

NetExam
Sri Lanka Institute of Information Technology

it20167

Question 1
Not yet answered
Marked out of 1.00
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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. Only one static route with FastEthernet0/0 exit interface.

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
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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

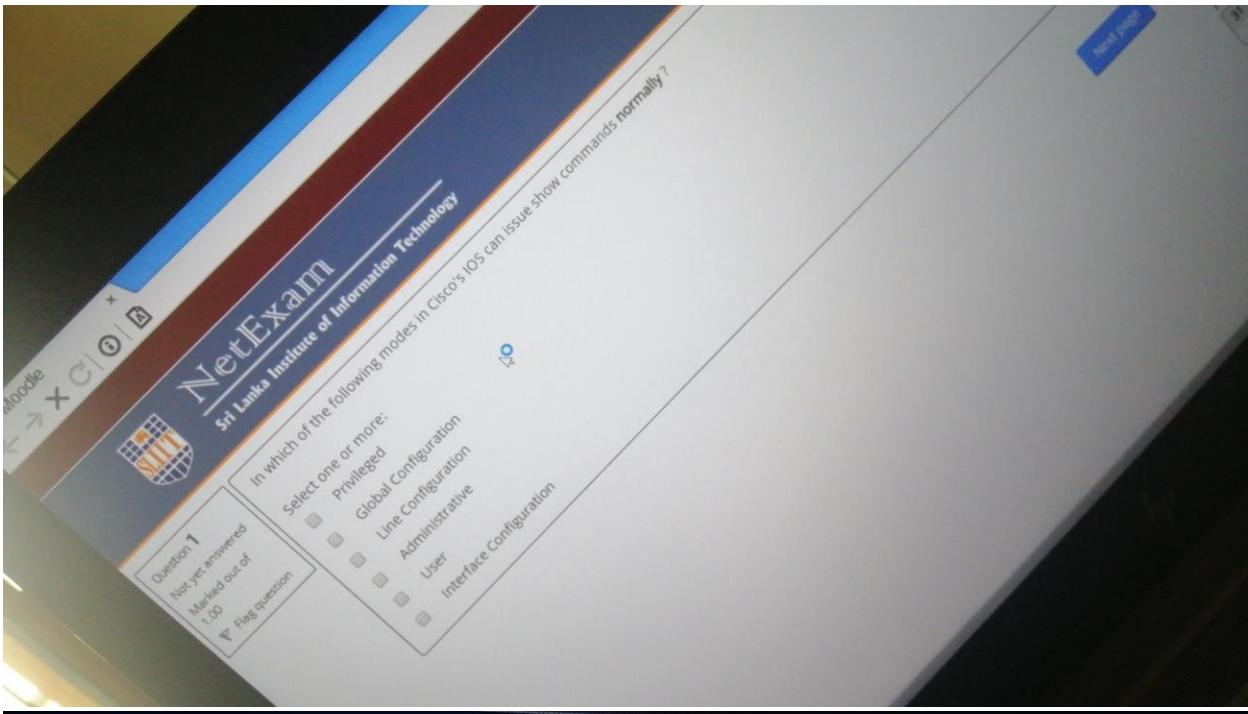
Router1#

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. Default route is 172.16.0.0/16.
 D. Three networks directly connected to Router1.

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Select the incorrect statement/s.

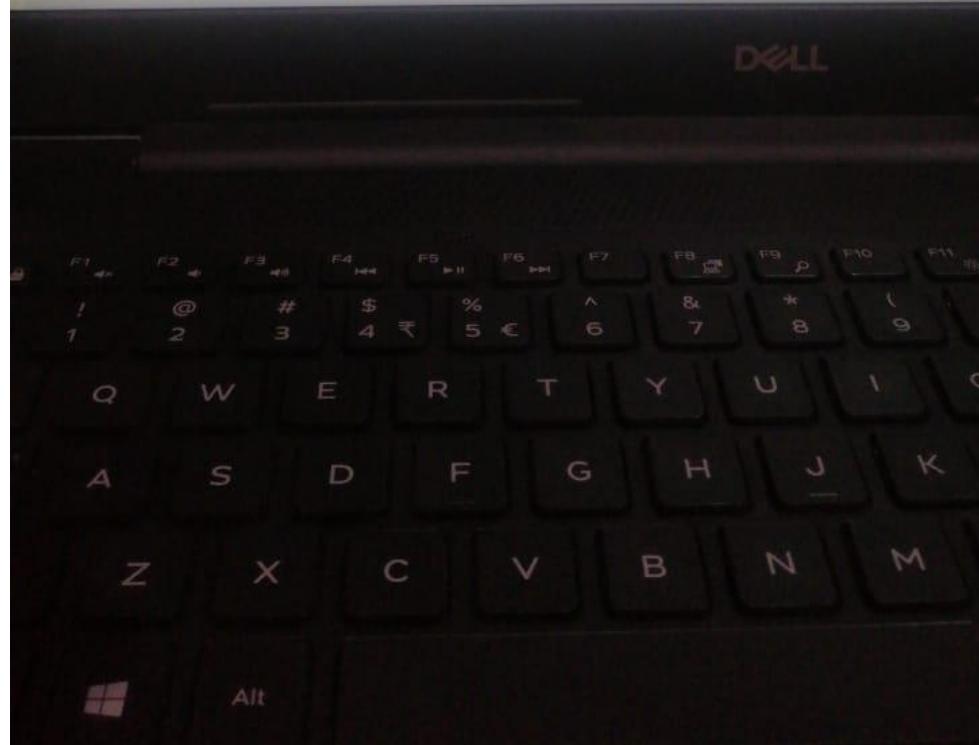
Select one or more:

- IPv4 was developed to overcome many deficiencies of IPv6
- IPv6 allows for 3.4×10^{38} addresses
- IPv6 is the newest version of the IP protocol
- IPv6 was developed to overcome many deficiencies of IPv4

Refer to the router topology shown in the diagram. Assuming that all routers are running RIP, which statement is true about the routers exchanging their routing tables?

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
- F. A and D above



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The Administrator needs to prevent unauthorized users from plugging their laptops into the router. What type of password should be used?

Select one:

- Enable
- Console
- Secret
- Telnet
- Line



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A router with a Maximum Transmission Unit (MTU) of 196 bytes has received an IP packet of size with an IP header of length 2 values of the fields in the IP header of the fragments are given below .

20	176
Fragment Offset	0

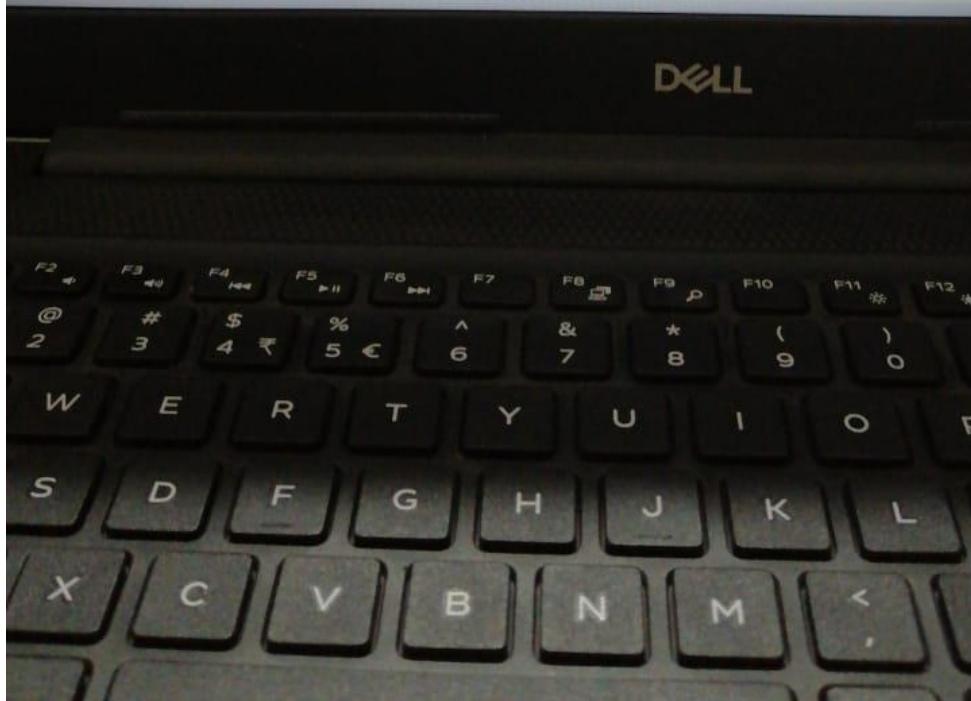
20	176
Fragment Offset	22

20	148
Fragment Offset	44

What are the values of D bit and M bit respectively of the last fragment ?

Select one:

- 0..1
- 1..1
- 1..0
- 0..0



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2001:0db8:003e:ef11:0000:0000:c100:004d

The abbreviated version of the above IPv6 address is : 2001:db8:3e:ef11::c100:4d

DELL



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Which command gives the view of recently used commands?

Select one or more:

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

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question

Routing_Protocols used inside and between autonomous systems are respectively called ?

Select one:

- Border Gateway Protocols and Exterior Gateway Protocols
- Interior Gateway Protocols and Exterior Gateway Protocols
- Exterior Gateway Protocols and Border Gateway Protocols
- Exterior Gateway Protocols and Interior Gateway Protocols
- Interior Gateway Protocols and Border Gateway Protocols

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	$\neq 0$
0	$\neq 0$
0	0

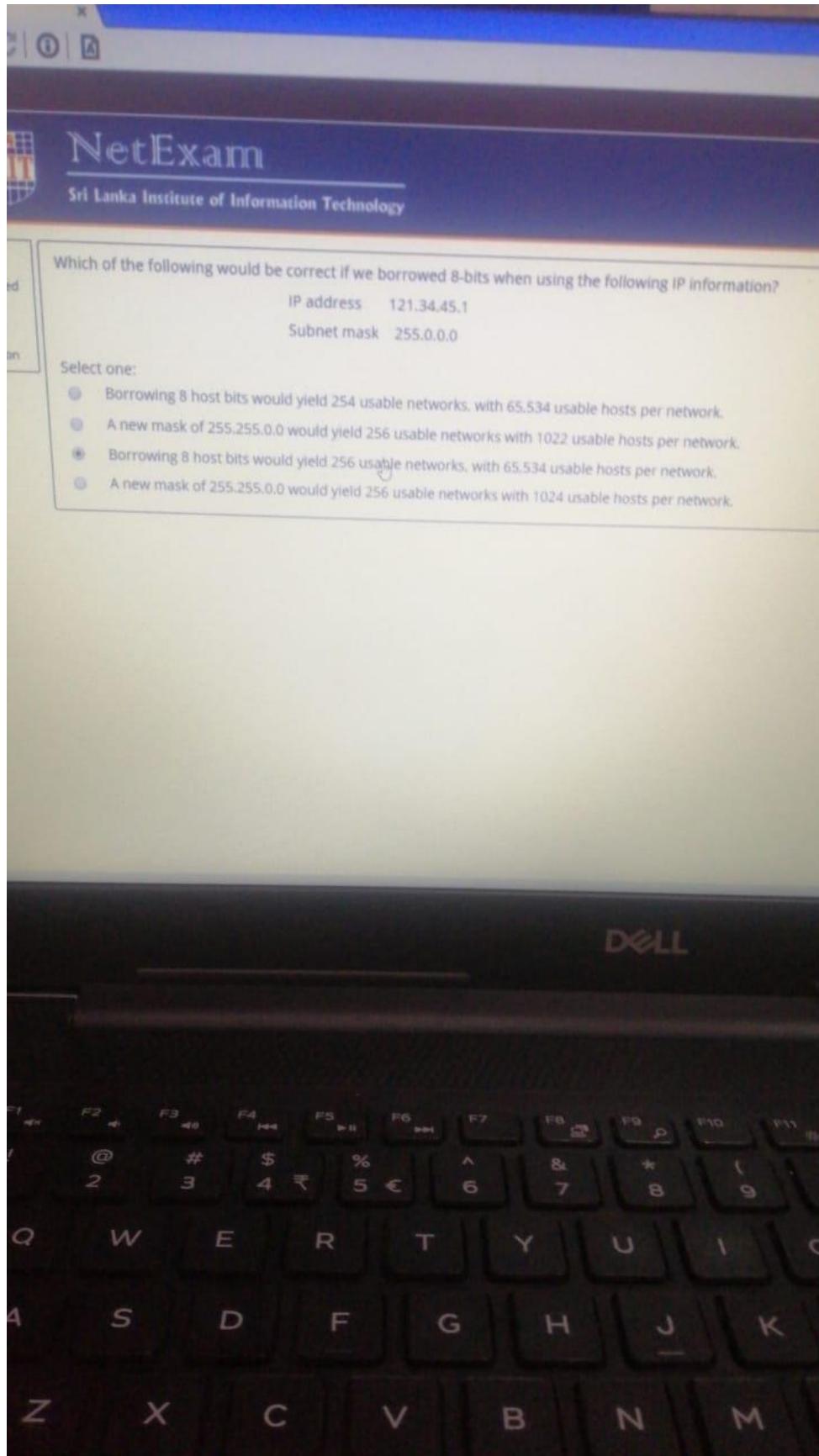
→ P
→ Q
→ R
→ S

From the above four types of packets (denoted as P,Q,R and S) , which packet can be the sample values of a last fragment ?

Select one:

- R
- Q
- S
- P

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Which of the following remains same in the IP header of the packet in a network during the entire journey of the packet?

Select one or more:

- Destination address
- Header Checksum
- Source Address
- Identification Number
- D Bit
- TTL

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

Select one:

- 150.17.45.63
- 150.17.45.61
- 150.17.45.60
- 150.17.45.62

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What is split horizon?

Select one:

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

F4 F5 F6 F7 F8 F9
% 5 A 6 & 7 * 8 (9) 0
T Y U I



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	20 176	20 148
	0	22	44

What is the last byte number of the data field of the second fragment?

Select one:

- 175
- 351
- 196
- 352
- 176
- 195



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

Select one:

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

DELL

F2 F3 F4 F5 F6 F7 F8 F9
@ + -

The image shows a Dell laptop keyboard in the foreground and a computer monitor in the background. The monitor displays a web-based exam interface titled "NetExam" from "Sri Lanka Institute of Information Technology". The question asks: "In which of the following modes in Cisco's IOS can issue show commands normally ?" Below the question is a list of options: Global Configuration, Privileged, Line Configuration, Interface Configuration, Administrative, and User. The "User" option is highlighted with a blue selection bar.

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

Select one or more:

- Global Configuration
- Privileged
- Line Configuration
- Interface Configuration
- Administrative
- User

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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:

- A. 192.168.252.8 255.255.255.252
- B. 192.168.252.8 255.255.255.248
- C. 192.168.252.16 255.255.255.252
- D. 192.168.252.0 255.255.255.252
- E. 192.168.252.16 255.255.255.240



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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:

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



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Moodle

Section 2
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A new network is being designed for your company. Using a Class C IP network, which subnet mask will provide one useable subnet per department while allowing enough usable host addresses for each department specified in the diagram?

```
graph TD; MainOffice[Main Office  
7 Users] --- Financial[Financial  
15 Users]; MainOffice --- Sales[Sales  
15 Users]; MainOffice --- Development[Development  
7 Users]; MainOffice --- Support[Support  
16 Users]
```

Select one:

- A. 255.255.255.224
- B. 255.255.255.248
- C. 255.255.255.240
- D. 255.255.255.0
- E. 255.255.255.192





What is split horizon?

Select one:

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



Which of the following remains same in the IP header of the packet in a network during the entire journey of the packet?

Select one or more:

- Destination address
- Header Checksum
- Source Address
- Identification Number
- D Bit
- TTL

In IPv6, Which special address type have been eliminated ?

Select one:

- Unicast
- Multicast
- Anycast
- Dualcast
- Broadcast

Next

Not yet answered
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Flag question

regarding the connectivity of the devices with the technician's PC ?

Command Prompt

```
PCping 192.168.1.2
Pinging 192.168.1.2 with 32 bytes of data:
Request timed out.
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

PCping 192.168.1.21
Pinging 192.168.1.21 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.21:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss).
PC>
```

Select one:

- Connectivity : 192.168.1.21 No connectivity : 192.168.1.2
- No Connectivity : 192.168.1.0
- Connectivity : 192.168.1.255
- Connectivity : 192.168.1.0
- Connectivity : 192.168.1.2 No connectivity : 192.168.1.21

Select the incorrect statement/s.

Select one or more:

- IPv6 is the newest version of the IP protocol
- Ipv4 was developed to overcome many deficiencies of IPv6
- IPv6 allows for 3.4×10^{38} addresses
- Ipv6 was developed to overcome many deficiencies of IPv4

→ X C | i | A

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Question 6
Not yet answered
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[Flag question](#)

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

Select one:

- Flags
- Offset
- TOS
- Identification Number

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A Network technician is testing connectivity in a new network. Based on the test results shown in the exhibit, what can you conclude regarding the connectivity of the devices with the technician's PC?

Command Prompt

```
PC>ping 192.168.1.2
Pinging 192.168.1.2 with 32 bytes of data:
Request timed out.
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

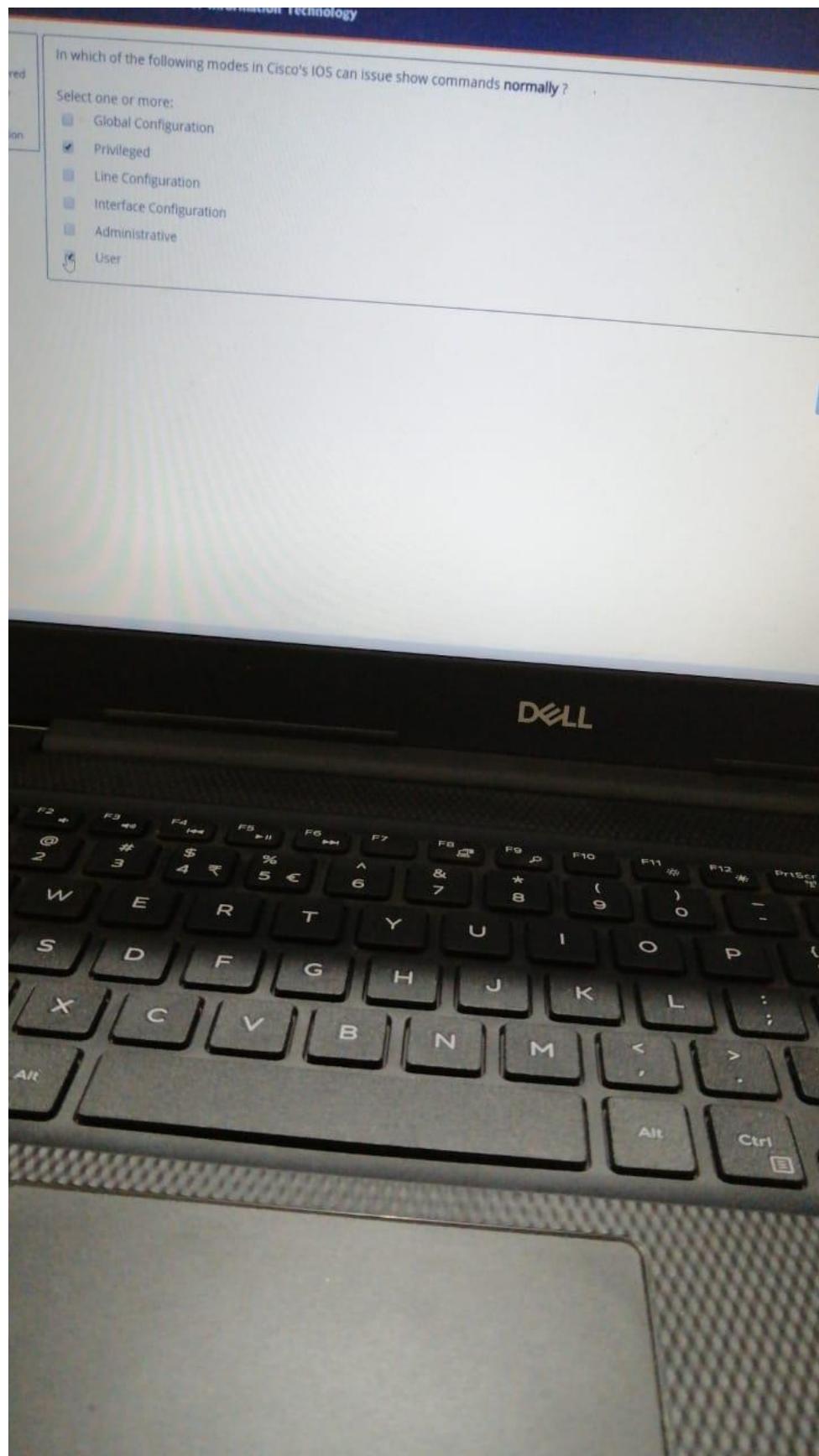
PC>ping 192.168.1.21
Pinging 192.168.1.21 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

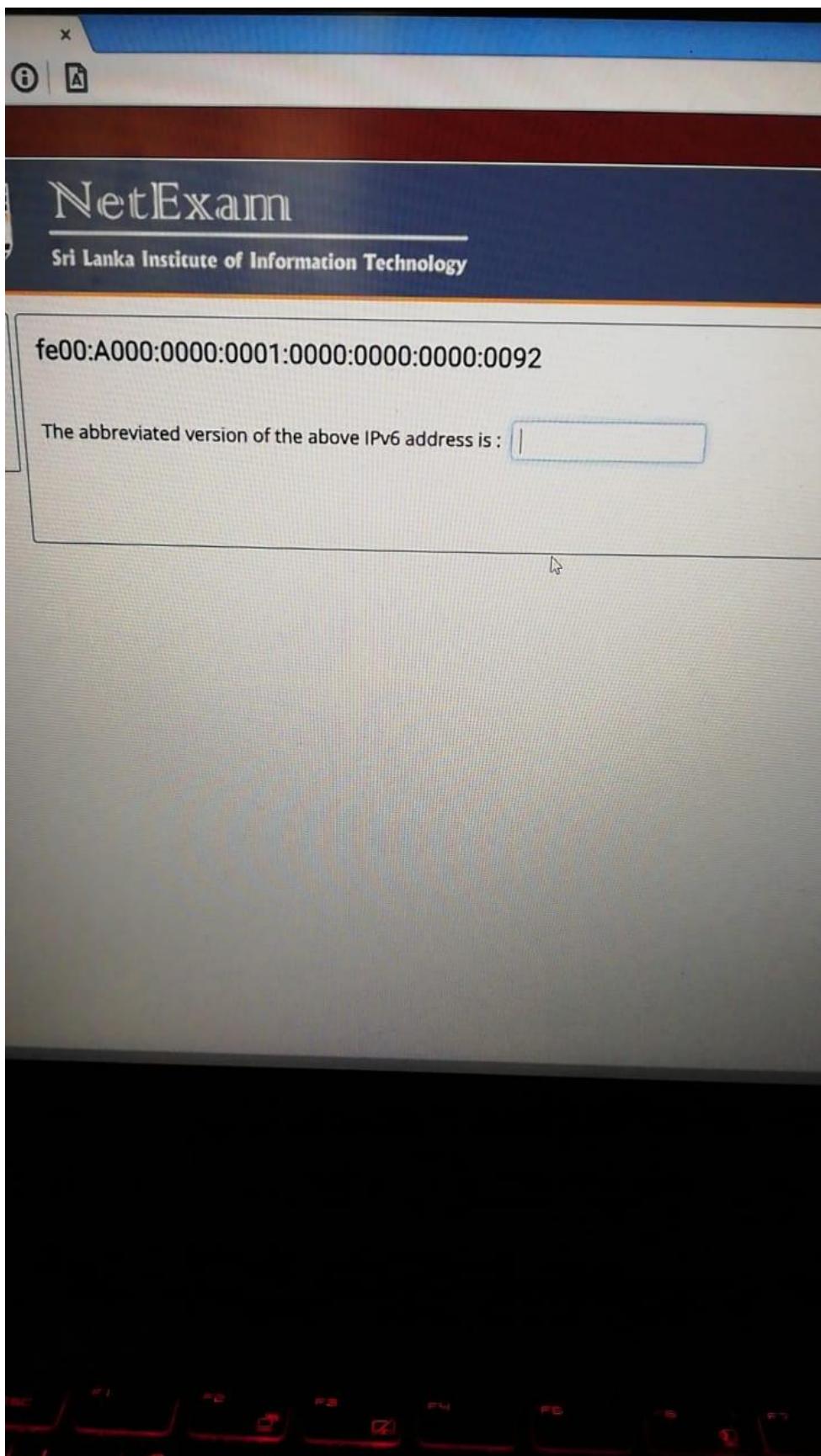
Ping statistics for 192.168.1.21:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>
```

Select one:

- No Connectivity : 192.168.1.0
- Connectivity : 192.168.1.2 No connectivity : 192.168.1.21
- Connectivity : 192.168.1.21 No connectivity : 192.168.1.2
- Connectivity : 192.168.1.0
- Connectivity : 192.168.1.255





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What is the network ID portion of the IP address 191.154.25.66 if classfull addressing is used?

