchport mode trunk
- Switch(config)# interface gigabitethernet 1/1
Switch(config-if)# switchport mode trunk
- Switch(config)# switchport mode trunk

A network administrator

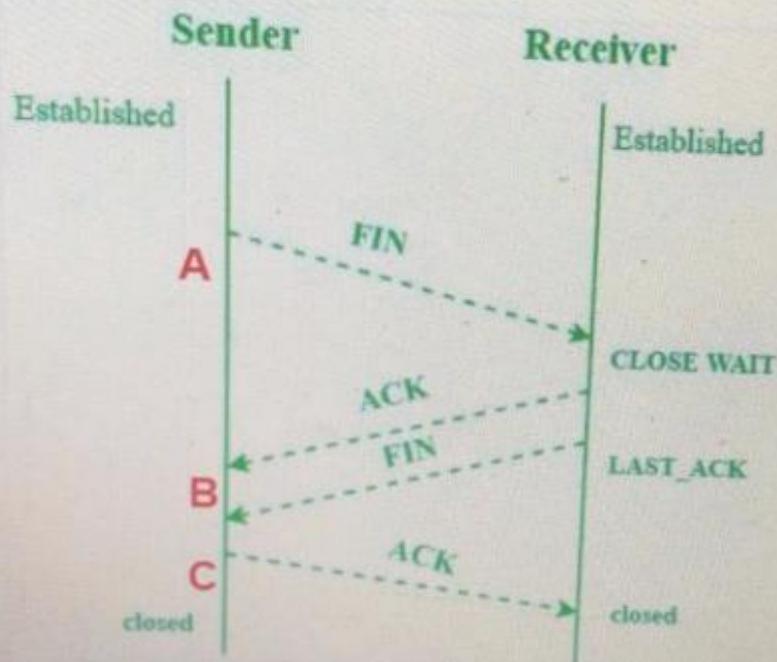
A network administrator needs to configure a standard ACL so that only the workstation of the administrator with the IP address 192.168.15.23 can access the virtual terminal of the main router. Which two configuration commands can achieve the task?

Select one or more:

- Router1(config)# access-list 10 permit 192.168.15.23 0.0.0.255
- Router1(config)# access-list 10 permit 192.168.15.23 255.255.255.255
- Router1(config)# access-list 10 permit 192.168.15.23 0.0.0.0
- Router1(config)# access-list 10 permit host 192.168.15.23
- Router1(config)# access-list 10 permit 192.168.15.23 255.255.255.0

A network administrator needs

Identify the TCP State denoted by "A".



Identify the tcp state

Select one:

- TIME_WAIT_1
- FIN_WAIT_2
- TIME_WAIT
- FIN_WAIT_1

FIN_WAIT_1

A device has the IP address of 192.168.20.166/27.

What is the last usable IP address of the network of the above device?

Select one:

- 192.168.20.190
- 192.168.20.191
- 192.168.20.255
- 192.168.20.159
- 192.168.20.254
- 192.168.20.158

A device has the



Match the correct TCP Timers for P,Q and R respectively.

P - To deal with a zero-window-size deadlock situation, TCP uses this timer. When the sending TCP receives an acknowledgment with a window size of zero, it starts this timer.

Q - This timer is used to prevent a long idle connection between two TCPs.

R - This timer starts after sending the last Ack for 2nd FIN and closing the connection.

Select one:

- Retransmission , Time-waited , Keepalive
- Retransmission , Keepalive , Time-waited
- Persistance , Keepalive , Time-waited
- Persistance , Time-waited , Keepalive
- Retransmission , Keepalive , Persistance

Match the correct tcp

```
+++++
01:11:12: %PM-4-ERR_DISABLE: psecure-violation error detected on Fa0/8, putting Fa0/8 in err-disable state
01:11:12: %PORT_SECURITY-2-PSECURE_VIOLATION: Security violation occurred, caused by MAC address 0011.a0d4.12a0 on port
FastEthernet0/8.
01:11:13: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/8, changed state to down
01:11:14: %LINK-3-UPDOWN: Interface FastEthernet0/8, changed state to down
+++++
```

Which of the following cause the above error message to appear?