Select one:

- 25.66
- 191
- 191.154.0.0
- 191.154

DELL

F2 F3 F4 F5 F6 F7 F8 F9 F10
@ # \$ % ^ & *



Question 5

Not yet answered
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1.00

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



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Under which circumstance is needed to configure a clock rate on a serial interface?

Select one:

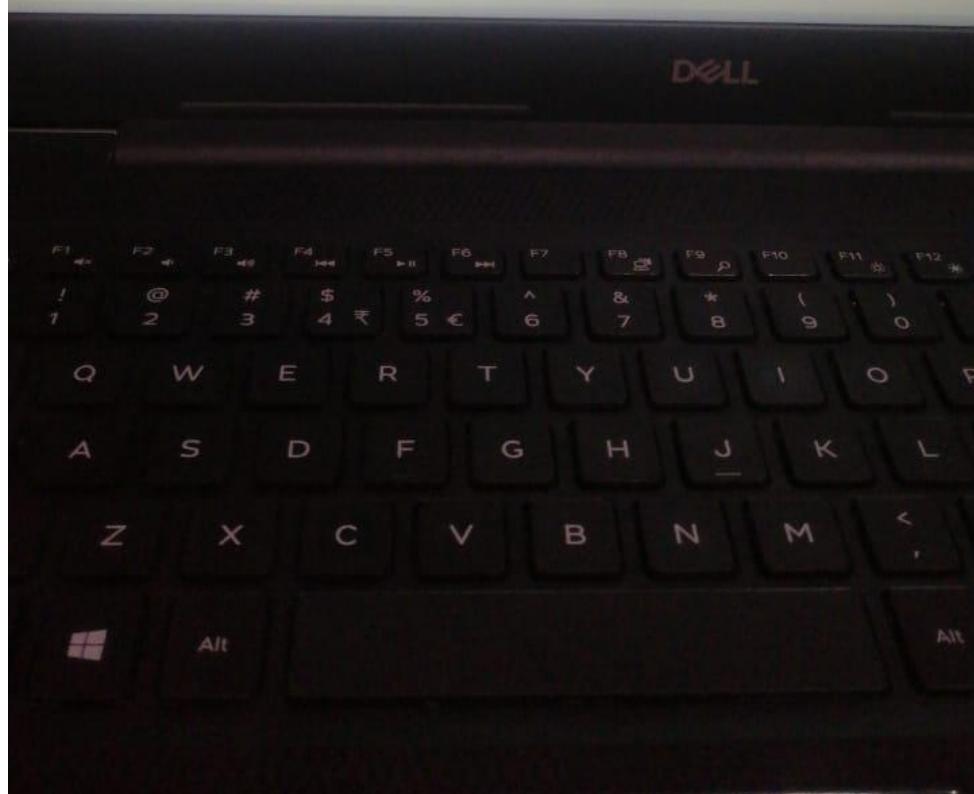
- When the interface is terminated using the DCE end of the cable.
- When the interface is terminated with the DTE end of the cable.
- When the interface is terminated using a loopback adapter.
- When the interface is terminated using a Category 3 Cable.

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When powering up a router, which of the following types of memory normally stores the start-up configuration?

Select one:

- Flash Memory
- RAM
- ROM
- NVRAM



The image shows a close-up of a dark-colored Dell laptop keyboard. The Dell logo is visible at the top center of the keyboard. The keys are standard black with white or light-colored lettering. The layout includes a full set of function keys (F1-F12), a numeric keypad, and standard QWERTY keys. The Windows key is located in the bottom-left corner, and two Alt keys are on the far right.

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

Diagram showing network connections:

```
graph LR; PC0[PC-PT PC0] --- S1(( )); S1 --- S2(( )); S2 --- S3(( )); S3 --- PC1[PC-PT PC1]; S1 --- METRO[1841 METRO]; S2 --- MALABE[1841 MALABE];
```

PC-PT PC0 is connected to a switch (S1) with IP 172.16.10.0/16. S1 is connected to another switch (S2) with IP 10.0.0.1/8. S2 is connected to a switch (S3) with IP 10.0.0.2/8. S3 is connected to PC-PT PC1. The switch S1 is labeled 1841 METRO and the switch S3 is labeled 1841 MALABE.

Assume networks are configured with a DHCP server and newly connected computer in MALABE LAN is required to obtain an IP address from this DHCP server. Which of the following can be used as source address?

Select one:

- 255.255.255.255
- 0.0.0.0
- 255.255.255.0
- 10.0.0.2
- 192.168.1.0

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DELL

A close-up view of a Dell laptop keyboard. The keys are black with white or red lettering. The visible keys include F2 through F12, a numeric keypad, and various function keys like Alt, Ctrl, and Shift. The Dell logo is visible on the top edge of the keyboard.

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Base on the following diagram which two commands must be configured to allow communications between the 192.168.10.0/24 and 173.16.0.0/16 networks?

Note: Static Route command

```
Router(config)#ip route <destination network><destination network subnet mask><next hop address | exit interface>
```

Select one:

- A. Router1(config)# ip route 173.16.0.0 255.255.0.0 10.0.0.2
Router2(config)# ip route 192.168.10.0 255.255.255.0 10.0.0.1
- B. Router1(config)# ip route 172.16.10.1 255.255.0.0 Se3/0
Router2(config)# ip route 193.168.10.1 255.255.255.0 10.0.0.1
- C. Router1(config)# ip route 10.0.0.0 255.0.0.0 Se3/0
Router2(config)#ip route 10.0.0.0 255.0.0.0 10.0.0.1
- D. None of the above

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Question 7
Not yet answered
Marked out of 1.00
[Flag question](#)

A Network Administrator has entered commands shown below in R1. When he checks the connectivity status it was found that the serial interface is administratively down.
What is the additional command to be issued to bring it up ?

```
R1(config)# interface serial 0/0/0
R1(config-if)# description Link to R2
R1(config-if)# ip address 209.165.200.225 255.255.255.252
R1(config-if)# exit
R1(config)#
```

Select one:

- line up
- clock rate 64000
- Shutdown
- no shutdown
- clockrate 64000

[Quiz navigation](#)

Finish attempt ...

Time left 0:44:49

MULTIPLE CHOICE QUESTIONS

1	2	3	4
9	10	11	12
17	18	19	20
25	26	27	28
29	30	31	32

FEEDBACK

31

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

Select one:

- 150.17.45.60
- 150.17.45.62
- 150.17.45.61
- 150.17.45.63

Question 11
Not yet answered
Marked out of
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 Flag question

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



4800 01A0 005A 0000 0906 0000 5A3C 0209 449C 5707

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 source network address.

Select one:

- 164.12.14.7
- 90.60.0.0
- 164.12.0.0
- 90.0.0.0
- 90.60.2.9

≡ Quiz navigation

Finish attempt ...

Time left 0:43:25

MULTIPLE CHOICE QU

1	2	3	4
9	10	11	12
17	18	19	20
25	26	27	28
FEEDBACK			
31			



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Question 8

Not yet answered

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

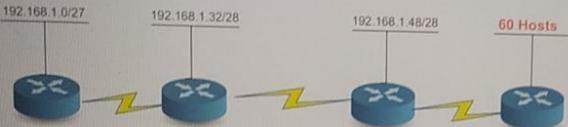
Question 8

Not yet answered

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1.00

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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?



Select one:

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

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Quiz nav

Finish attempt

Time left 0:46:30

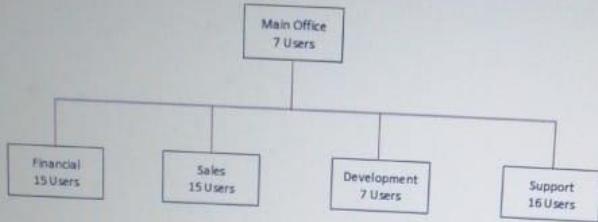
MULTIPLE CHOICE

1	2	3
9	10	11
17	18	19
25	26	27
FEEDBACK		
31		

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A new network is being designed for your company. Using a Class C IP network, which subnet mask will provide one useable subnet per department while allowing enough usable host addresses for each department specified in the diagram?



Select one:

- A. 255.255.255.224
- B. 255.255.255.192
- C. 255.255.255.0
- D. 255.255.255.240
- E. 255.255.255.248

Next p

DELL



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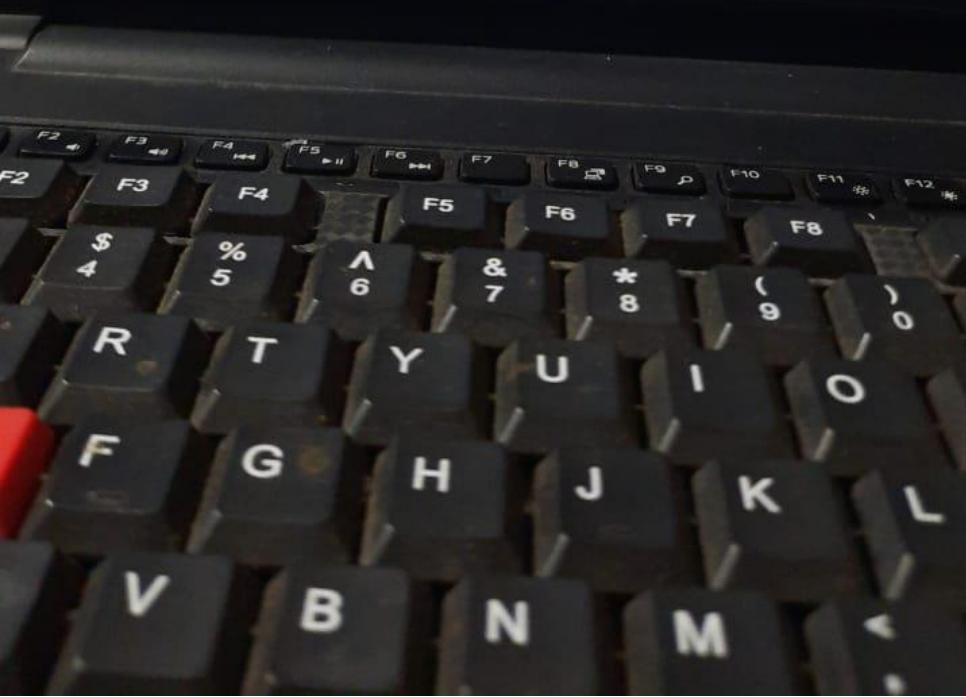
You type the following command into the router and receive the following:

```
Router(config)#show serial 0/0
^
% Invalid input detected at '^' marker.
```

Why was this error message displayed?

Select one or more:

- The router does not have a serial0/0 interface
- Part of the command is missing
- You need to be in privileged mode
- Administrator only can issue this command
- You cannot have a space between serial and 0/0



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

Select one:

- When the host responds with an ICMP Echo Reply message
- When the value in the TTL field reaches zero
- 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 RTT value reaches zero

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

```
graph LR; PC0[PC-PT PC0] --- METRO((METRO)); METRO --- Link[10.0.0.0/8]; Link --- MALABE((MALABE)); MALABE --- PC1_1[PC-PT PC1]; PC1_1 --- PC1_2[PC-PT PC1]
```

Assume networks are configured with a DHCP server and newly connected computer in MALABE LAN is required to obtain an IP from this DHCP server. Which of the following can be used as source address?

Select one:

- 192.168.1.0
- 255.255.255.255
- 10.0.0.2
- 255.255.255.0
- 0.0.0.0

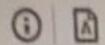
DELL

A close-up view of a Dell laptop keyboard. The keys visible include F2 through F12, various symbols like \$, %, ^, &, *, (,), and numbers 3, 4, 5, 6, 7, 8, 9, 0. The letters W, E, R, T, Y, U, I, O, P, D, F, G, H, J, K, L, C, V, B, N, M, and punctuation keys like < and > are also visible.

The image shows a Dell laptop screen displaying a network configuration question from the NetExam platform. The screen content includes:

- A logo of Sri Lanka's coat of arms.
- The text "NetExam" and "Sri Lanka Institute of Information Technology".
- A question: "Two devices in the same Local Area Network are having the following IP addresses. Select the network to which they can belong to :".
- IP addresses: 192.168.100.135 and 192.168.100.144.
- A note: "Select one or more:" followed by a list of network ranges:
 - 192.168.100.128/25
 - 192.168.100.128/24
 - 192.168.100.125
 - 192.168.100.0/25
 - 192.168.100.0/24

The laptop's keyboard and the "DELL" logo on the back panel are visible at the bottom of the frame.



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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

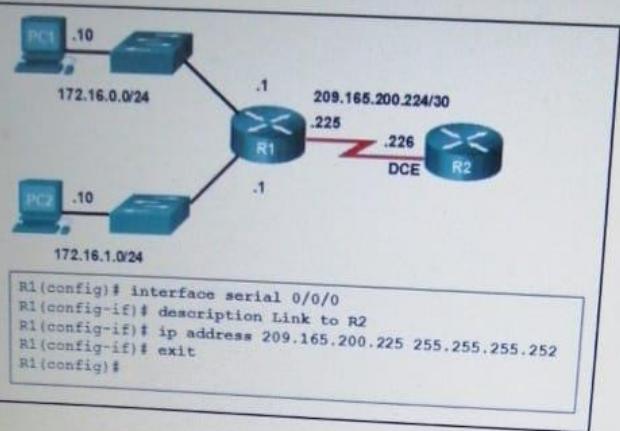
Select one or more:

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



A Network Administrator has entered commands shown below in R1. When he checks the connectivity status, he finds that the interface is administratively down.

What is the additional command to be issued to bring it up ?

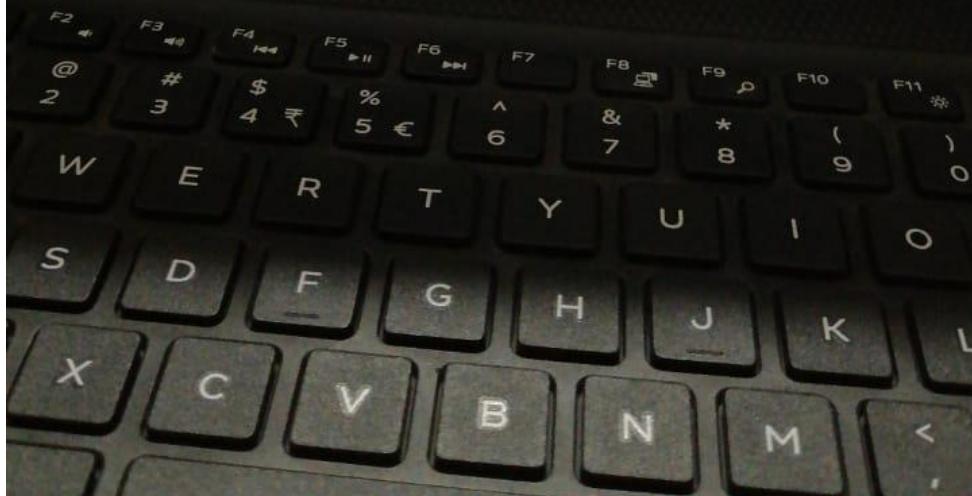


```
R1(config)# interface serial 0/0/0
R1(config-if)# description Link to R2
R1(config-if)# ip address 209.165.200.225 255.255.255.252
R1(config-if)# exit
R1(config)#
```

Select one:

- no shutdown
- clock rate 64000
- clockrate 64000
- line up
- Shutdown

DELL



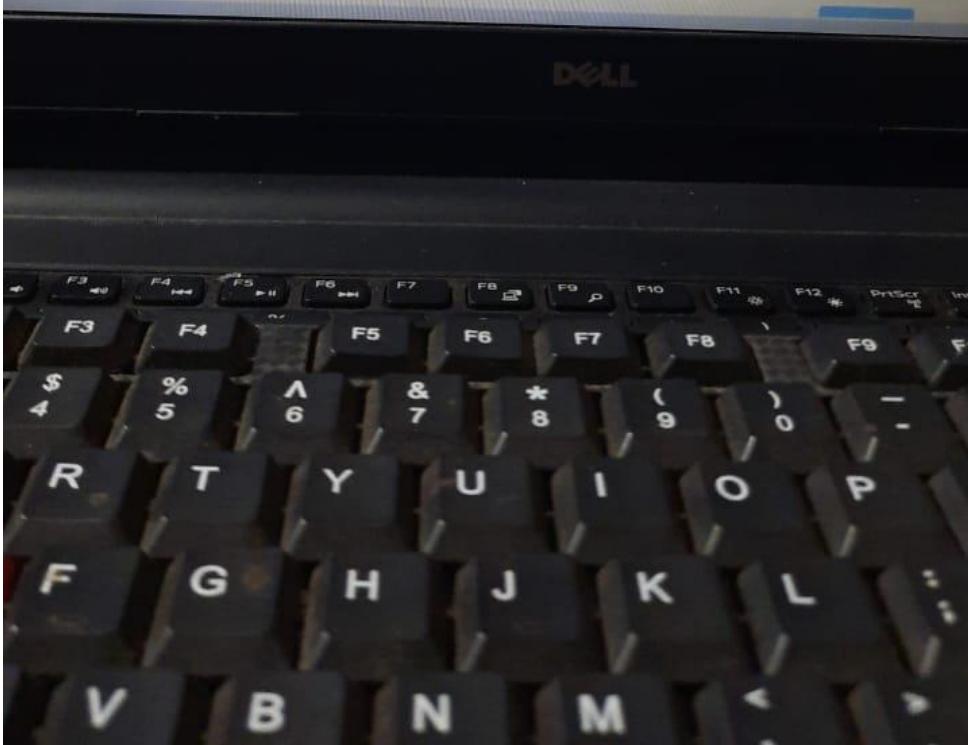
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Refer to the exhibit. The user at Workstation B reports that Server A cannot be reached. What is preventing Workstation B from reaching Server A?

The diagram illustrates a network topology. At the top is a blue cloud icon labeled "Fast Internet Router". Below it, a blue server icon is labeled "Server-PT Server-A" with the IP address "IP: 192.168.10.1/24" and Gateway "Gateway: 192.168.10.50/24". A dashed line connects the Router to the server. Below the server is a blue computer monitor icon labeled "PC-PT Workstation-B" with the IP address "IP: 172.168.10.1/26" and Gateway "Gateway: 172.168.10.50/26". Another dashed line connects the Router to the workstation.

Select one:

- The IP address for Workstation B is a subnet address.
- The gateway for Workstation B is not on the same subnet.
- The IP address for Server A is a broadcast address.
- The gateway for Server A is not on the same subnet.

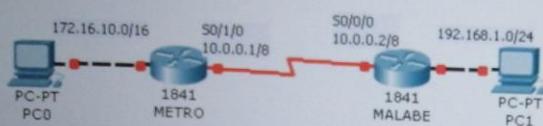


Which of the following commands sets the secret password to Cisco ?

Select one:

- enable secret Cisco
- enable secret password Cisco
- enable password Cisco
- enable secret cisco

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



Assume networks are configured with a DHCP server and newly connected computer in MALABE LAN is required to obtain an IP address from this DHCP server. Which of the following can be use as source address?

Select one:

- 0.0.0.0
- 255.255.255.255
- 255.255.255.0
- 10.0.0.2
- 192.168.1.0



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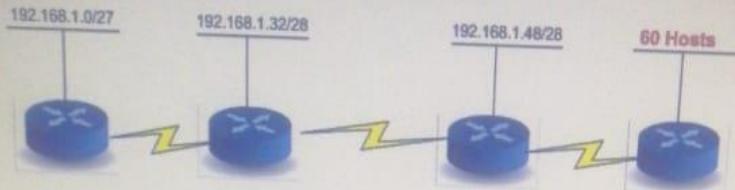
A required parameter (attempt) was missing

[More information about this error](#)

[Continue](#)



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



Select one:

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



DELL





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Refer the following router output:

```
Router#show cl  
% Ambiguous command: "show cl"
```

What is the reason to receive this error message?

Select one:

- The command requires additional options or parameters
- There is more than one show command that starts with the letters *cl*
- The command is being executed from the wrong router mode
- There is no show command that starts with *cl*

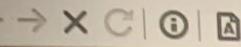
What does the following command allow you to perform next?

RouterA(config)#line vty 0 3

Select one:

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

Moodle



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Question 13

Not yet answered

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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:

- Network
- Data Link
- Presentation
- Physical

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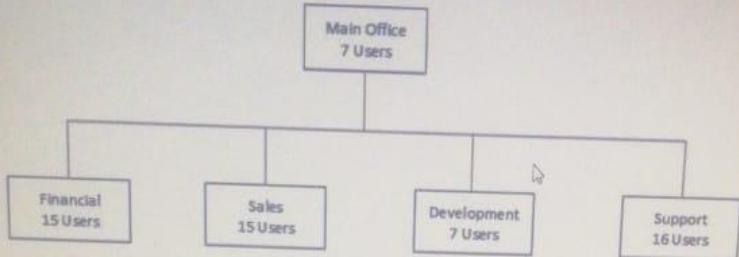
14 answered out of question

When powering up a router, which of the following types of memory normally stores the start-up configuration?

Select one:

- Flash Memory
- NVRAM
- RAM
- ROM

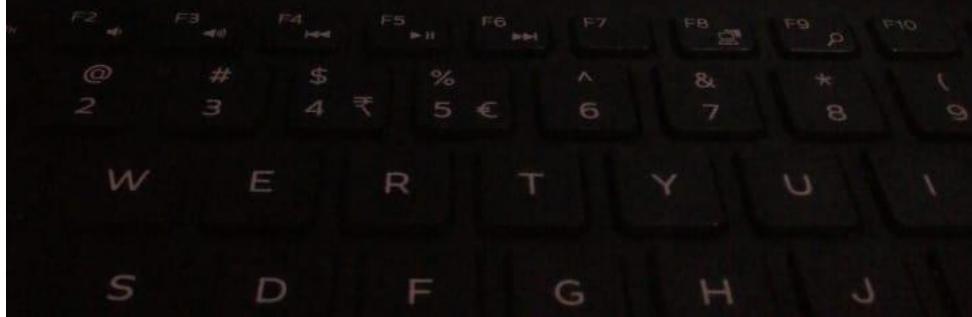
A new network is being designed for your company. Using a Class C IP network, which subnet mask will provide a unique address for each department while allowing enough usable host addresses for each department specified in the diagram?



Select one:

- A. 255.255.255.224
- B. 255.255.255.240
- C. 255.255.255.248
- D. 255.255.255.0
- E. 255.255.255.192

DELL





on 10

not yet answered

Marked out of

Flag question

Which memory type holds the full IOS image for the router?

Select one:

- NVRAM
- Flash Memory
- RAM
- ROM



Question 16

not yet answered

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Flag question

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

Select one:

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

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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:

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

QUESTION



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

Select one:

- When the value in the TTL field reaches zero
- When the host responds with an ICMP Echo Reply message
- 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 RTT value reaches zero

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Base on the following diagram which two commands must be configured to allow communications between the 192.168.10.0/16 networks?

Note: Static Route command

Router(config)#ip route <destination network><destination network subnet mask><next hop address interface>

Select one:

- A. Router1(config)# ip route 173.16.0.0 255.255.0.0 10.0.0.2
Router2(config)# ip route 192.168.10.0 255.255.255.0 10.0.0.1
- B. Router1(config)# ip route 172.16.10.1 255.255.0.0 Se3/0
Router2(config)# ip route 193.168.10.1 255.255.255.0 10.0.0.1
- C. Router1(config)# ip route 10.0.0.0 255.0.0.0 Se3/0
Router2(config)#ip route 10.0.0.0 255.0.0.0 10.0.0.1
- D. None of the above

DELL

W E R T Y U I O
S D F G H J K
X C V B N M

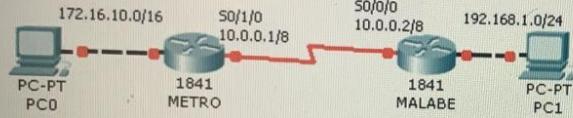
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Network addresses of MALABE and METRO LANs are given in the diagram.



Assume networks are configured with a DHCP server and newly connected computer in MALABE LAN is required to obtain an IP address from this DHCP server. Which of the following can be used as source address?

Select one:

- 0.0.0.0
- 192.168.1.0
- 255.255.255.255
- 10.0.0.2
- 255.255.255.0

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

Select one:

- A. 192.168.252.16 255.255.255.240
- B. 192.168.252.16 255.255.255.252
- C. 192.168.252.8 255.255.255.248
- D. 192.168.252.8 255.255.255.252
- E. 192.168.252.0 255.255.255.252

DELL

F3 F4 F5 F6 F7 F8 F9 F10
\$ %

Question 20

Not yet answered

Marked out of
1.00

Flag question

Refer the following router output:

Router#show cl

%6 Ambiguous command: "show cl"

What is the reason to receive this error message?

Select one:

- There is more than one show command that starts with the letters **c**
- The command requires additional options or parameters
- The command is being executed from the wrong router mode
- There is no show command that starts with **c**



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 5
- E. A and C above
- F. A and D above

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
- F. A and D above

Consider classful addressing and choose the broadcast address of 25.10.100.200.

Select one:

- 25.10.100.255
- 25.255.254.255
- 25.0.0.0
- 25.255.255.255



Refer the following router output:

```
Router#show cl  
% Ambiguous command: "show cl"
```

What is the reason to receive this error message?

Select one:

- The command is being executed from the wrong router mode
- The command requires additional options or parameters
- There is no show command that starts with cl
- There is more than one show command that starts with the letters cl

NetExam

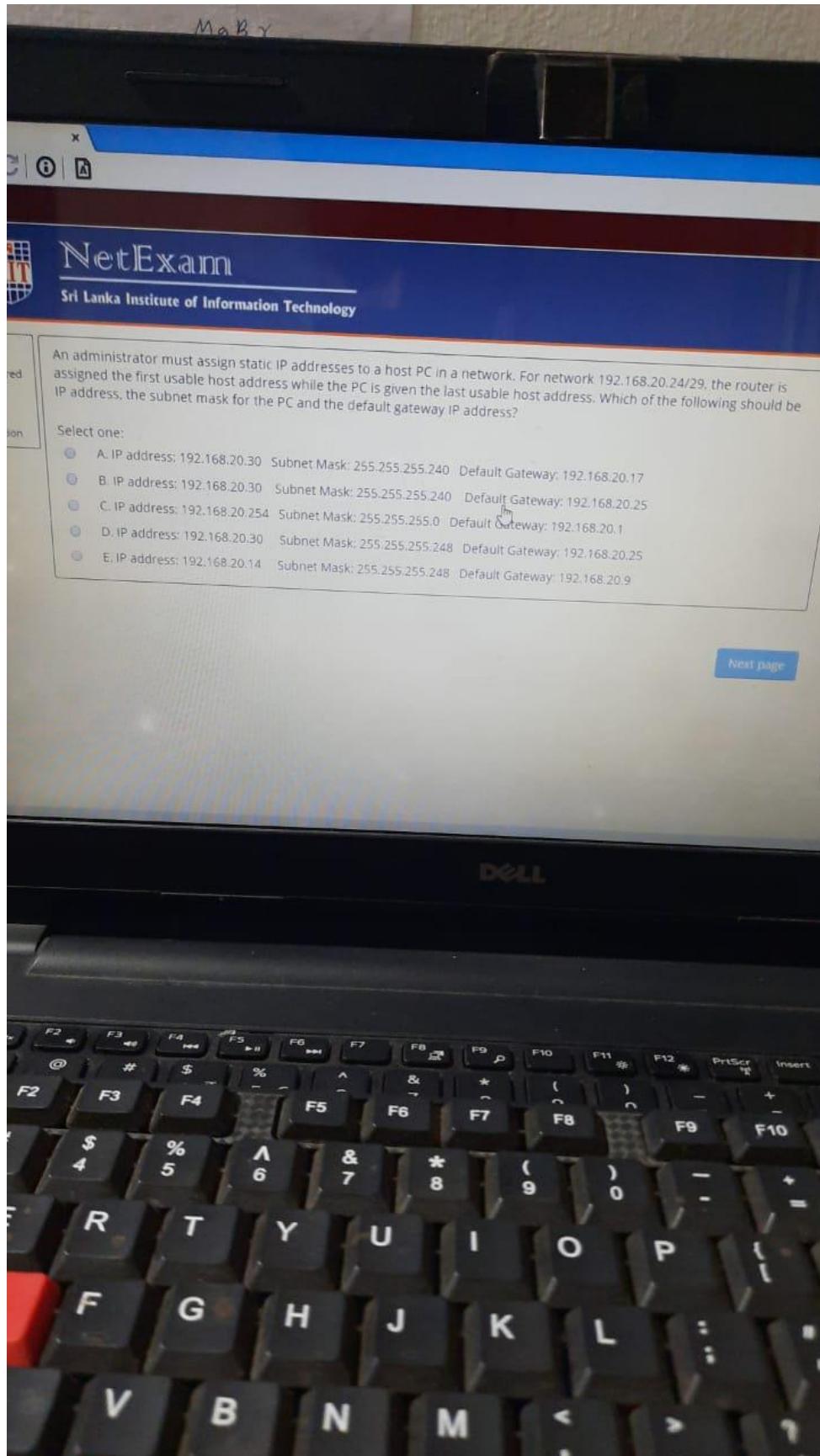
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The interface ID of the IPv6 address generated by EUI64 method is 8ff8:40ff:feb2:28ca

The MAC Address of the device is 8df8:40b2:28ca

DELL







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MAC of PC_B is 52F0:4EB0:28CC

**** Provide your answer in the SAME format (XXXX:XXXX:XXXX) not case sensitive**

The interface ID of the IPv6 address generated by EUI64 method is

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If the first byte of a Datagram is 4000

Select one:

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



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:

- A. 192.168.252.8 255.255.255.248
- B. 192.168.252.16 255.255.255.252
- C. 192.168.252.0 255.255.255.252
- D. 192.168.252.16 255.255.255.240
- E. 192.168.252.8 255.255.255.252

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

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

Select one:

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



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Question 17
Not yet answered
Marked out of 1.00
 Flag question

MAC of PC_B is 52F0:4EB0:28CC

** Provide your answer in the SAME format (XXXX:XXXX:XXXX) not case sensitive

The interface ID of the IPv6 address generated by EUI64 method is

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MAC of PC_A is d600:0ABB:28FC

The interface ID of the IPv6 address generated by EUI64 method is

The interface ID of the IPv6 address generated by EUI64 method is 8ff8:40ff:feb2:28ca

The MAC Address of the device is

The image shows a computer monitor displaying a NetExam question from Sri Lanka Institute of Information Technology. The question asks: "An IP fragment has arrived with an offset value of 370. How many bytes of data were sent in the previous fragment/s?" Below the question is a list of five options with radio buttons:

- 3000
- 0
- 740
- 370
- 2960

Below the monitor, a portion of a black Dell keyboard is visible, showing the F2-F12 keys, a numeric keypad, and the top row of letters (W, E, R, T, Y, U, I, O) along with symbols like @, #, \$, %, ^, &, *, (,), and _.

EIGRP is a Cisco proprietary routing protocol that uses all routing protocols to use metrics to determine the best path to a destination. Which are 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

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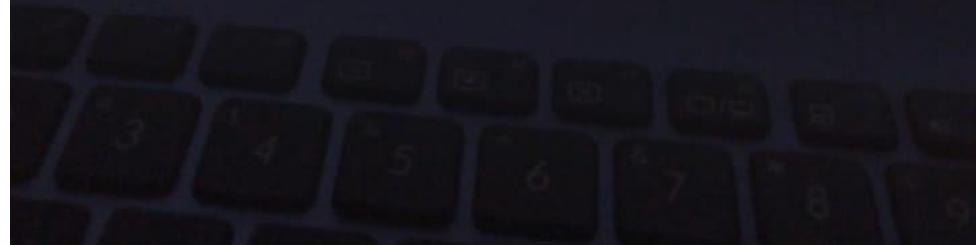
NetExam

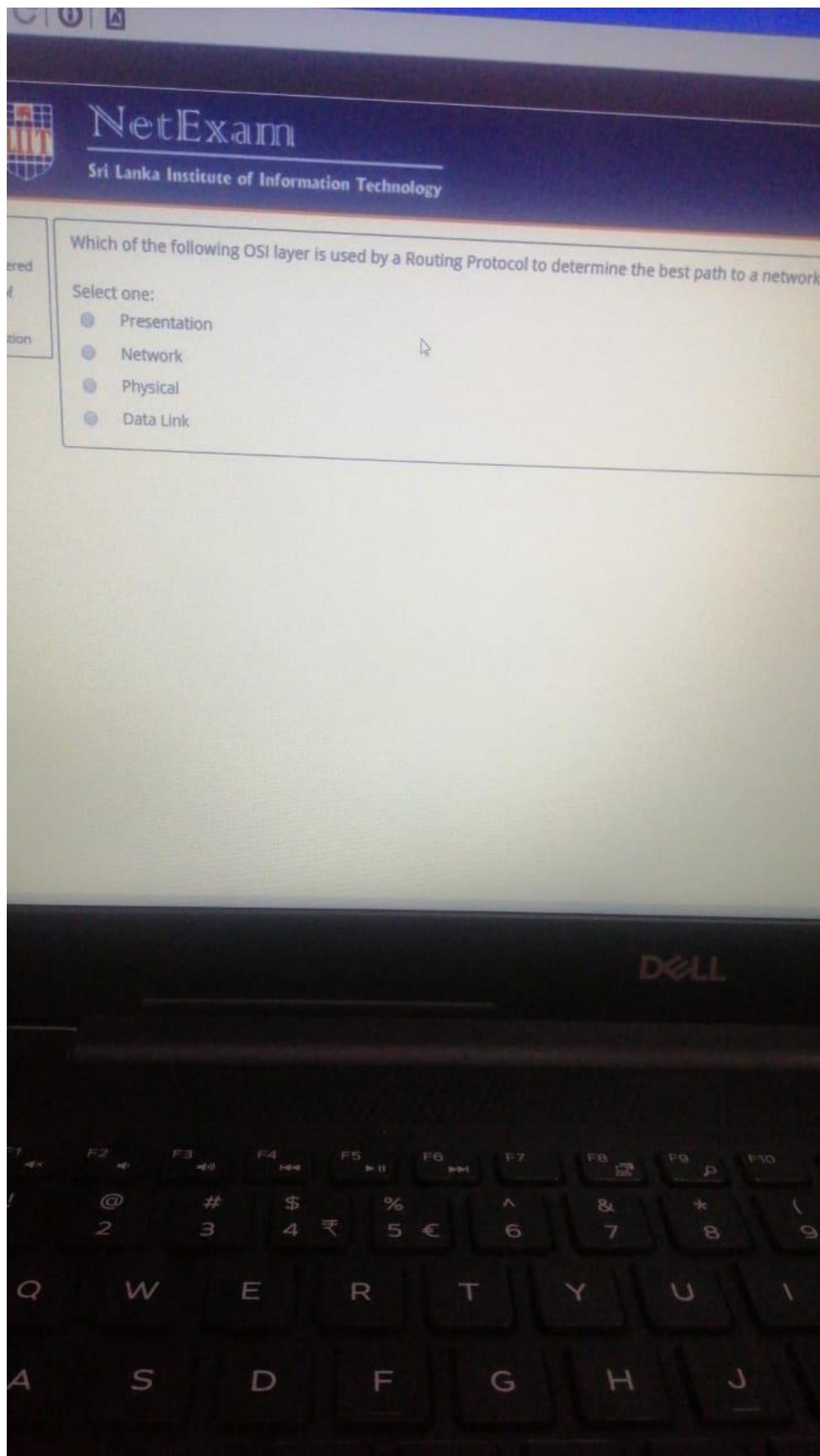
Sri Lanka Institute of Information Technology

Routing Protocols used inside and between autonomous systems are respectively called ?

Select one:

- Interior Gateway Protocols and Exterior Gateway Protocols
- Exterior Gateway Protocols and Border Gateway Protocols
- Exterior Gateway Protocols and Interior Gateway Protocols
- Interior Gateway Protocols and Border Gateway Protocols
- Border Gateway Protocols and Exterior Gateway Protocols







16

Unanswered
out of
question

An organization is granted the IP Address block 216.100.10.0 in class C. The administrator wants to create 13 subnets and it is required to take minimum number of bits to create subnetworks.

Find the subnet mask.

Select one:

- 255.255.240.0
- 255.255.255.255
- 255.255.255.0
- 255.255.224.0
- 255.255.255.240

[Next page](#)

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Finish

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FEEDB

Question 19
Not yet answered
Marked out of
1.00
[Flag question](#)

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	! = 0
0	! = 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:

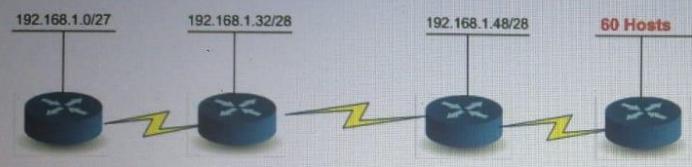
- R
- Q
- P
- S

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
- F. A and D above



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?



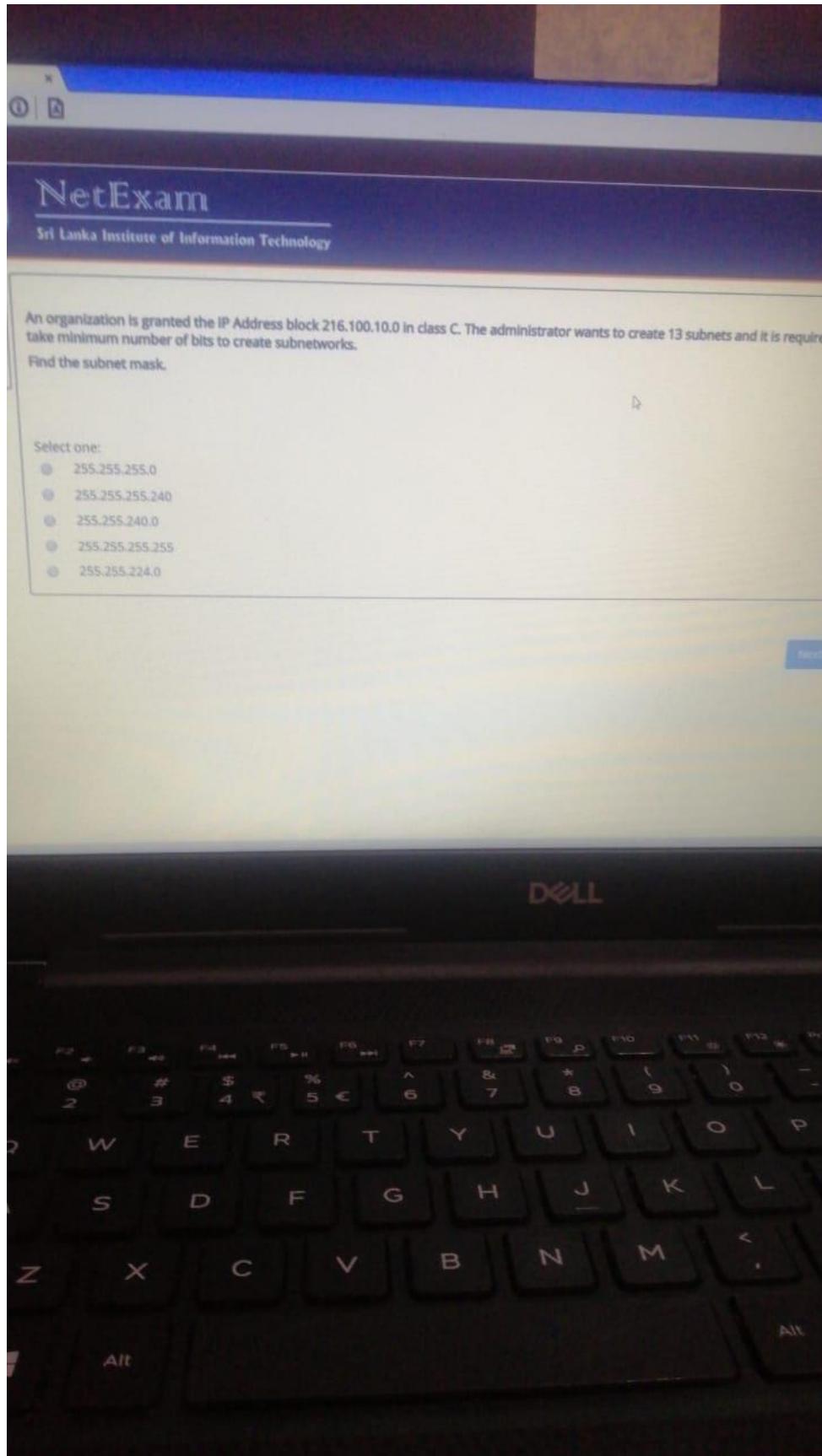
Select one:

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

Which of these is not applicable for IP protocol ?

Select one or more:

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

A screenshot of a computer monitor displaying a web-based examination interface. The title bar reads "NetExam" and "Sri Lanka Institute of Information Technology". The main content area contains a question: "An organization is granted the IP Address block 216.100.10.0 in class C. The administrator wants to create 13 subnets and it is required to take minimum number of bits to create subnetworks. Find the subnet mask." Below the question is a list of five subnet mask options, each preceded by a radio button. The options are: 255.255.255.0, 255.255.255.240, 255.255.240.0, 255.255.255.255, and 255.255.224.0. A "Next" button is visible at the bottom right of the screen. The monitor sits on a dark surface, and a portion of a Dell keyboard is visible in the foreground.

An organization is granted the IP Address block 216.100.10.0 in class C. The administrator wants to create 13 subnets and it is required to take minimum number of bits to create subnetworks. Find the subnet mask.

Select one:

- 255.255.255.0
- 255.255.255.240
- 255.255.240.0
- 255.255.255.255
- 255.255.224.0

DELL

W E R T Y U I O P
S D F G H J K L
Z X C V B N M , .
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Question 25
Not yet answered
Marked out of 1.00
Flag question

Select the incorrect statement/s.

Select one or more:

- IPv6 was developed to overcome many deficiencies of IPv4
- IPv6 is the newest version of the IP protocol
- IPv6 allows for 3.4×10^{38} addresses
- IPv4 was developed to overcome many deficiencies of IPv6

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Question 22
Not yet answered
Marked out of 1.00
Flag question

You type the following command into the router and receive the following:

```
Router(config)#show serial 0/0
^
% Invalid input detected at '^' marker.
```

Why was this error message displayed?