Which of the following cause

Select one:

- Port security was enabled on the switch port, and an unauthorized connection was made on switch port Fa0/8 by device 0011.a0d4.12a0
- An unauthorized user tried to telnet to the switch through switch port Fa0/8
- Another switch was connected to this switch port with the wrong cable
- Port security was enabled on the switch port, and an unauthorized connection was made on switch port Fa0/8 by unknown device
- NAT was enabled on a router, and a private IP address arrived on switch port Fa0/8
- A host with an invalid IP address was connected to a switch port that was previously unused

Which of these is not applicable for IP protocol ?

Select one or more:

Which of these is not

- Connection-less
- Connection - Oriented ✓
- Does not offer error reporting
- Offer reliable service ✓
- Operate at the layer 4 ✓
- Offer unreliable service



Which of the following access-list commands permit packets going from host 10.1.1.1 to all web servers whose IP addresses begin with 172.16.5?

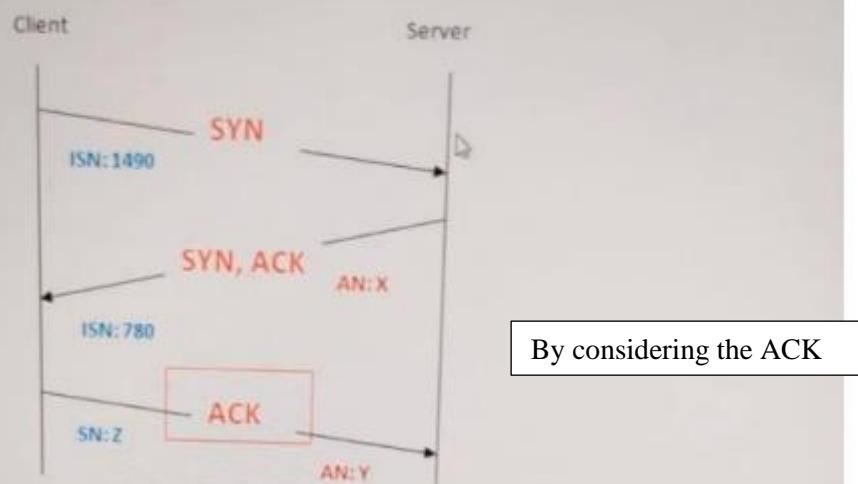
Select one or more:

Which of the following access-list

- access-list 101 permit tcp host 10.1.1.1 172.16.5.0 0.0.0.255 eq www
- access-list 23 permit tcp host 10.1.1.1 eq www 172.16.5.0 0.0.0.255
- access-list 101 permit tcp host 10.1.1.1 172.16.5.0 0.0.0.255 eq http
- access-list 25 permit ip host 10.1.1.1 eq www 172.16.5.0 0.0.0.255
- access-list 101 permit ip host 10.1.1.1 172.16.5.0 0.0.0.255 eq www
- access-list 1951 permit ip host 10.1.1.1 172.16.5.0 0.0.0.255 eq 80
- access-list 1951 permit ip host 10.1.1.1 172.16.5.0 0.0.0.255 eq www



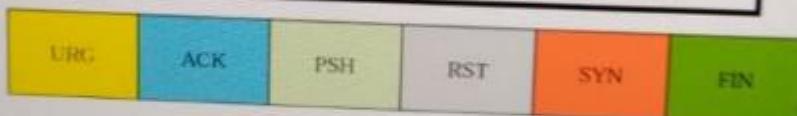
By considering the ACK segment (marked in red colour box) below, identify the connection establishment process between a client and a server.



The Control fields of TCP header.