Select one or more:

- The router does not have a serial0/0 interface
- You cannot have a space between serial and 0/0
- You need to be in privileged mode
- Part of the command is missing
- Administrator only can issue this command



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2001:0db8:003e:ef11:0000:0000:c100:004d

The abbreviated version of the above IPv6 address is :

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



Select one:

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

DELL



An administrator must assign static IP addresses to a host PC in a network. For network 192.168.20.24/29, the router is assigned the first usable host address while the PC is given the last usable host address. Which of the following should be IP address, the subnet mask for the PC and the default gateway IP address?

Select one:

- A. IP address: 192.168.20.14 Subnet Mask: 255.255.255.248 Default Gateway: 192.168.20.9
- B. IP address: 192.168.20.254 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.20.1
- C. IP address: 192.168.20.30 Subnet Mask: 255.255.255.240 Default Gateway: 192.168.20.17
- D. IP address: 192.168.20.30 Subnet Mask: 255.255.255.248 Default Gateway: 192.168.20.25
- E. IP address: 192.168.20.30 Subnet Mask: 255.255.255.240 Default Gateway: 192.168.20.25

[Next page](#)

An administrator must assign static IP addresses to a host PC in a network. For network 192.168.20.24/29, the router is assigned the first usable host address while the PC is given the last usable host address. Which of the following should be IP address, the subnet mask for the PC and the default gateway IP address?

Select one:

- A. IP address: 192.168.20.254 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.20.1
- B. IP address: 192.168.20.14 Subnet Mask: 255.255.255.248 Default Gateway: 192.168.20.9
- C. IP address: 192.168.20.30 Subnet Mask: 255.255.255.240 Default Gateway: 192.168.20.17
- D. IP address: 192.168.20.30 Subnet Mask: 255.255.255.248 Default Gateway: 192.168.20.25
- E. IP address: 192.168.20.30 Subnet Mask: 255.255.255.240 Default Gateway: 192.168.20.25

[Next page](#)

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FEEDBACK
31

Not yet answered
Marked out of
1.00
Flag question

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



4c00 01A0 0027 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									

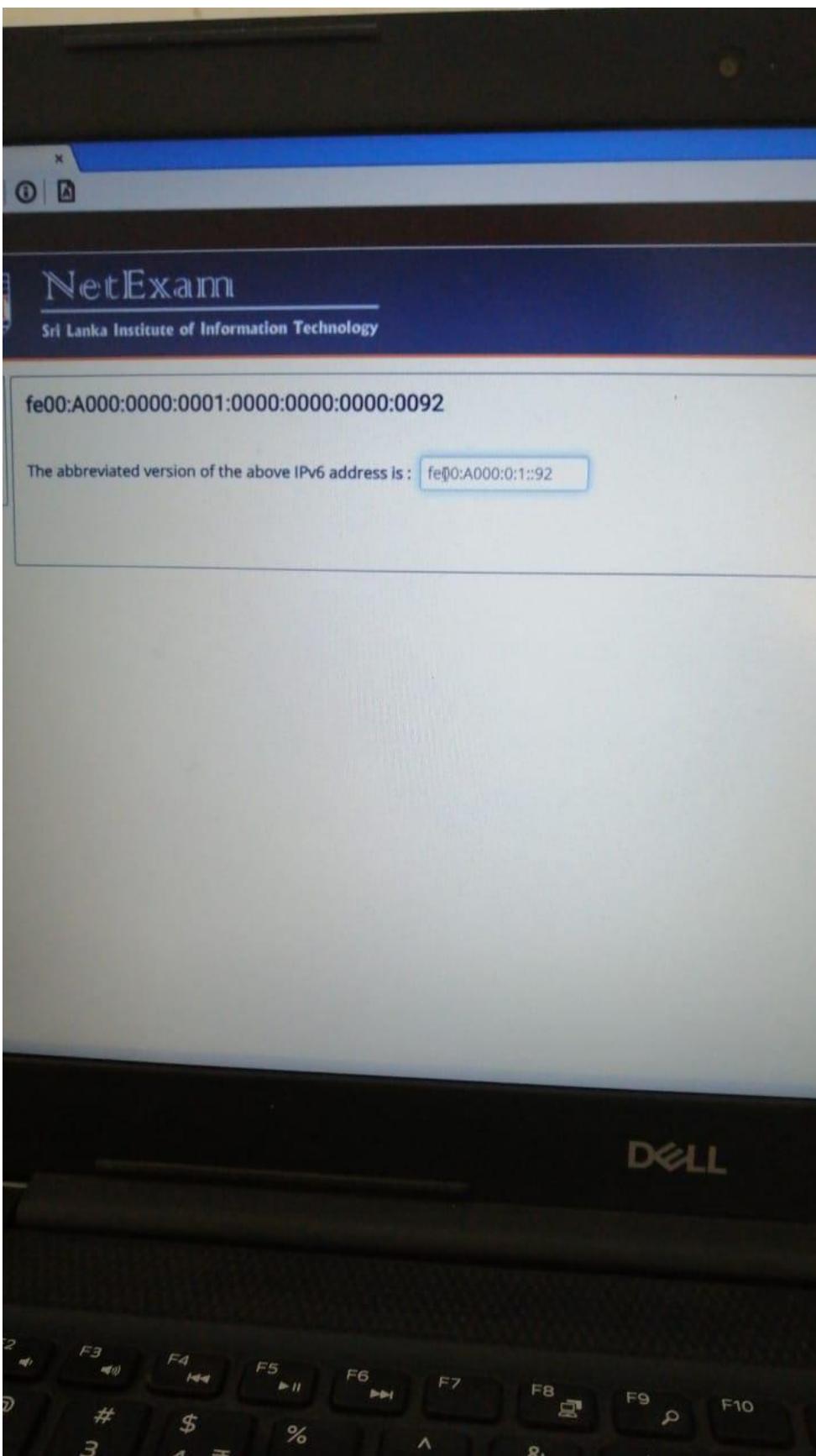
Find the destination network address.



Select one:

- 90.0.0.0
- 164.12.14.7
- 164.12.0.0
- 90.60.2.9
- 90.60.0.0

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Question 29

Not yet answered
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Flag question

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

Select one:

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

C | O | A

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Which field of the IP header helps to check rearrangement of the fragments?

Select one:

- TTL
- Offset
- D Bit
- M Bit
- HLEN

DELL



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	$\neq 0$	Q
0	$\neq 0$	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:

- S
- P
- Q
- R

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



Sri Lanka Institute of Information Technology

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

←

4B00 0190 002A 0000 0906 0000 5A3C 0209 440C 0E07

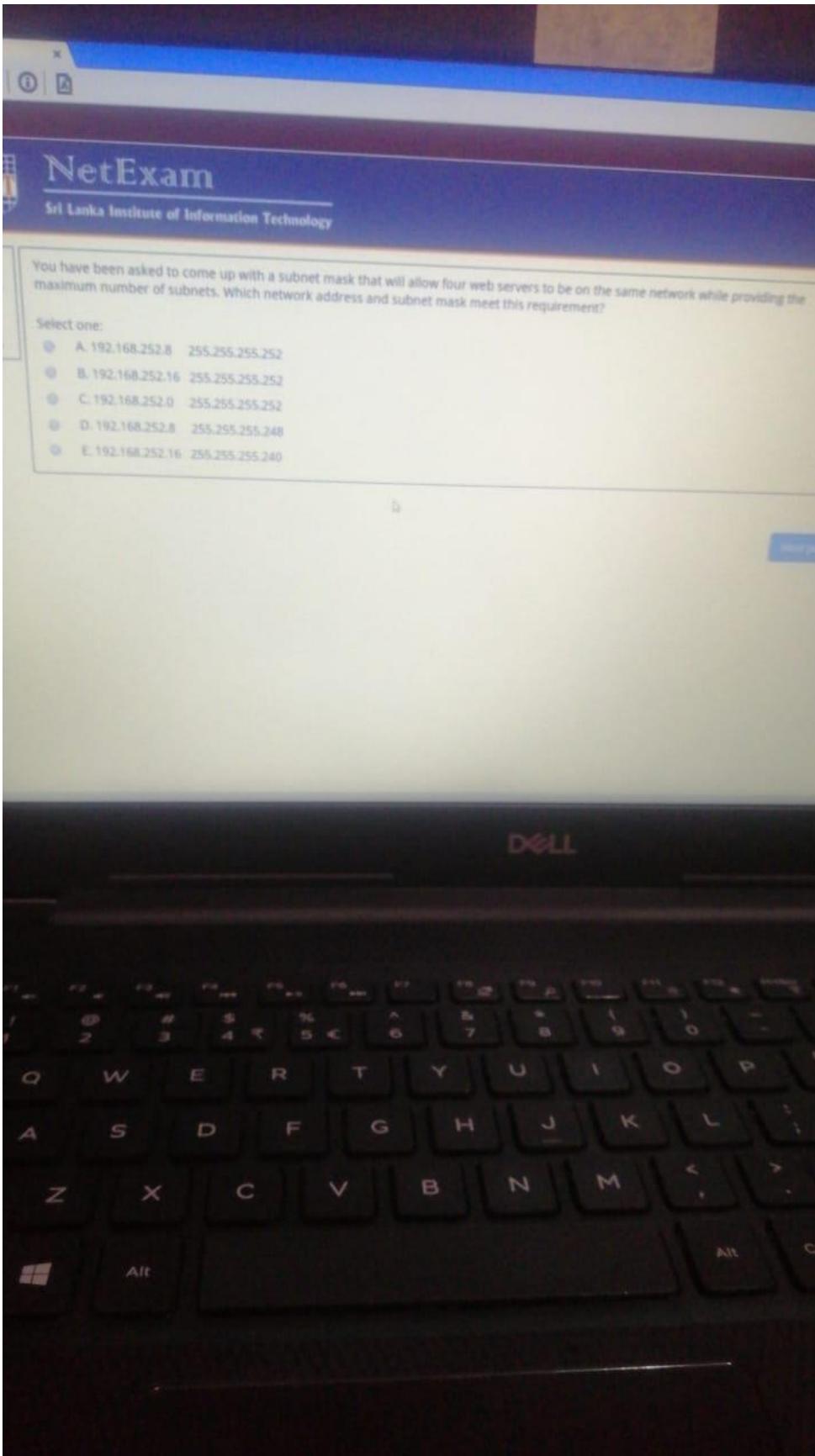
Find the size of the IP header? (in Bytes)

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:

44
 31
 20
 11
 24

F1 F2 F3 F4 F5 F6 F7





Question 30

Not yet answered

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 Flag question

Identify the purpose of ICMP?

Select one or more:

- Send control messages
- Send error messages
- Collision detection
- Avoiding routing loops.
- Transporting routing updates

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

←

4c00 01A0 0027 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:

- 164.12.0.0
- 90.60.2.9
- 90.60.0.0
- 164.12.14.7
- 90.0.0.0

DELL



Sri Lanka Institute of Information Technology

What does the following command allow you to perform next?

RouterA(config)#line vty 0 3

Select one:

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

NetExam
Sri Lanka Institute of Information Technology

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?

Select one:

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

Next Page

Question 26
Not yet answered
Marked out of 1.00
 Flag question

A new network is being designed for your company. Using a Class C IP network, which subnet mask will provide one useable subnet per department while allowing enough usable host addresses for each department specified in the diagram?

```
graph TD; MO[Main Office  
7 Users] --- Financial[Financial  
15 Users]; MO --- Sales[Sales  
15 Users]; MO --- Development[Development  
7 Users]; MO --- Support[Support  
16 Users]
```

Select one:

- A. 255.255.255.192
- B. 255.255.255.0
- C. 255.255.255.240
- D. 255.255.255.224
- E. 255.255.255.248

Quiz
Finish attempt
Time left 0
MULTIPLE
1 2
9 10
17 18
25 26
FEEDBACK
31

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

20	176
----	-----

20	176
----	-----

20	148
----	-----

Fragment
Offset

0

22

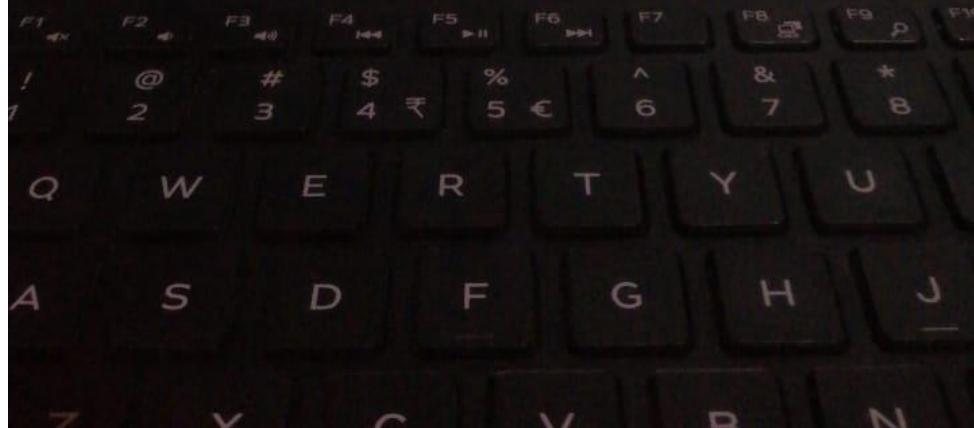
44

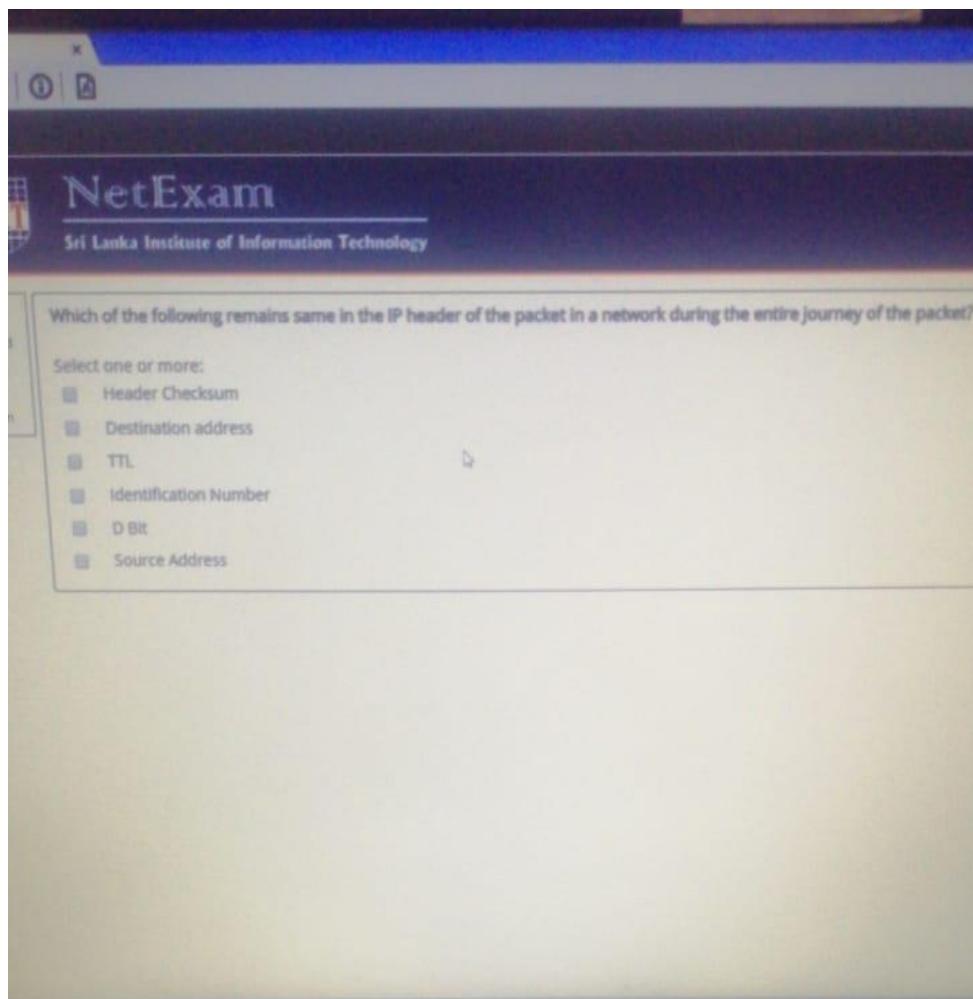
What is the last byte number of the data field of the second fragment ?

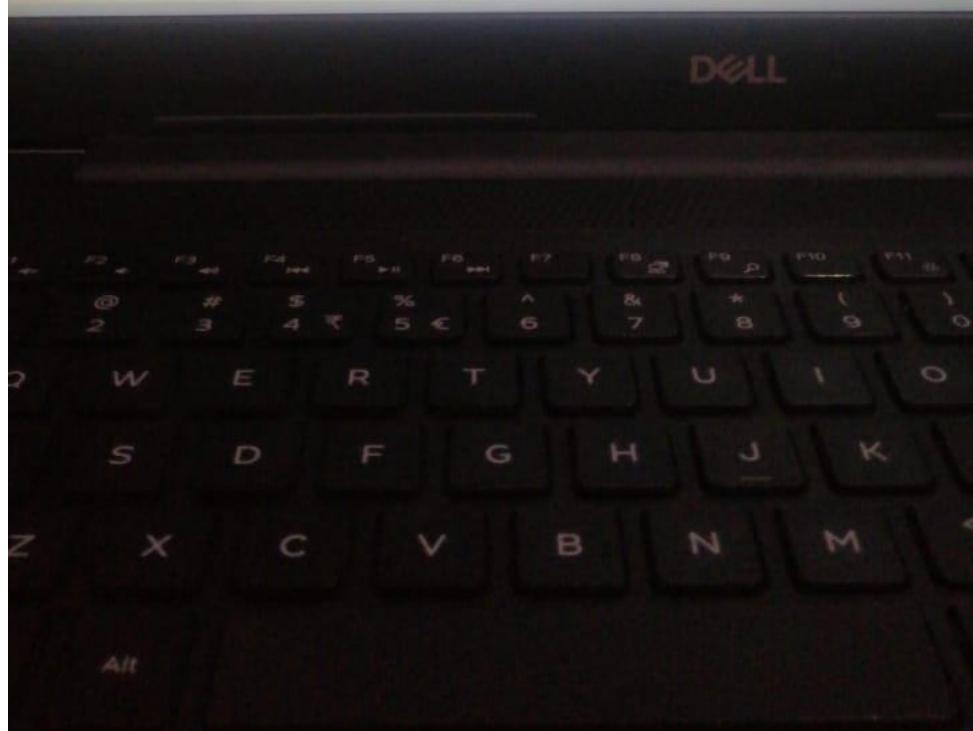
Select one:

- 195
- 176
- 175
- 196
- 351
- 352

DELL



A screenshot of a computer monitor displaying a Windows desktop. In the center, a window titled "NetExam" is open, showing a question from "Sri Lanka Institute of Information Technology". The question asks: "Which of the following remains same in the IP header of the packet in a network during the entire journey of the packet?". Below the question is a list of six options, each preceded by a blue square checkbox. The options are: "Header Checksum", "Destination address", "TTL", "Identification Number", "D Bit", and "Source Address".

A close-up view of a black Dell keyboard. The keys are white with black lettering. The visible keys include the F1-F12 function keys at the top, followed by a row of symbols (@, #, \$, %, ^, *, (,), \, /). Below that is a row of letters (Q, W, E, R, T, Y, U, I, O) and numbers (2, 3, 4, 5, 6, 7, 8, 9, 0). The next row shows S, D, F, G, H, J, K. The bottom row shows Z, X, C, V, B, N, M. The "Alt" key is visible on the left side of the keyboard.

An administrator must assign static IP addresses to a host PC in a network. For network 192.168.20.24/29, the router is assigned the first usable host address while the PC is given the last usable host address. Which of the following should be IP address, the subnet mask for the PC and the default gateway IP address?

Select one:

- A. IP address: 192.168.20.14 Subnet Mask: 255.255.255.248 Default Gateway: 192.168.20.9
- B. IP address: 192.168.20.30 Subnet Mask: 255.255.255.240 Default Gateway: 192.168.20.25
- C. IP address: 192.168.20.30 Subnet Mask: 255.255.255.248 Default Gateway: 192.168.20.25
- D. IP address: 192.168.20.254 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.20.1
- E. IP address: 192.168.20.30 Subnet Mask: 255.255.255.240 Default Gateway: 192.168.20.17

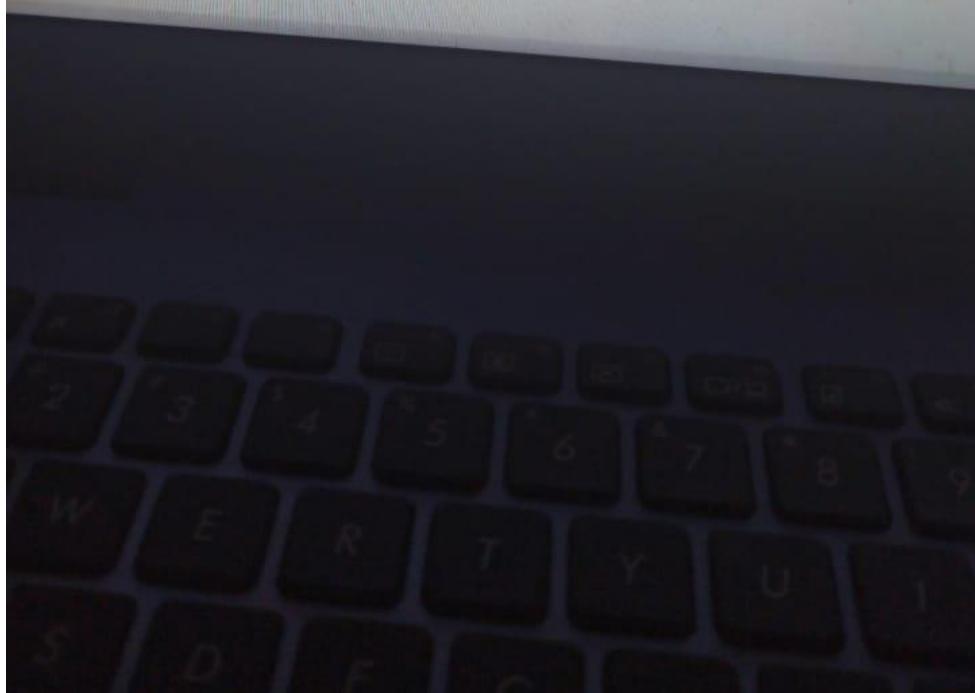
[Next page](#)

Which two statements describe the IP address 10.16.3.65/23?

1. The subnet address is 10.16.3.0
2. The lowest host address in the subnet is 10.16.2.1
3. The last valid host address in the subnet is 10.16.2.254
4. The broadcast address of the subnet is 10.16.3.255

Select one:

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



Sri Lanka Institute of Information Technology

The Administrator needs to prevent unauthorized users from plugging their laptops into the router. What type of password will help prevent this issue?

Select one:

- Secret
- Enable
- Console
- Telnet
- Line

[Next Page](#)

NetExam

Sri Lanka Institute of Information Technology

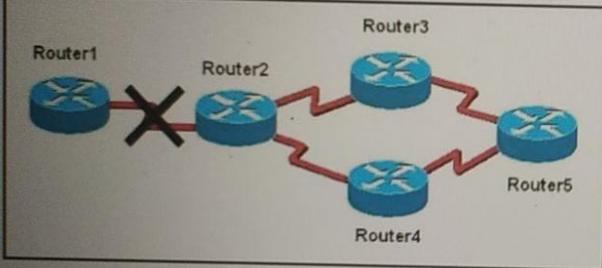
Which of the following would be correct if we borrowed 8-bits when using the following IP information?

IP address 121.34.45.1
Subnet mask 255.0.0.0

Select one:

- 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.
- 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.

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?



Select one:

- count to infinity
- route poisoning
- split horizon
- error condition

NetExam

Sri Lanka Institute of Information Technology

it20136574 N...

Routing Protocols used inside and between autonomous systems are respectively called ?

Select one:

- Interior Gateway Protocols and Border Gateway Protocols
- Exterior Gateway Protocols and Border Gateway Protocols
- Exterior Gateway Protocols and Interior Gateway Protocols
- Interior Gateway Protocols and Exterior Gateway Protocols
- Border Gateway Protocols and Exterior Gateway Protocols

≡ Quiz n...

Finish attempt

Time left 0:10:23

MULTIPLE CH...

1 2 3

8 9 10

15 16 17

22 23 24

29 30

Next page

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

Select one:

- Data Link
- Presentation
- Network
- Physical

Sri Lanka Institute of Information Technology

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 are the values of D bit and M bit respectively of the last fragment ?

Select one:

- 0, 0
- 0, 1
- 1, 0
- 1, 1

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

←

4c00 01A0 0027 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:

- 164.12.0.0
- 90.60.2.9
- 90.60.0.0
- 164.12.14.7
- 90.0.0.0

DELL

◀ C | ⌂ | ▶

NetExam
Sri Lanka Institute of Information Technology

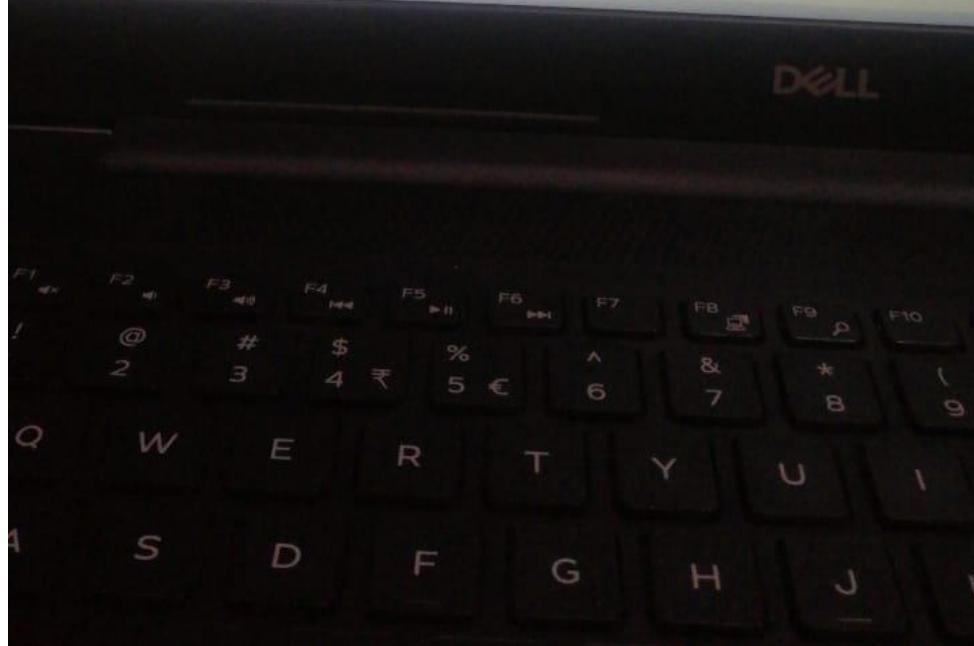
8
Answered
of
Question

Which of the following memory locations describes the possible locations from which the operating system initializes?

Select one:

- NVRAM, RAM
- NVRAM, ROM
- RAM, ROM
- Flash Memory, ROM

DELL



Which field of the IP header helps to check rearrangement of the fragments?

Select one:

- D Bit
- M Bit
- TTL
- HLEN
- Offset



9
Answered
X of
Question

Refer the following router output:

Router#show cl

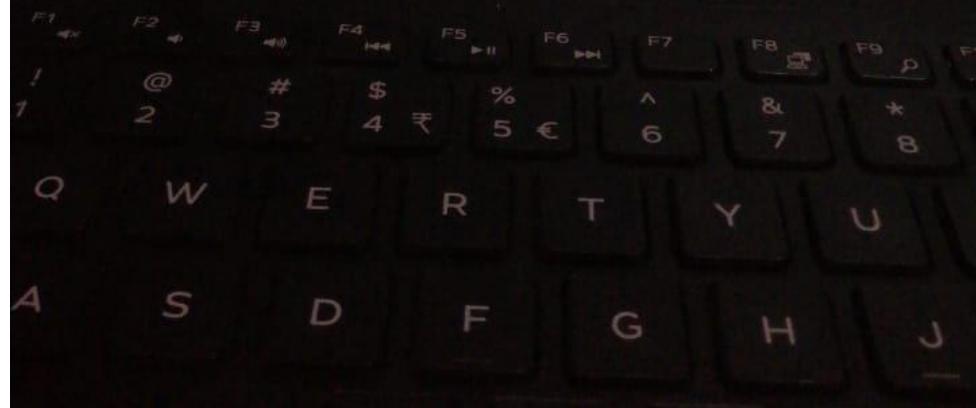
% Ambiguous command: "show cl"

What is the reason to receive this error message?

Select one:

- The command requires additional options or parameters
- There is no show command that starts with *cl*
- The command is being executed from the wrong router mode
- There is more than one show command that starts with the letters *cl*

DELL



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

Select one:

- Offset
- Identification Number
- TOS
- Flags

Which of these is not applicable for IP protocol ?

Select one or more:

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

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

Select one:

- Rollover
- Crossover
- TIA 568B
- Straight Through

NetExam
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lt20136574 Nao

An IP packet contains 6800 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:

- 4
- 5
- 4.5
- 6
- 7

Quiz na

Finish attempt

Time left 0:07:16

MULTIPLE CHOICE

1	2	3
8	9	10
15	16	17
22	23	24
29	30	
ANSWER		
31		

Next page



Question 30

Not yet answered

Marked out of
0.00

Flag question

Which command gives the view of recently used commands?

Select one or more:

- DO set history
- DO view history
- DO show history
- show ~~history~~
- show protocol
- view history
- set history

The image shows a computer monitor displaying a web-based examination interface. The header reads "NetExam" and "Sri Lanka Institute of Information Technology". The main question asks: "Which of the following remains same in the IP header of the packet in a network during the entire journey of the packet?" Below the question is a list of five options, each preceded by a checkbox:

- Header Checksum
- Source Address
- D Bit
- Destination address
- TTL
- Identification Number

Below the monitor, a portion of a black Dell laptop keyboard is visible, featuring white lettering on the keys.

Routing_Protocols used inside and between autonomous systems are respectively called ?

Select one:

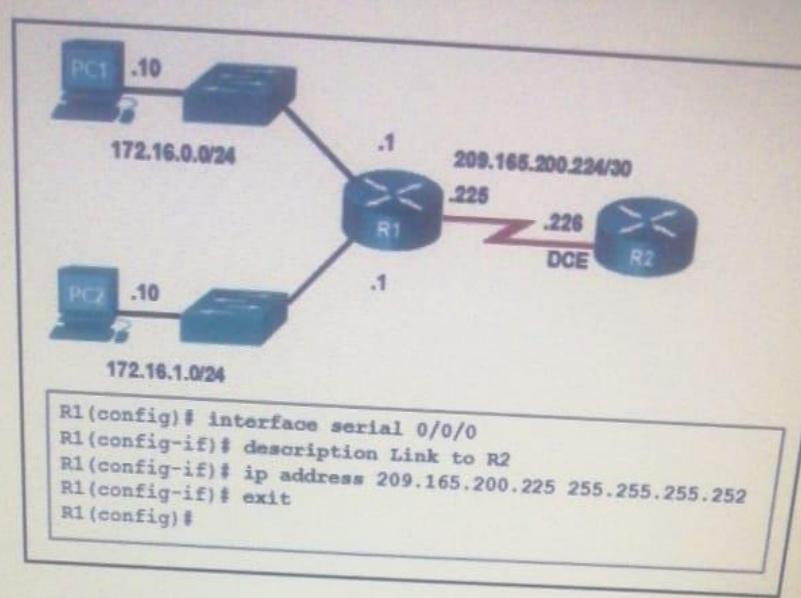
- Interior Gateway Protocols and Border Gateway Protocols
- Exterior Gateway Protocols and Interior Gateway Protocols
- Border Gateway Protocols and Exterior Gateway Protocols
- Exterior Gateway Protocols and Border Gateway Protocols
- Interior Gateway Protocols and Exterior Gateway Protocols

EIGRP is a Cisco propriety routing protocol that as all routing protocol use metrics to determine the best path to a destination. Which are the default metrics for this routing protocol?

Select one:

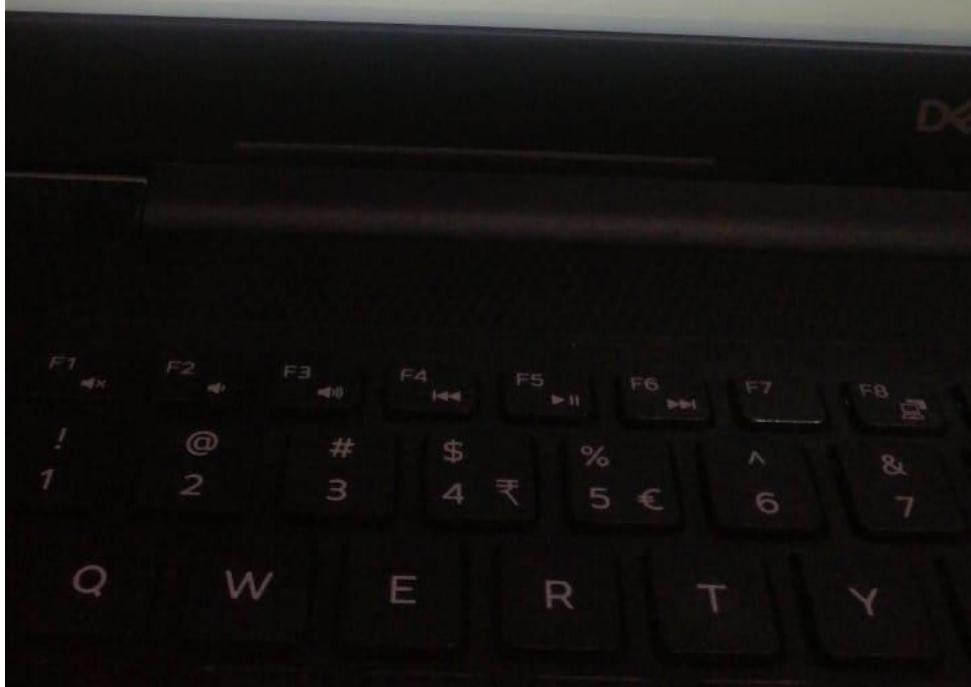
- A. Maximum Transmission Unit
- B. Delay in line
- C. Bandwidth
- D. Link loading in bits-per-second
- E. A and B above
- F. B and C above

[Next page](#)



Select one:

- line up
- clock rate 64000
- no shutdown
- Shutdown
- clockrate 64000



Question 30
Not yet answered
Marked out of
1.00
 Flag question

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



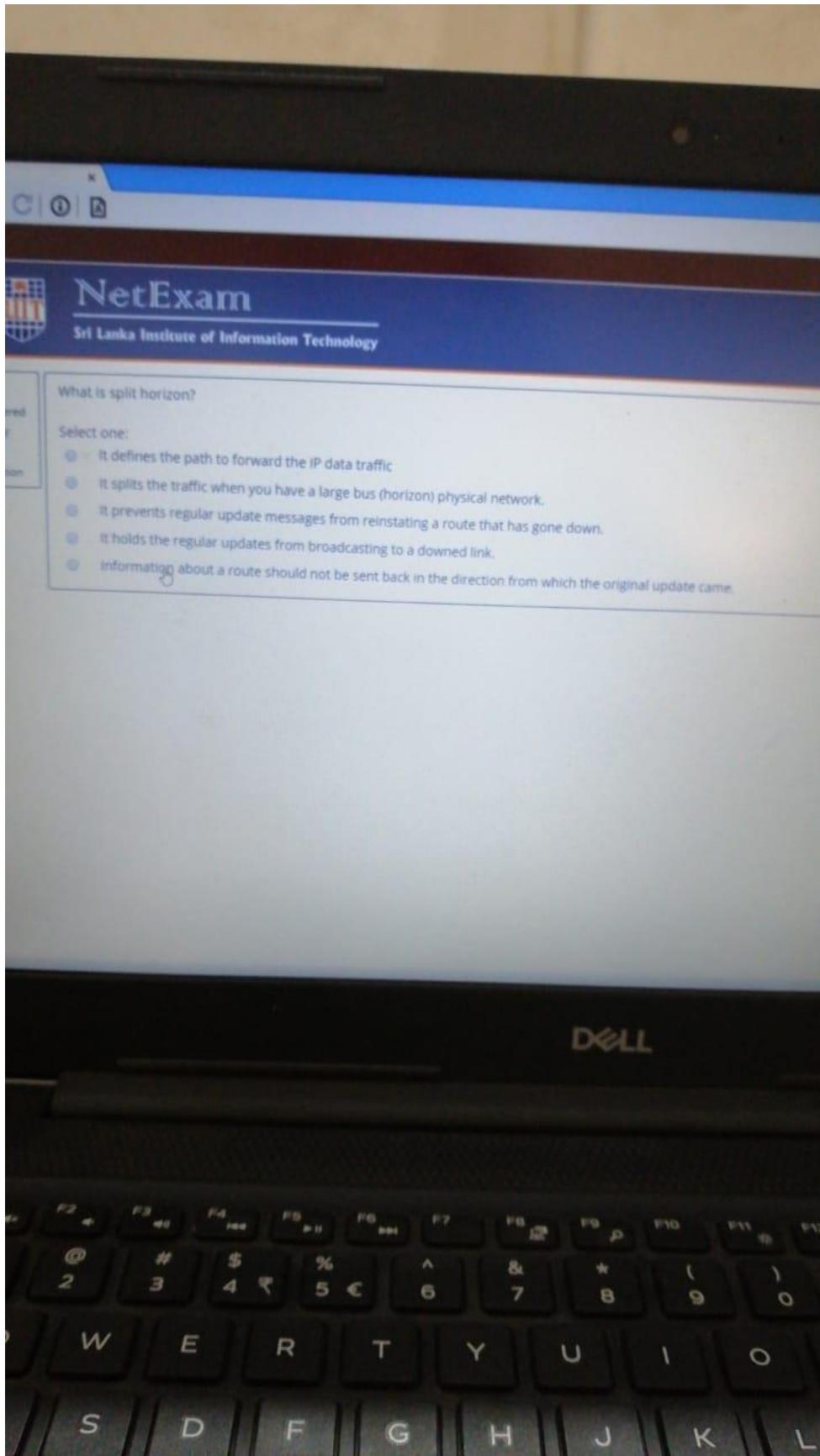
4c00 01A0 0027 0000 0906 0000 5A3C 0209 A40C 0E07

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:

- 164.12.14.7
- 90.60.0.0
- 164.12.0.0
- 90.60.2.9



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 prevents regular update messages from reinstating a route that has gone down.
- 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.



Ques 30

yet answered

100 out of

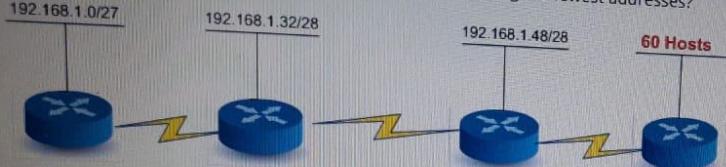
Flag question

Identify the purpose of ICMP?

Select one or more:

- Send error messages
- Collision detection
- Avoiding routing loops.
- Send control messages
- Transporting routing updates

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?



Quiz navigation

Finish attempt ...

Time left 0:03:23

MULTIPLE CHOICE QUEST

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

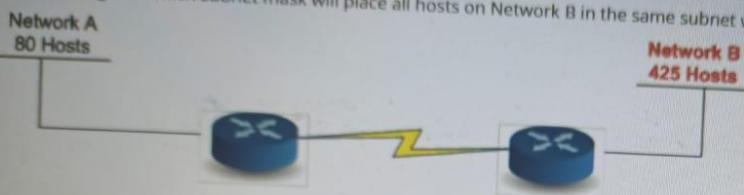
FEEDBACK

31

Select one:

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

What subnet mask will place all hosts on Network B in the same subnet with the least amount of wasted addresses?



Select one:

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



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

Select one:

- Physical
- Data Link
- Network
- Presentation

[Next page](#)



☰

Finish

Time

MULT

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

An organization is granted the IP Address block 216.100.10.0 in class C. The administrator wants to create 13 subnets and it is required to take minimum number of bits to create subnetworks.

Find the subnet mask.

Select one:

- 255.255.224.0
- 255.255.255.255
- 255.255.255.240
- 255.255.255.0
- 255.255.240.0

[Next page](#)

FEEDBACK

You need to issue the command show startup-config from the relevant mode. How to identify that you are in that mode?

Select one:

- %
- #
- >
- \$

[Next page](#)



Which field of the IP header helps to check rearrangement of the fragments?

Select one:

- HLEN
- TTL
- D Bit
- Offset
- M Bit

A new network is being designed for your company. Using a Class C IP network, which subnet mask will provide one usable host address for each department specified in the diagram?

```
graph TD; MainOffice[Main Office  
7 Users] --- Financial[Financial  
15 Users]; MainOffice --- Sales[Sales  
15 Users]; MainOffice --- Development[Development  
7 Users]; MainOffice --- Support[Support  
16 Users]
```

Select one:

- A. 255.255.255.192
- B. 255.255.255.224
- C. 255.255.255.240
- D. 255.255.255.0
- E. 255.255.255.248

Question 30
Not yet answered
Marked out of 1.00
Flag question

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

Quiz navigation

Finish attempt ...
Time left 0:00:54

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
29	30					

FEEDBACK

31

ed

on

2001:067c:002e:0001:0000:0000:0000:00c1

The abbreviated version of the above IPv6 address is :

N

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?

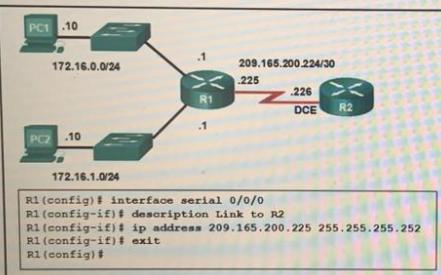
Select one:

- A. 192.168.252.8 255.255.255.252
- B. 192.168.252.8 255.255.255.248
- C. 192.168.252.0 255.255.255.252
- D. 192.168.252.16 255.255.255.240
- E. 192.168.252.16 255.255.255.252

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Question 7
Not yet answered
Marked out of 1.00
Flag question

A Network Administrator has entered commands shown below in R1. When he checks the connectivity status it was found that the serial interface is administratively down.
What is the additional command to be issued to bring it up ?



R1(config)# interface serial 0/0/0
R1(config-if)# description Link to R2
R1(config-if)# ip address 209.165.200.225 255.255.255.252
R1(config-if)# exit
R1(config)#

Select one:

- line up
- clock rate 64000
- Shutdown
- ~~0~~ shutdown
- clockrate 64000

Quiz navigation
Finish attempt ...
Time left 0:44:49
MULTIPLE CHOICE QUESTIONS
1 2 3 4
9 10 11 12
17 18 19 20 21
25 26 27 28 29
FEEDBACK
31

Not yet answered
Marked out of 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 navigation:
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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Question 1
Not yet answered
Marked out of 1.00
 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 0:59:47

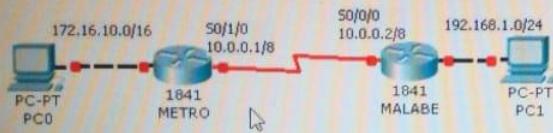
**Question 1**

Not yet answered
Marked out of 1.00

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 S0/0/0
- 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
Marked out of 1.00

Flag question

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.

≡ Q

1

8

15

22

29

Finish a

Time le



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Question 4

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

Next page

Fin

Tim



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Question 3

Not yet answered

Marked out of
1.00

Flag question

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

Answer:

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

Next page



Finish

Time



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Question 4

Not yet answered

Marked out of
1.00

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.

Next p

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Question 6

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

Next page

1 2
8 9
15 16
22 23
29 30

Finish attempt

Time left 0:51

Online Exams

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Question 5

Not yet answered

Marked out of 1.00

Flag question

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?

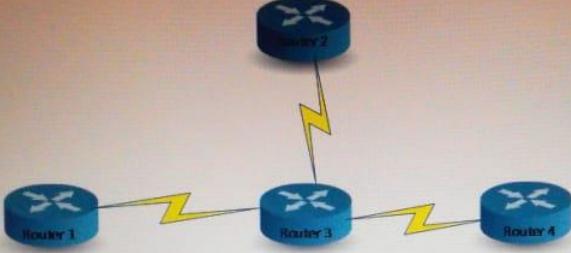
Select one:

- 172.16.192.128
- 172.16.192.160
- 172.16.192.168
- 172.16.192.0
- 172.16.0.0

Next page

Question 6
Not yet answered
Marked out of 1.00
 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
8	9	10	11
15	16	17	18
22	23	24	25
29	30		

Finish attempt ...
Time left: 0:48:31

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



Online Exams

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Question 8
Not yet answered
Marked out of 0
 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

Finish att

Time left: 0

9
Powered
out of
question

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?