URG: Urgent pointer is valid
ACK: Acknowledgment is valid
PSH: Request for push

RST: Reset the connection
SYN: Synchronize sequence numbers
FIN: Terminate the connection



Select one:

- 000010
- 000001
- 010000
- 001010

An IP Packet/ Datagram has arrived with the following information in the header. (in hexadecimal)



4A00 0019 002A 0000 0906 0000 5A3C 0209 440C 0E07

Find the size of the Data field? (in Bytes)

VER 4 bits	HLEN 4 bits	Service type 8 bits	Total length 16 bits
Identification 16 bits	Flags 3 bits	Fragmentation offset 13 bits	
Time to live 8 bits	Protocol 8 bits	Header checksum 16 bits	
Source IP Address			
Destination IP Address			
Option			



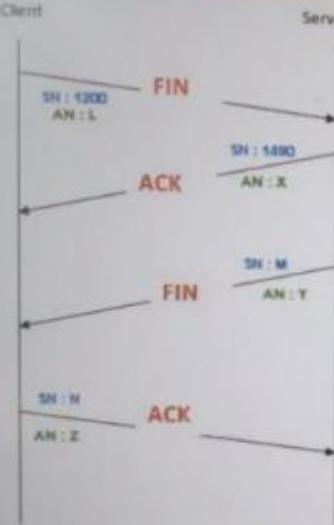
Select one:

- 25
- 19
- 65
- 41
- None of the Above

An ip packet

QUESTION
Not yet answered.
Marked out of 2.0
Flag question

Identify the values of M,N,Q,L respectively for the following connection termination process between a client and a server.



Identify the values or

L - 1490
X - 1491
M - 1491
Y - 1201
N - 1201
Z - 1492

Select one:

- 1491,1201,1491
- 1201,1201,1492
- 1201,1201,1491
- 1491,1201,1492
- 1201,1491,1492

≡ Quiz navigation

Finish attempt...

Time left 1:48:04

MULTIPLE CHOICE QUESTIONS

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28

ESSAY TYPE QUESTIONS

31	32
----	----

FEEDBACK

33

Consider a TCP client and a TCP server running on two different machines. After completing data transfer, the TCP client calls close to terminate the connection and a _____P_____ segment is sent to the TCP server. Server-side TCP responds by sending an _____Q_____ which is received by the client-side TCP.

Identify 'P' and 'Q' respectively

Select one:

- FIN & ACK
- FIN & RST
- ACK & FIN
- FIN & FIN+ACK
- FIN & FIN

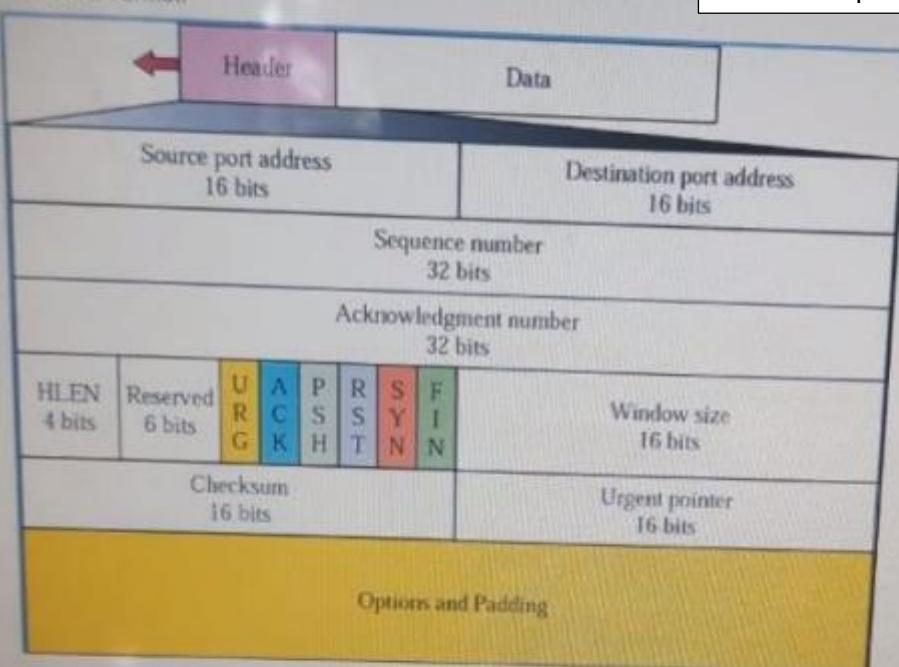
Consider a tcp client

PROVIDE ANSWERS TO THE QUESTIONS GIVEN BELOW.

9C40001700007D000000C51E0121000000000000....

TCP Header Format:

The source port number is



1. The source port number is (in Decimal): **40000**

2. The destination port number is (in Decimal): **23**

DELL