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
8	9	10	11	12	13
15	16	17	18	19	20
22	23	24	25	26	27
29	30				

Finish attempt ...
Time left 0:46:55

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Question 7
Not yet answered
Marked out of 1.00
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:

- A. 8190
- B. 4094
- C. 254
- D. 8192
- E. 4090

Next page



Section 10

Not yet answered

Marked out of

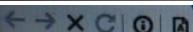
10

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

[Next page](#)

Question 11

Not yet answered

Marked out of

1.00

Flag question

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, EZ - 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
22	23	24	25	26	27
29	30				

[Finish attempt ...](#)

Time left 0:42:47

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Question 8

Not yet answered

Marked out of 1.00

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

1
8
15
22
29

Finish

Time left

Next page

Online Exams

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Question 12

Not yet answered

Marked out of 1.00

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

1
8
15
22
29

Finish

Time left

Next page



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Question 10

Not yet answered

Marked out of
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

Marked out of
1.00

Flag question

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

[Next page](#)

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Question 12
Not yet answered
Marked out of 1.00

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

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Question 13
Not yet answered
Marked out of 1.00

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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Question 13

Not yet answered

Marked out of
1.00

Flag question

What is the maximum hop count for RIP routes?

Select one:

- 16
- 255
- 15
- 256



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Question 14

Not yet answered

Marked out of
1.00

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

Question 14
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?

Network A
80 Hosts

Network B
425 Hosts

Select one:

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

Next page

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

Question 15
Not yet answered
Marked out of 1.00
 Flag question

What is the maximum hop count for RIP routes?

Select one:

- A. 255
- B. 15
- C. 256
- D. 16

Next page

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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Section 16

Not yet answered

Marked out of 1.00

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

Next page

Quiz navigation

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

Finish attempt ...

Time left 0:31:56

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Question 15

Not yet answered

Marked out of 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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Question 17

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 privilleged 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 only
 C and D only
 E and F only

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...
Time left 0:30:14

← → × C ⓘ A

Question 16

Not yet answered

Marked out of 1.00

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

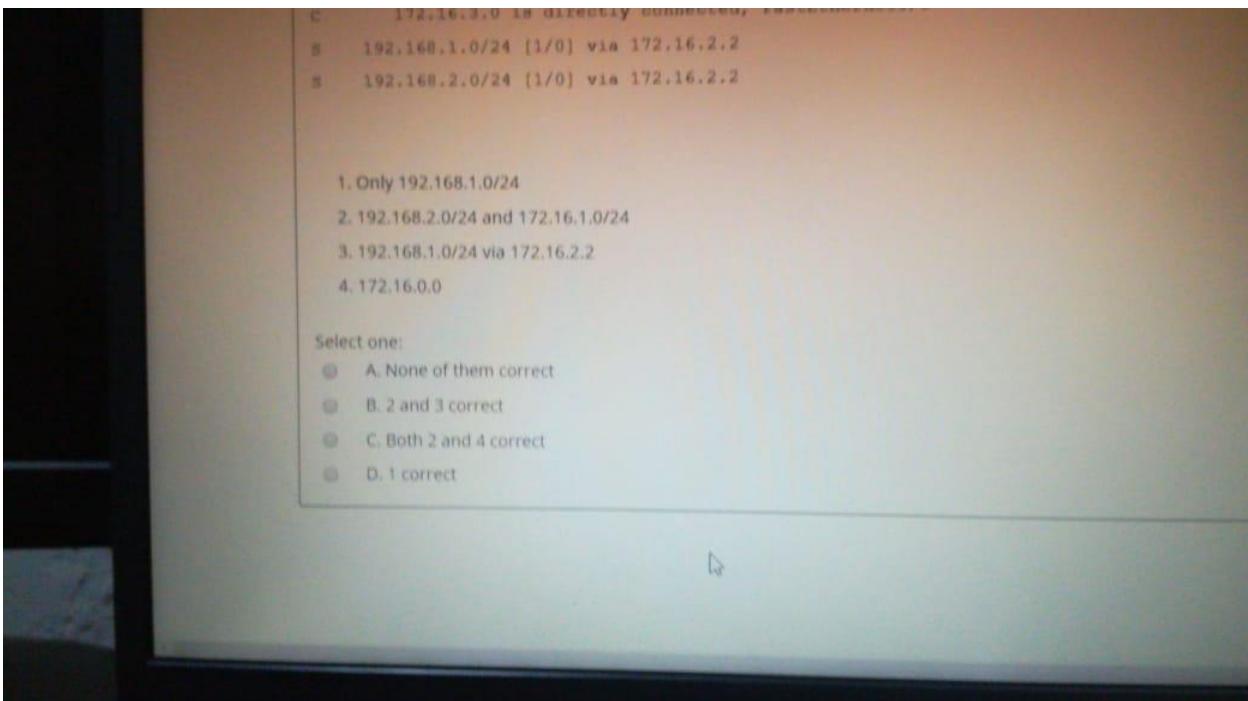
1. Only 192.168.1.0/24
2. 192.168.2.0/24 and 172.16.1.0/24
3. 192.168.1.0/24 via 172.16.2.2
4. 172.16.0.0

Select one:

Quiz navigation

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

Finish attempt...
Time left 0:29:57



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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:

- A Not a valid address.
- B A broadcast address
- C A private network address.
- D A public network address.
- E A usable host address.

[Next page](#)

Quiz n

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

Finish attempt

Time left 0:28:32

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19
Answered
out of
question

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

Online Exams

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19
Answered
out of
question

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

Next page

Finish attempt ...

Time left 0:25:28



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Question 17

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::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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Question 21

Not yet answered
Marked out of
1.00

Flag question

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

[Next page](#)

[Finish a](#)

Time left

1

8

15

22

29

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Question 18
Not yet answered
Marked out of 1.00
[Flag question](#)

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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Question 22
Not yet answered
Marked out of 1.00
[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:

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

Quiz navigation

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

[Finish attempt ...](#)
Time left 0:20:17
[Next page](#)

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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](#)

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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](#)

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Question 24

Not yet answered

Marked out of 1.00

Flag question

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

Select one:

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

Next page

Finish attempt

Time left 0:17:44

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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

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Finish

Time

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26 answered 1 out of 3 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

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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

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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

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Question 28
Not yet answered
Marked out of 1.00
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)?

172.16.10.0/16 50/1/0 50/0/0
10.0.0.1/8 10.0.0.2/8 192.168.1.0/24

PC-PT PC0 1841 METRO 1841 MALABE PC-PT PC1

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

Finish attempt ...

Time left 0:11:4

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?



Select one:

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



Online Exams

Sri Lanka Institute of Information Technology**Question 22**

Not yet answered

Marked out of
0 Flag question

IGRP is a Cisco propriety routing protocol that as all routing protocol use metrics 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

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Section 29
0 out of 100
Flag question

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

Answer:

Next page

Finish attempt

Time left 0

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Section 23
0 out of 100
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 privilidge 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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Question 30

Not yet answered

Marked out of 1.00

Flag question

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

Finish attempt

Time left

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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



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Question 25

Not yet answered

Marked out of
1.00

Flag question

What is the default route on an IP network?

Select one:

- When all conditions are equal, the best route for delivery of IP datagrams
- The address of the nearest downstream neighbor in a Token ring network
- Any static route listing in a routing table
- 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
- This is the route that will be chosen first by IP for delivery of a datagram

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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



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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



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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.



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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



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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

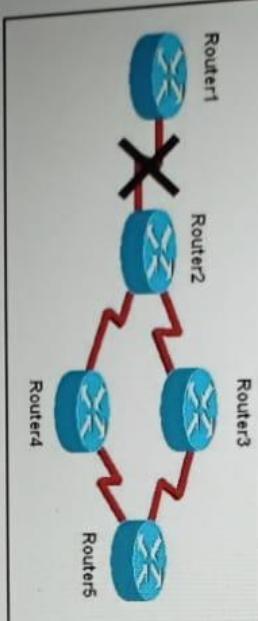
Select one:

- 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

≡ Quiz navigation

Section 30

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?



- route poisoning
 - error condition
 - count to infinity
 - split horizon

110

Time left 0:01:03

Time left 0:01:03

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

Next page

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

Select one:

- 40961 0200.1111.1111
- 40970 0200.2222.2222
- 32768 0200.1111.1111
- 40951 0200.1111.1111
- 32769 0200.2222.2222



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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~~witch~~port port-security mac-address 1

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

[Next page](#)

Computer Networks

Internet Protocol Version 4 (IPv4) and IPv6

3rd Semester Institute of Information Technology

Question 10
Max points allocated:
Marked max of:
400
P flag question

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

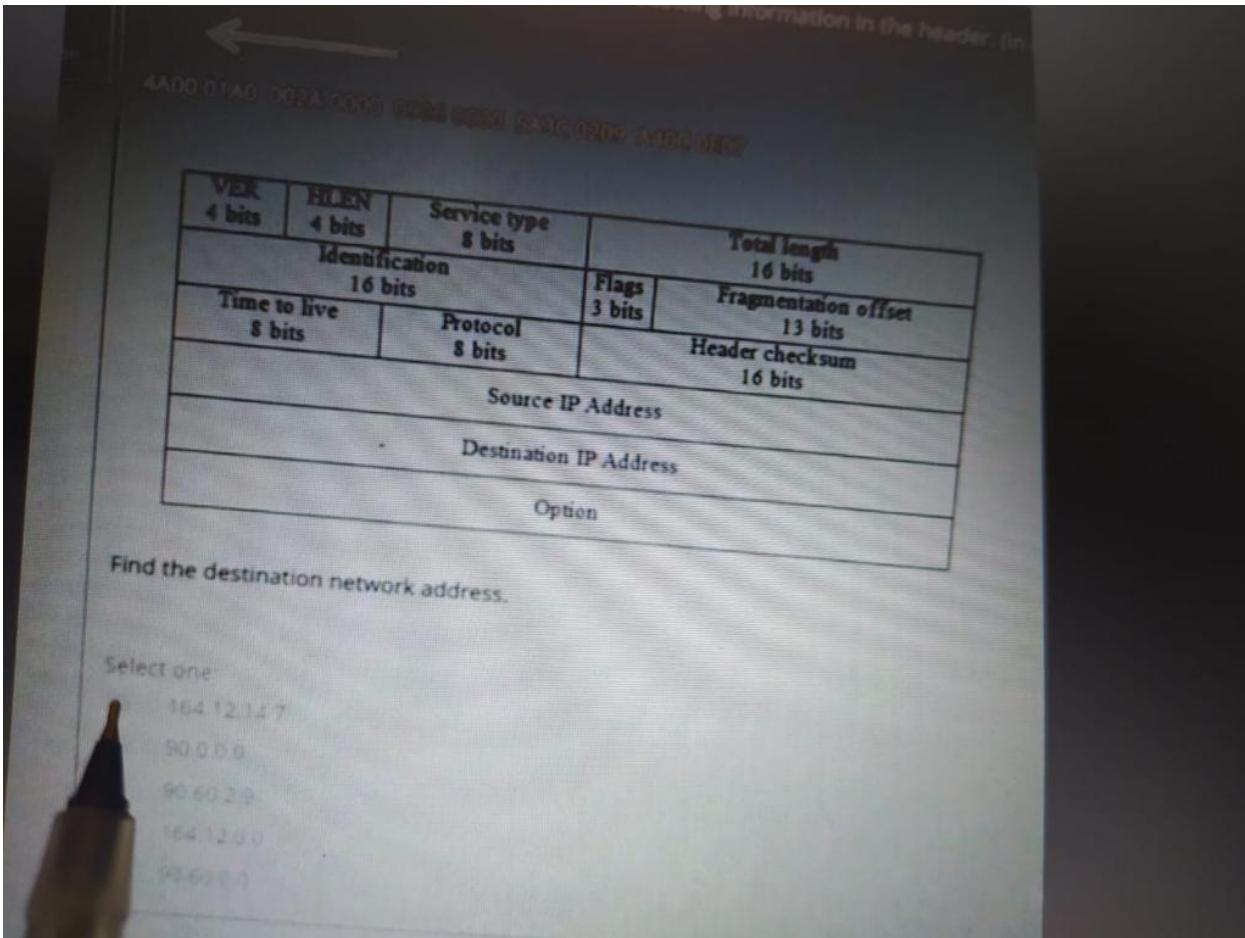
R

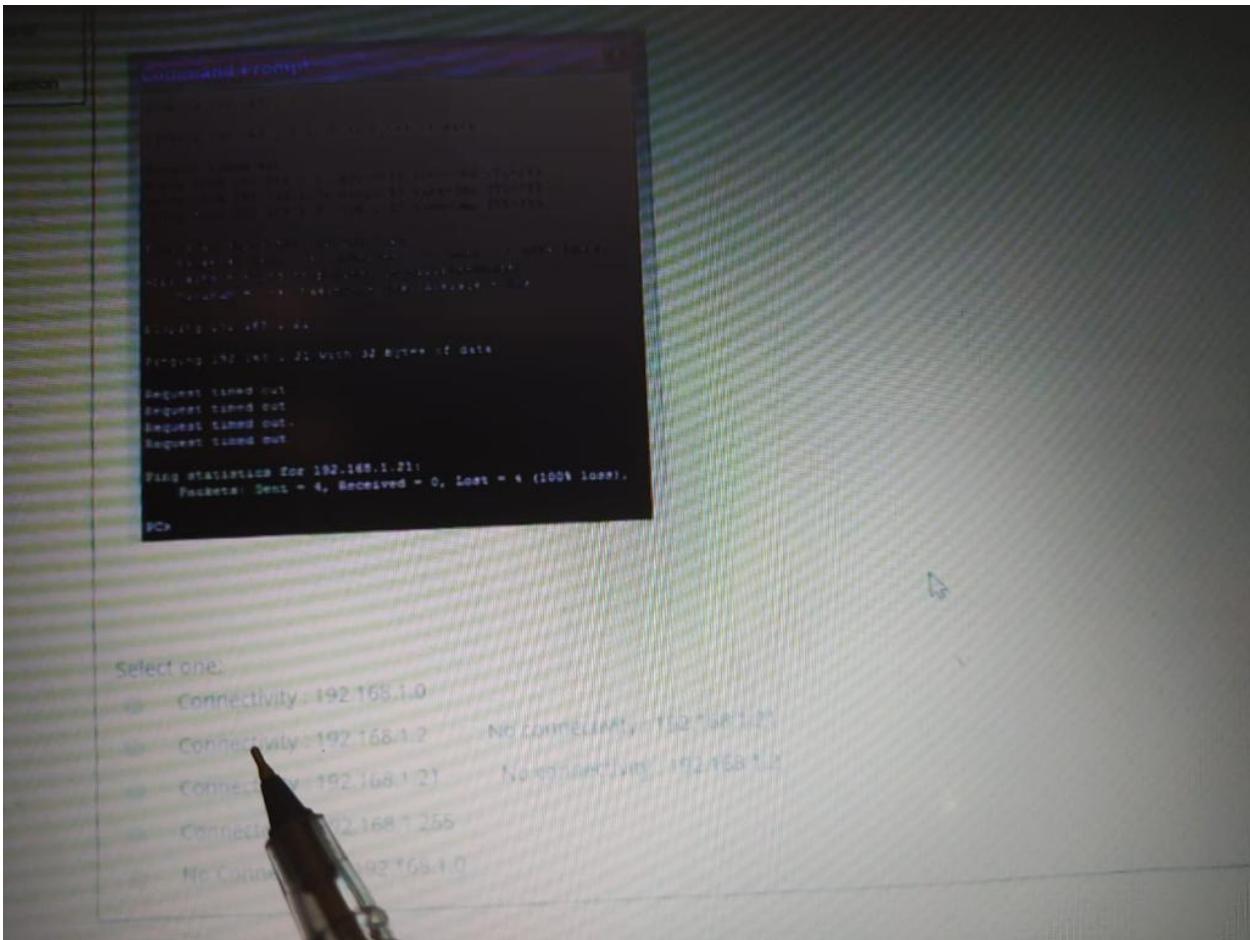
S

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

Select one:







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	$l=0$
0	$l=0$
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:

- P
- Q
- R
- S

Next Page



Online Exams

Sri Lanka Institute of Information Technology

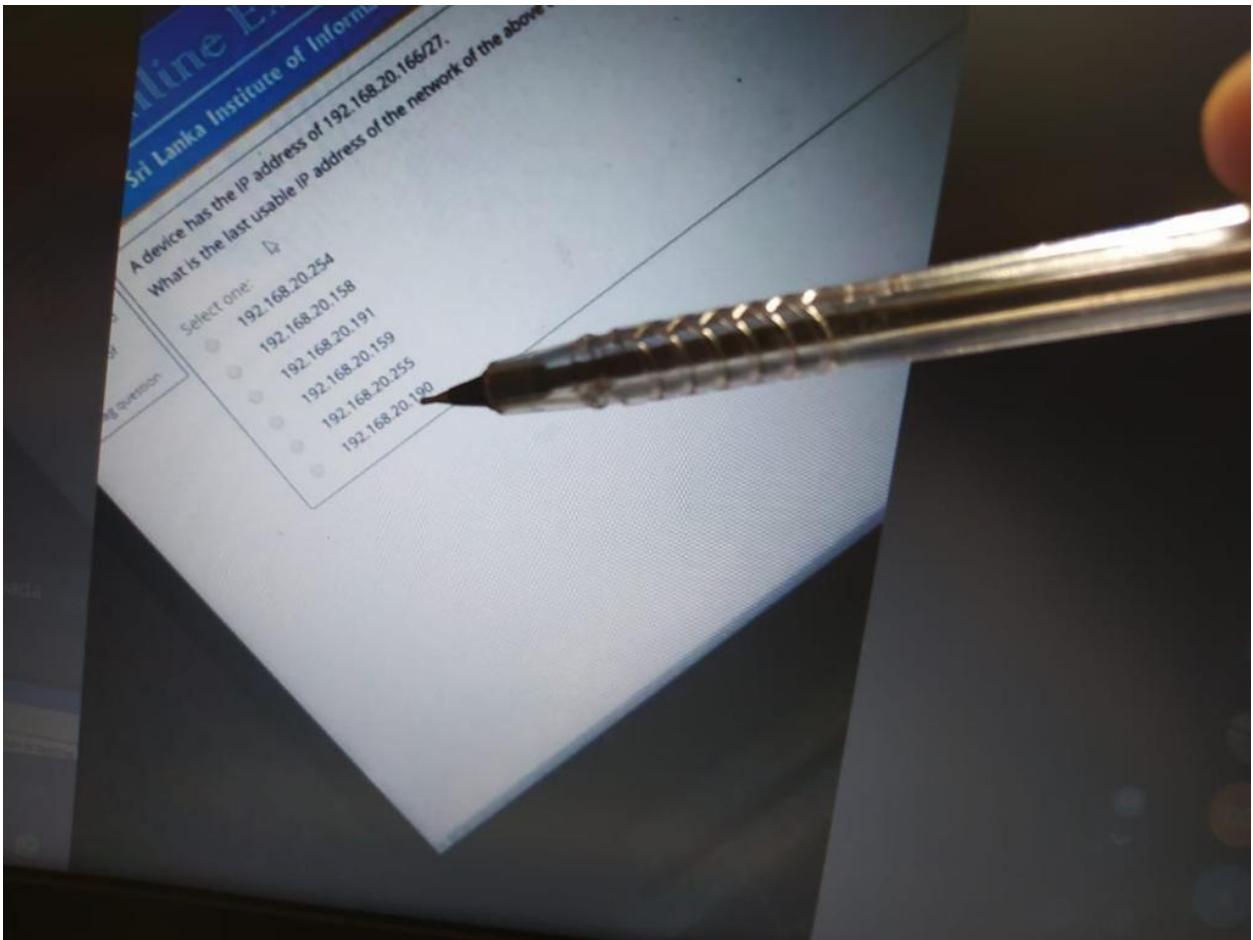
4

Answered
of
ession

Identify the purpose of ICMP?

Select one:

- Send error and control messages
- Collision detection
- Transporting routing updates
- Avoiding routing loops



A router with a Maximum Transmission Unit (MTU) of 196 bytes has received an IP packet of size 196 bytes 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	20 176	20 148
	0	22	44

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

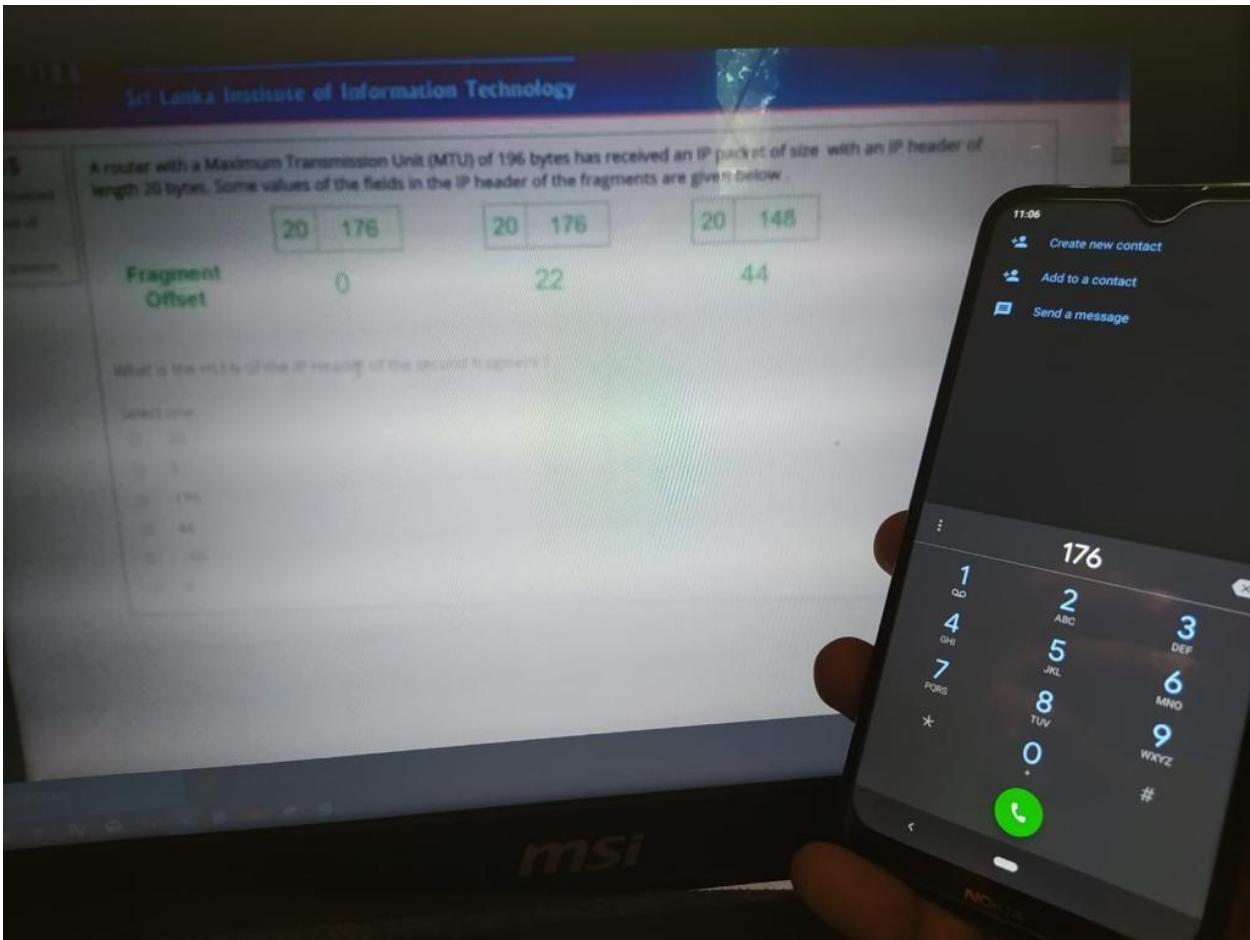
Select one:

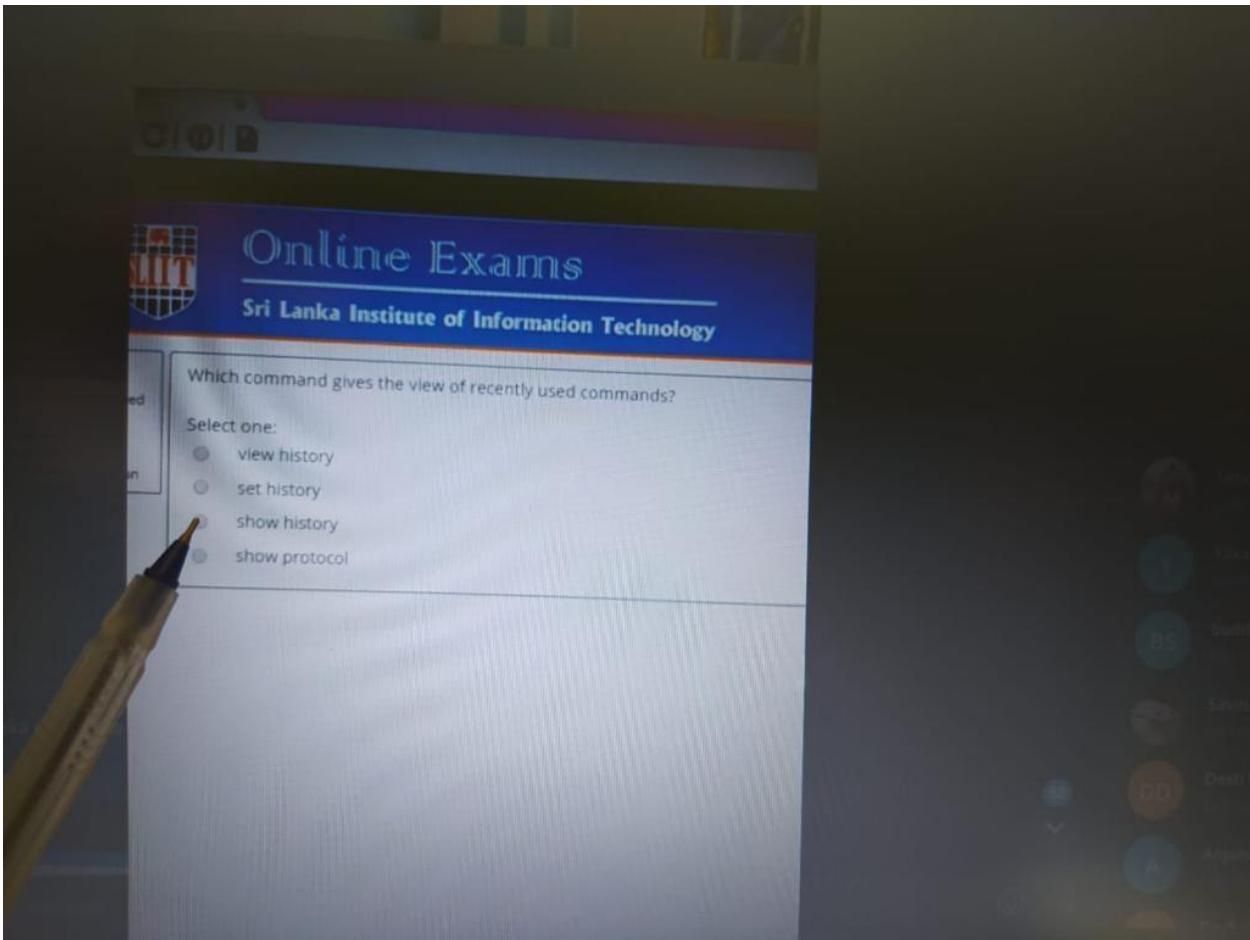
- 5
- 20
- 176
- 44
- 4
- 160

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





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	$\neq 0$
0	$\neq 0$
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

Next Page

Online Exams

Sri Lanka Institute of Information Technology

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

Online Exams

Sri Lanka Institute of Information Technology

9
answered
1 out of
1 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.



Online Exams

Sri Lanka Institute of Information Technology

ation 5

yet answered

ted out of

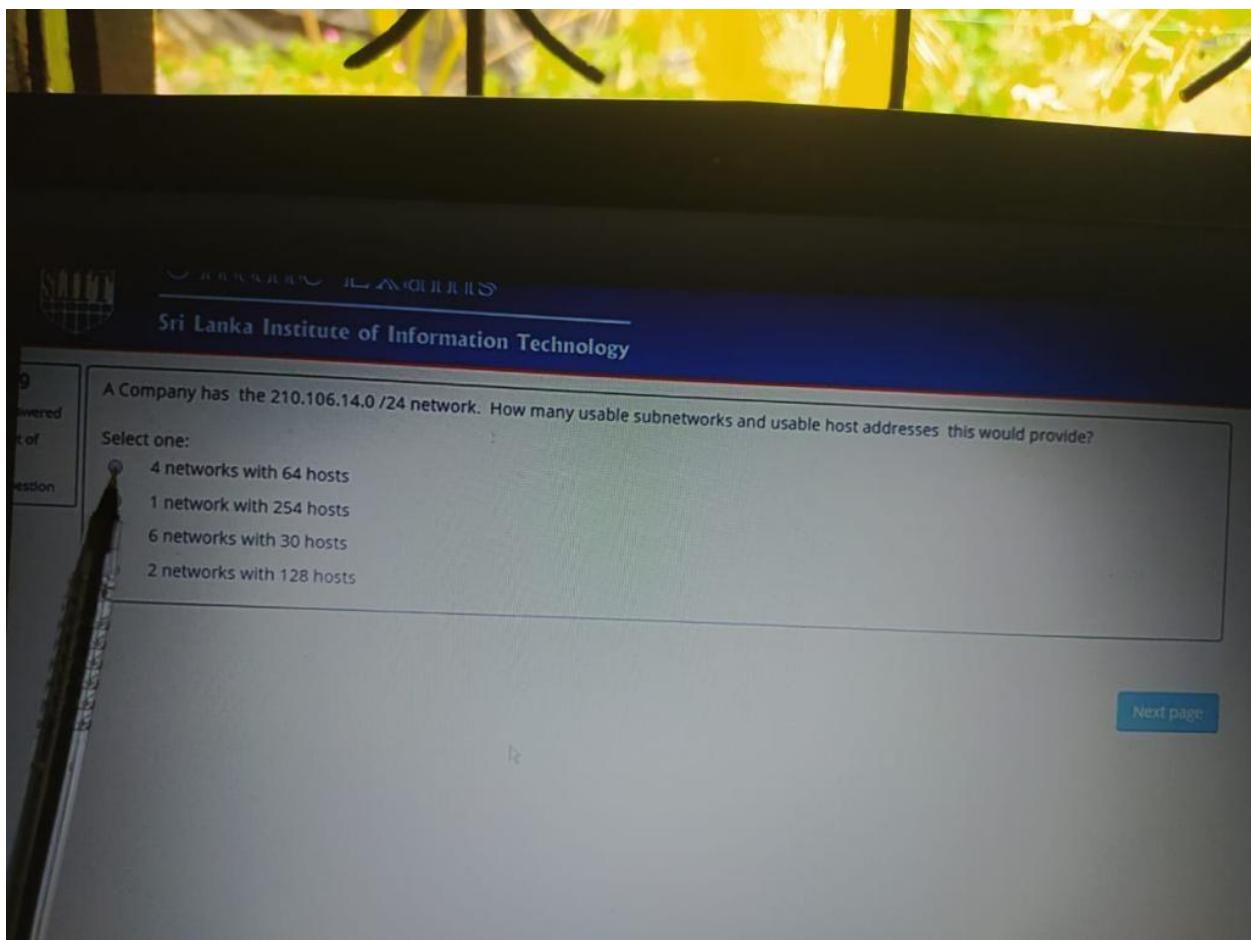
Flag question

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



Online Exams

Sri Lanka Institute of Information Technology

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

Select one:

BGP

RIP

OSPF

None of the above

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



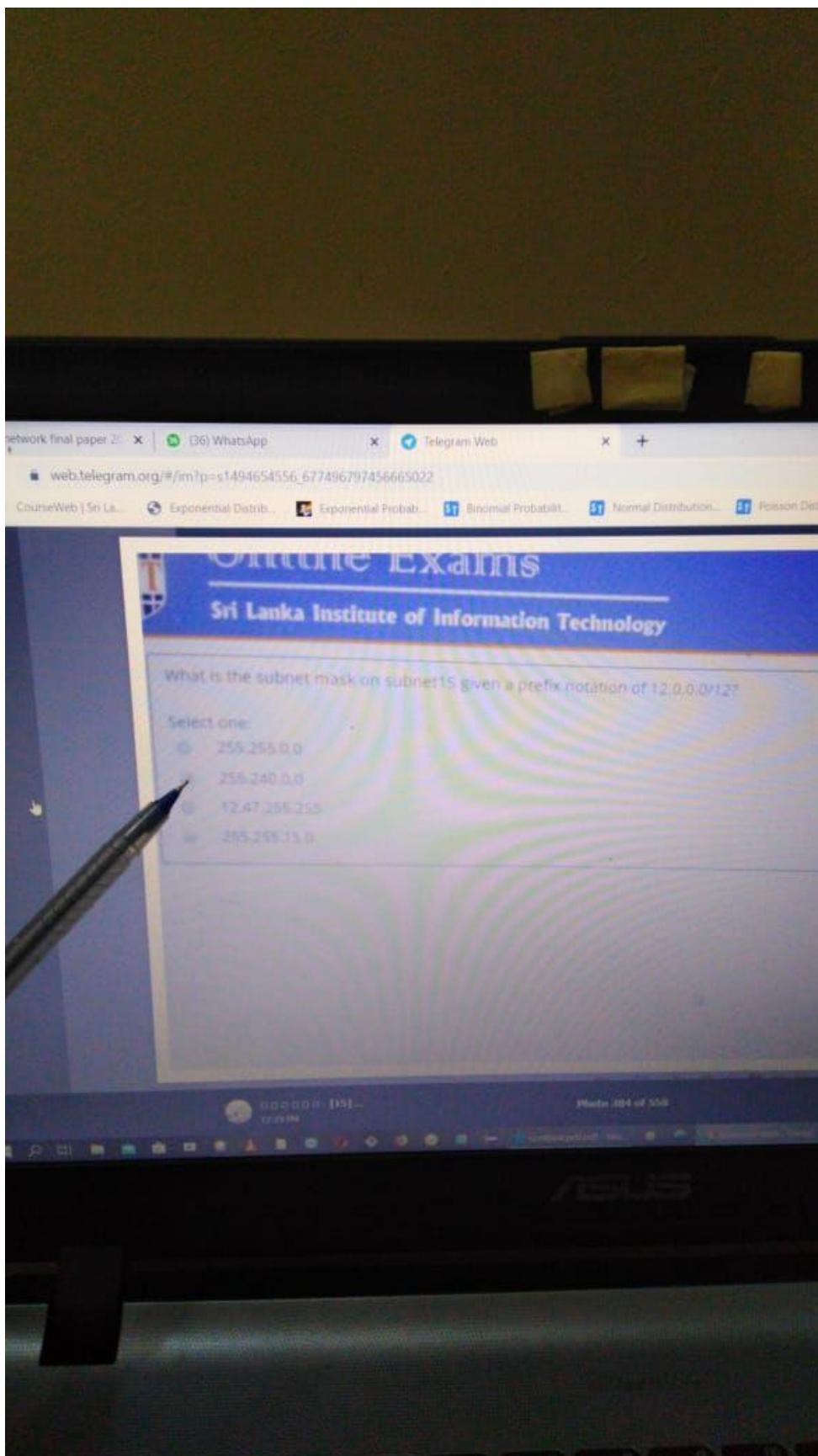
Online Exams

Sri Lanka Institute of Information Technology

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.



The image shows a computer screen with two main windows open. At the top, a Telegram Web browser window is visible, displaying a message from a user with the ID 554556_677496797456665022. Below the message, there are three links: "Exponential Probab...", "Binomial Probabilit...", and "Normal Distribution...". The main content of the screen is an online examination question from Sri Lanka Institute of Information Technology (SLIIT). The question is: "If the first byte of a Datagram is 4000". It asks the user to "Select one:" from a list of five options, all of which are preceded by radio buttons. The options are: "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", and "The datagram is 2000 Bytes in size". A pen is resting on the left side of the screen, pointing towards the question. The bottom of the screen shows a taskbar with various icons and the text "Photo 357 of 558".

app X Telegram Web

554556_677496797456665022

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

Online Exams

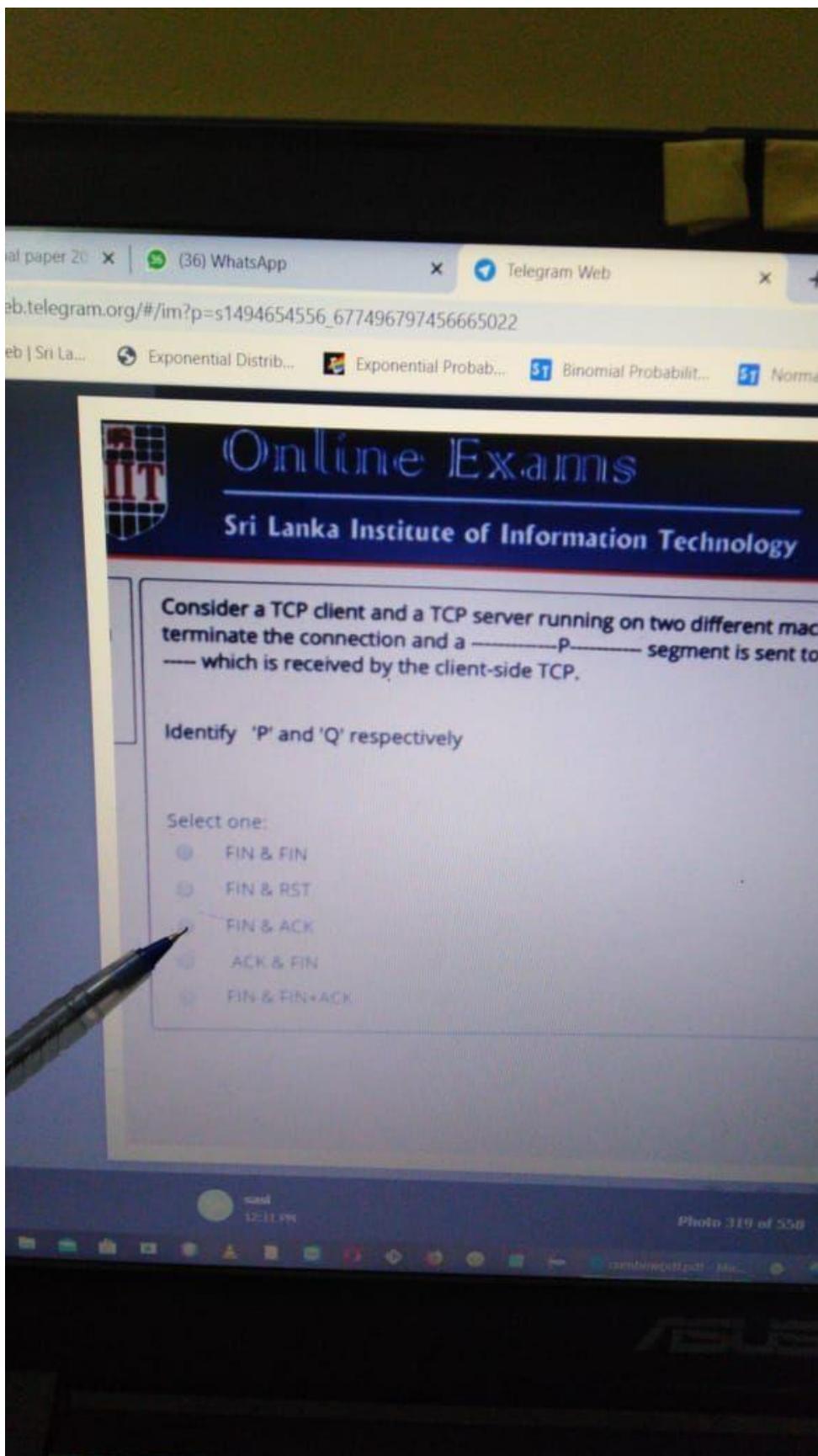
Sri Lanka Institute of Information Tech

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

Photo 357 of 558



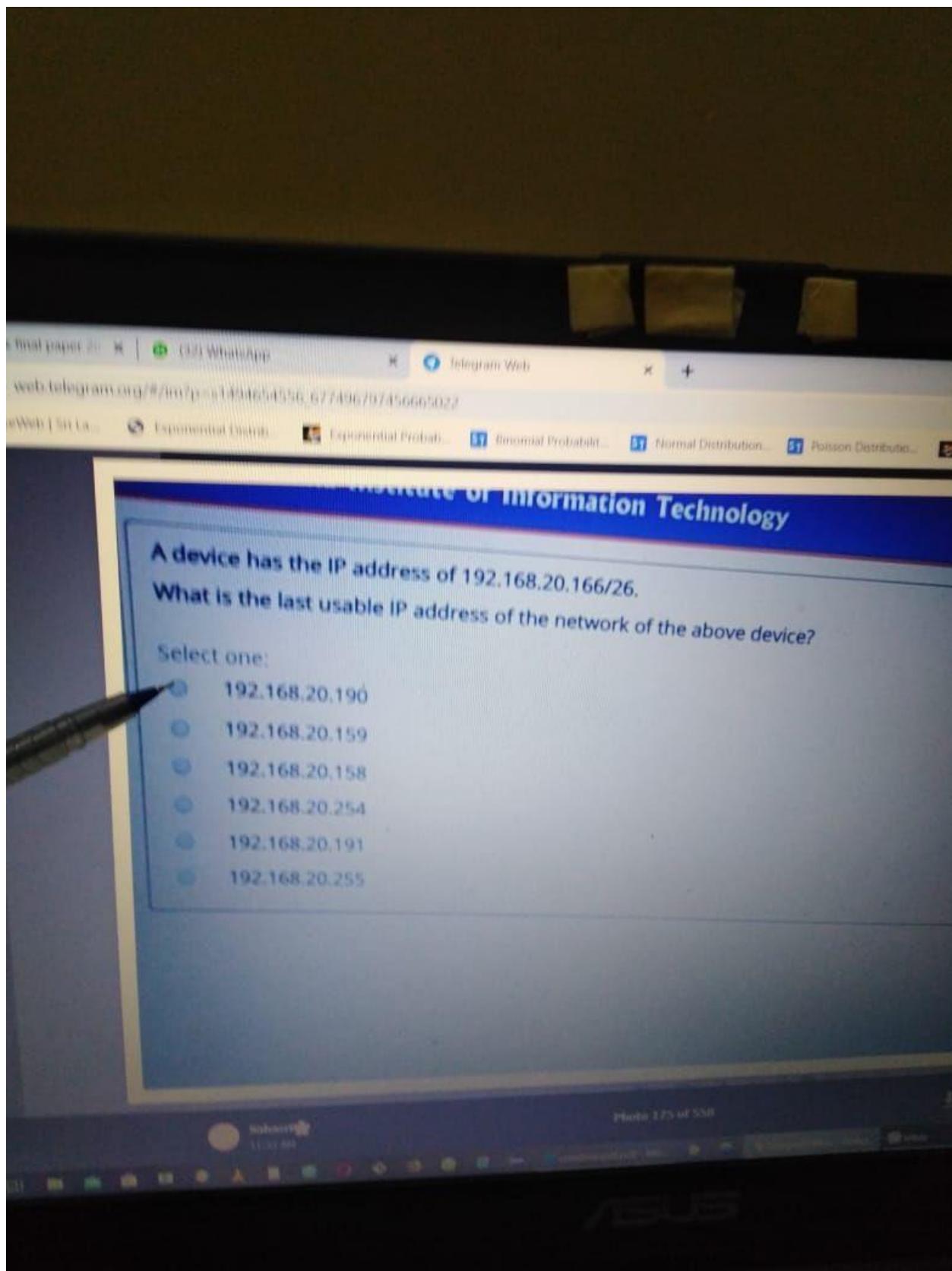
Online Exams

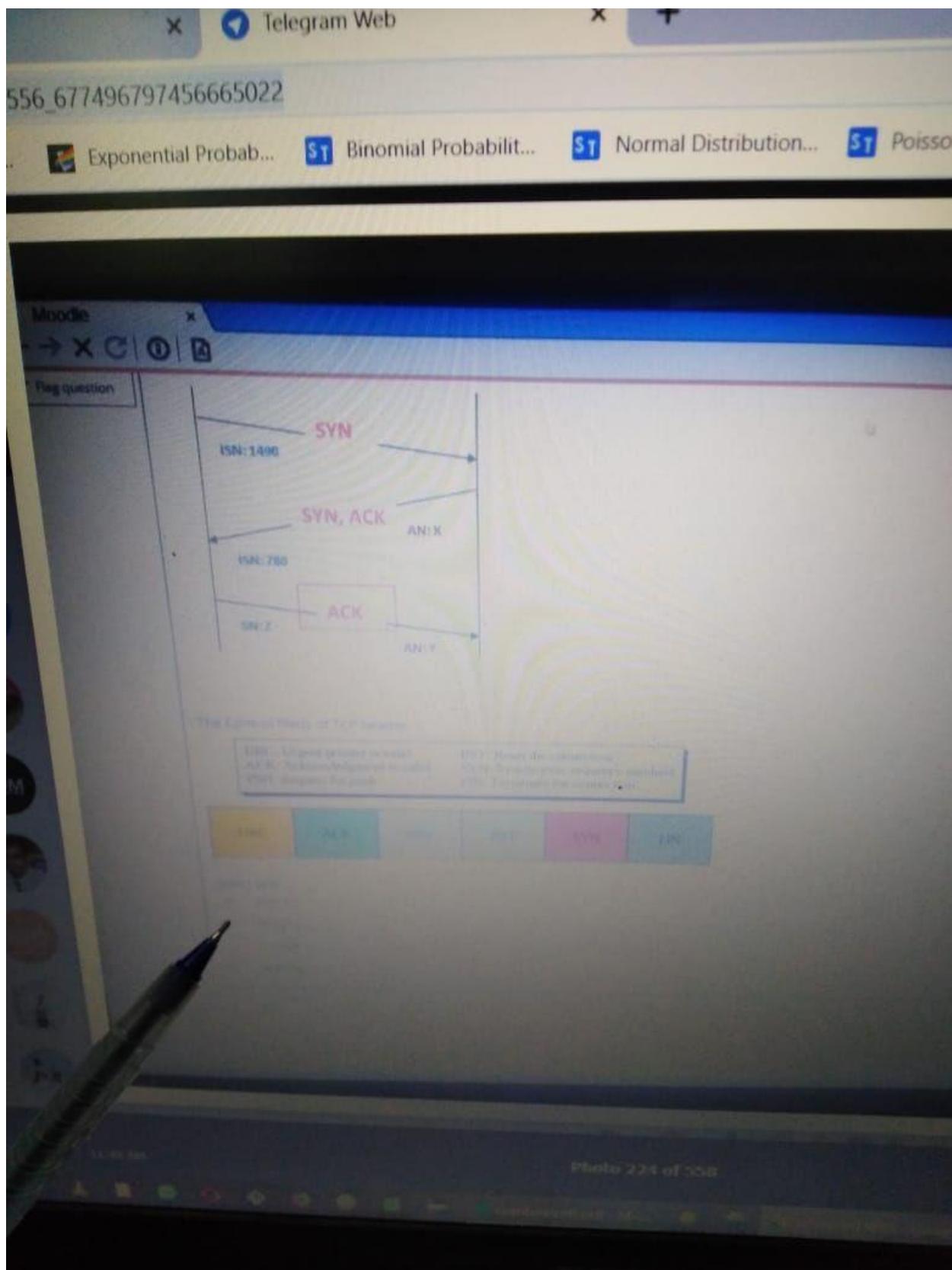
Sri Lanka Institute of Information Technology

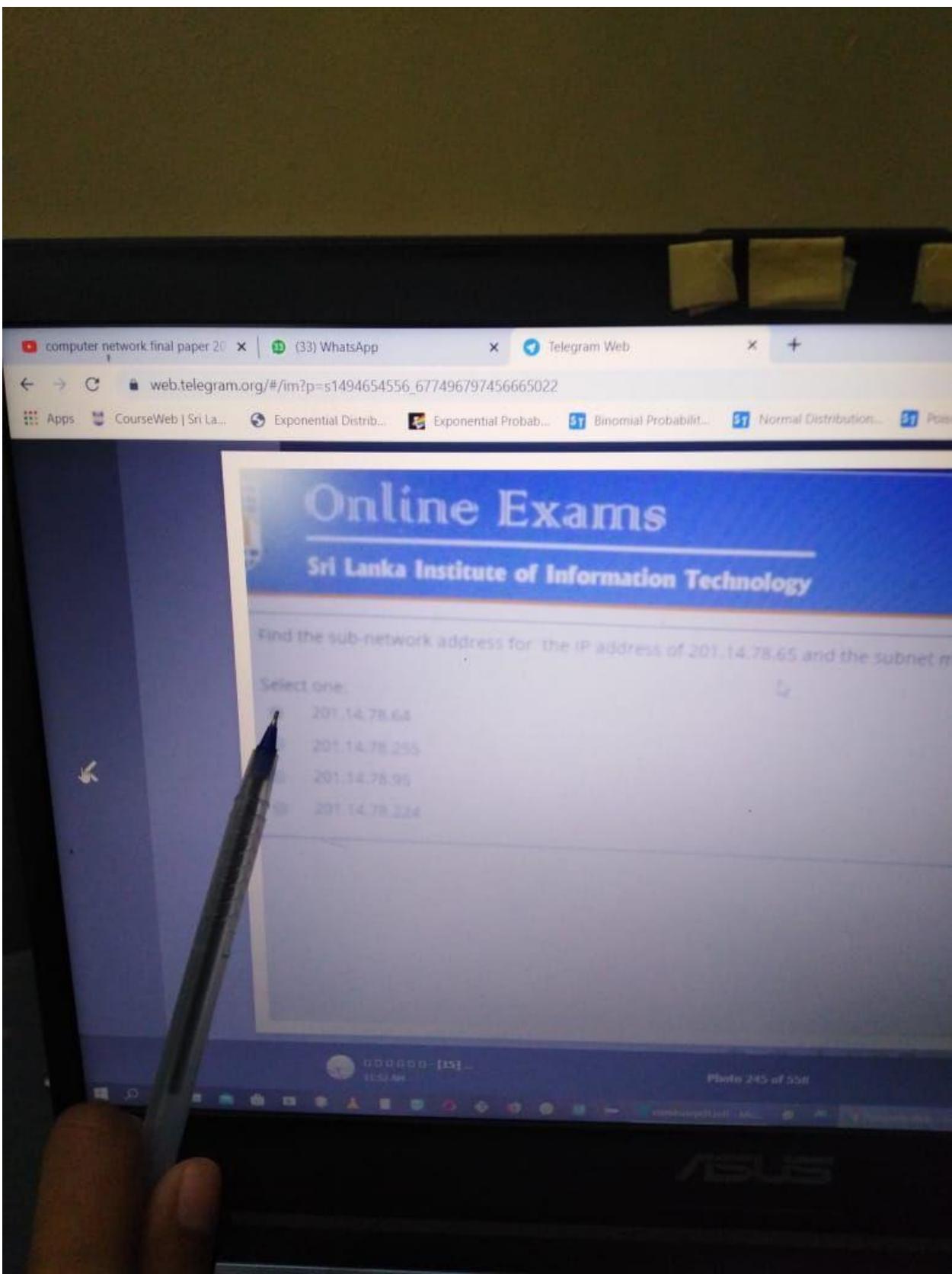
Which of the following cannot be future need to handle problems related to use of new mobile phone technology?

- Addiction of mobile
- Mobile handset
- Addiction
- Addiction of mobile
- Addiction of mobile

itharaine







n.org/#/im?p=s1494654556_677496797456665022

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

Institute 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:

1 Only

2 Only

2 and 3 Only

1 and 3 Only

1 and 2 Only

RANDO (15) 11/18/2023
Photo 230 of 650



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

/im?p=s1494654556_677496797456665022

Exponential Distrib...



Exponential Probab...



Binomial Probabilit...

QUESTION 12 ANSWERS

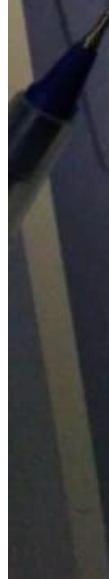
Sri Lanka Institute of Information Technology

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



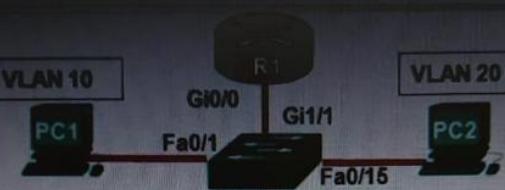
Which of the following statements is/are true about metrics used in routing p

- 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

You are troubleshooting verifying the configuration of interfaces on R1. You want to explain that PC2 cannot communicate with PC1.



```
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

Q - A dump of a TCP header in hexadecimal format.

05320017 00000001 00000000 500207FF 00000000

Source port address 16 bits		Destination port address 16 bits				
Sequence number 32 bits						
Acknowledgement number 32 bits						
HLEN 4 bits	Reserved 6 bits	URG R C S K H	A P R S Y T	R S Y I N N	F	Window size 16 bits
Checksum 16 bits				Urgent pointer 16 bits		
Options & padding						

What is the destination port number in Decimal?

Answer:

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

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

Select one:

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

23

4:05 PM

Rashi Perera 



SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

Sri Lanka Institute of Information Technology

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

Select one or more:

- Persistence
- Keepalive
- Retransmission
- Time waited

Please help

THAN

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

05A50017 00000001 00000000 500207FF 00000000

Source port address 16 bits		Destination port address 16 bits	
Sequence number 32 bits		Acknowledgement number 32 bits	
HLEN 4 bits		Window size 16 bits	
Reserved 6 bits		U A P R S F R C S Y I G K H T N N	
Checksum 16 bits		Urgent pointer 16 bits	
Options & padding			

What is the source port number in Decimal ?



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

Next

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

310 MEMBERS

LM Lakindu Minuka

Mindula Yasith

Yaxasri

BS buddhika senanayaka

Moodle x
→ X C | O | E

 Online Exams
Sri Lanka Institute of Information Technology

Question 11
Not yet answered
Marked out of 1.00
Flag question

Identify the purpose of ICMP?

Select one:

- Collision detection
- Send error and control messages
- Avoiding routing loops.
- Transporting routing updates

4800 0190 002A 0000 0906 0000 5A3C 0209 440C 0E07

Find the size of the IP header? (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:

- 24
- 11
- 20
- 44
- 31

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

- A. 32769:0200.1111.1111
- B. 32769:0200.2222.2222
- C. 4097:0200.1111.1111
- D. 4097:0200.2222.2222
- E. 40961:0200.1111.1111

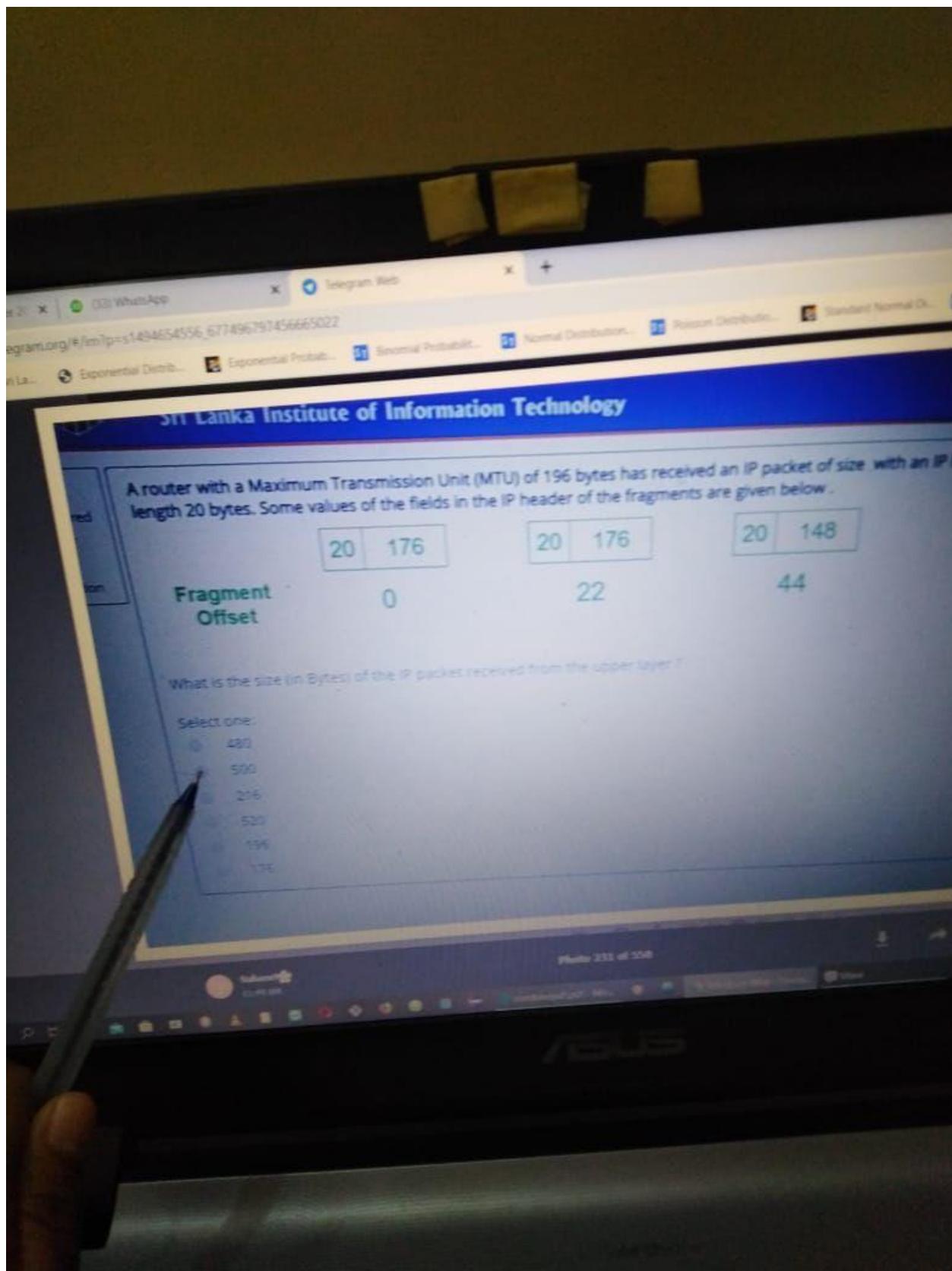
 Answer & Explanation

 Report

Answer : [c]

Explanation :

The smallest numeric bridge ID wins the election.



Sri Lanka Institute of Information Technology

An IP packet's total size can be derived with the following information in the header: (in bytes)

← 4800 0190 002A 0000 0906 0000 5A3C 0209 440C 0E07

Find the size of the IP header? (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:

31
11
44
20
24



Sri Lanka Institute of Information Technology

Identify the TCP State denoted by "A".

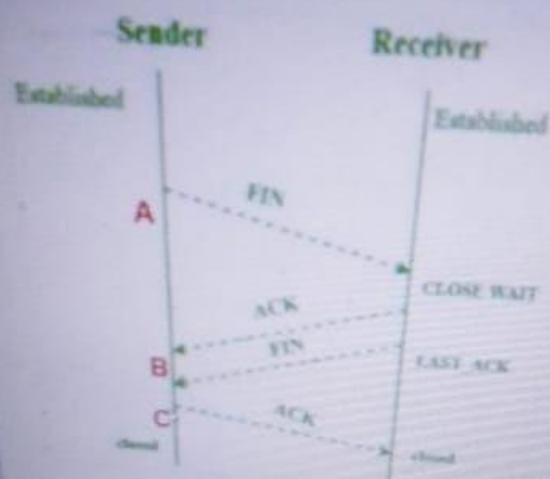


Photo 205 of 550

The screenshot shows a web browser window with multiple tabs open. The active tab displays an online exam interface for Sri Lanka Institute of Information Technology (SLIIT). The page title is "Online Exams" and the subtitle is "Sri Lanka Institute of Information Technology". The question being shown is:

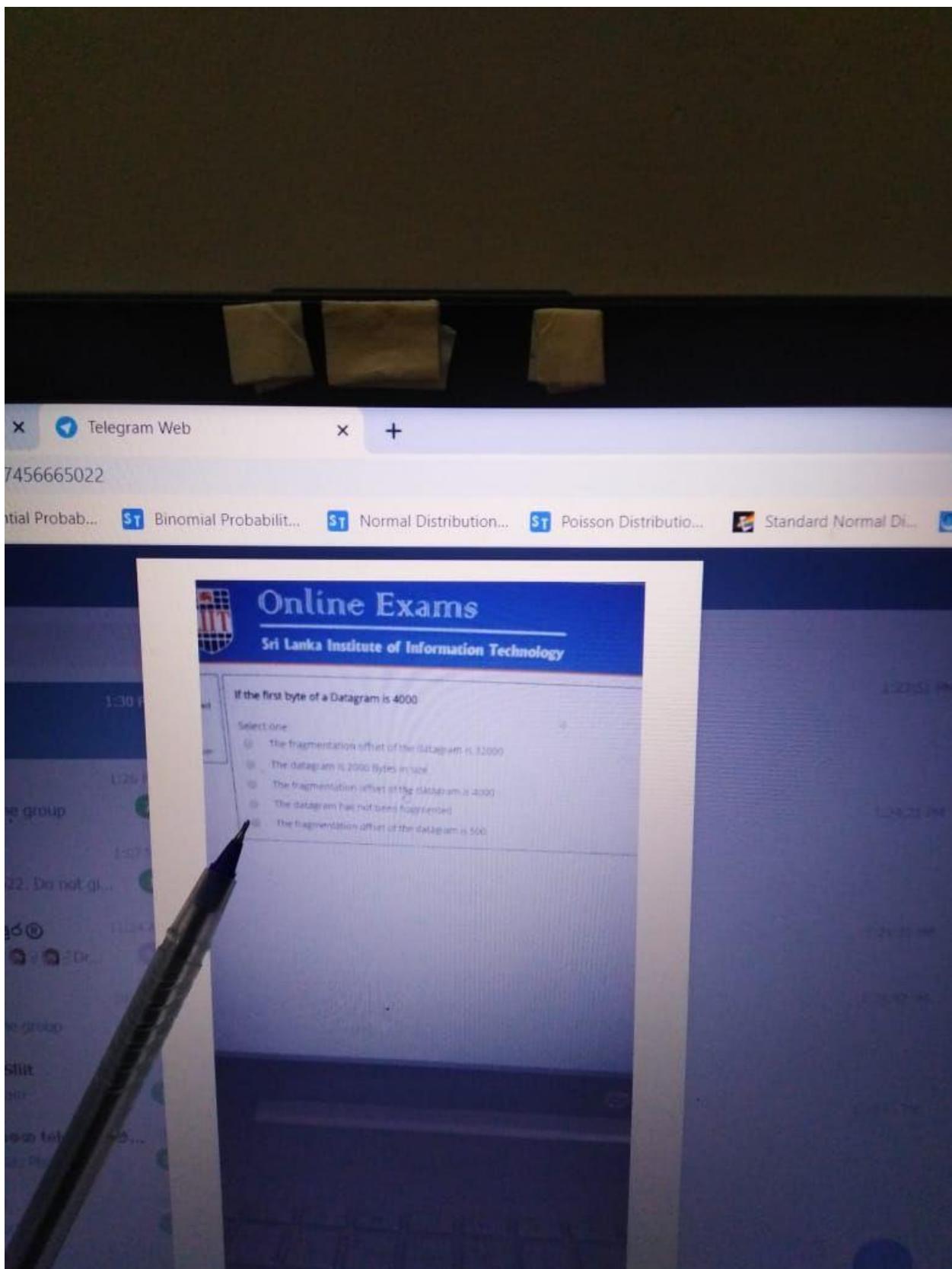
Question 1
Not yet answered
Marked out of 1.00
Flag question

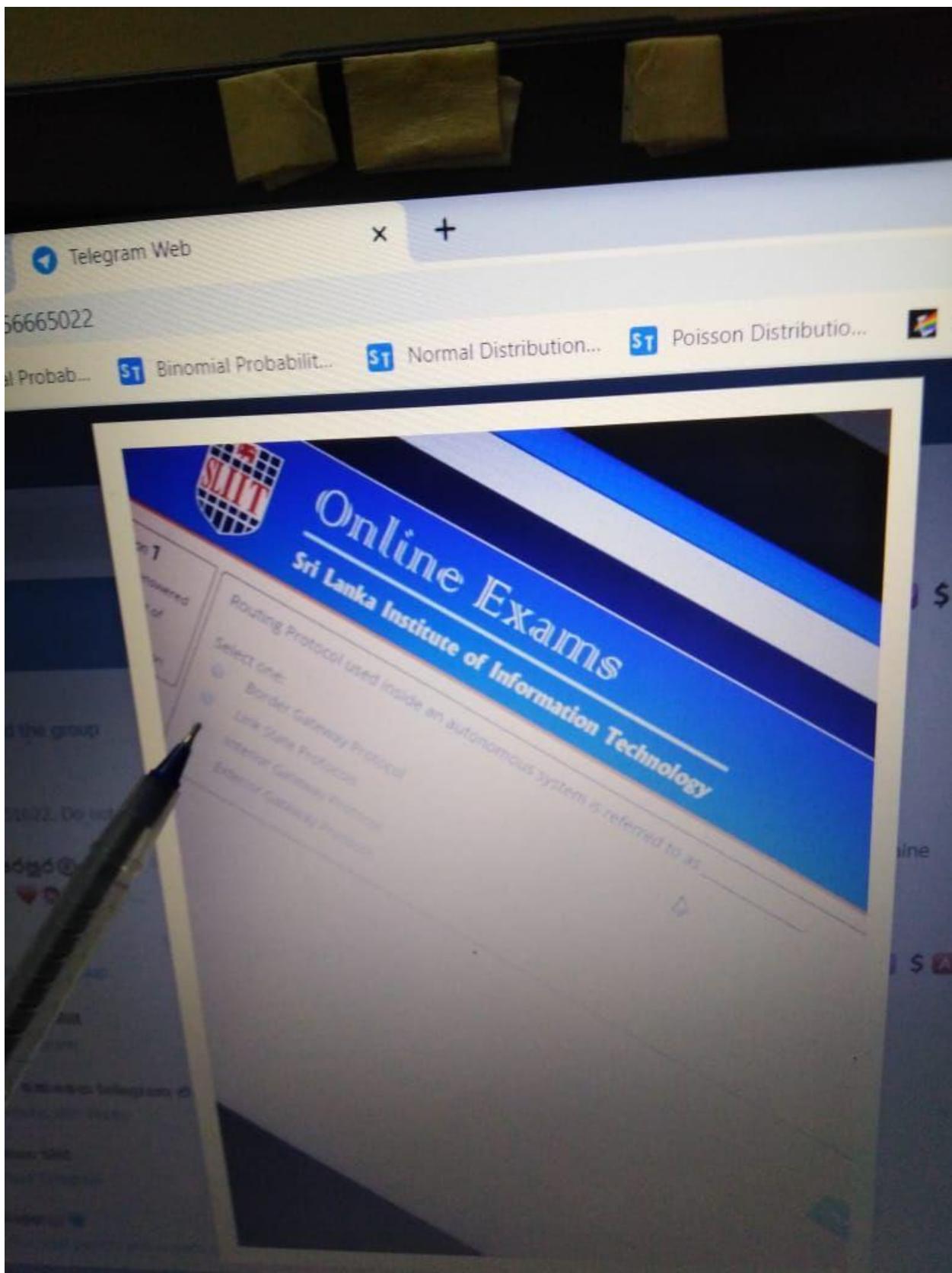
Which of the following VTP modes allow VLANs to be configured on a switch?

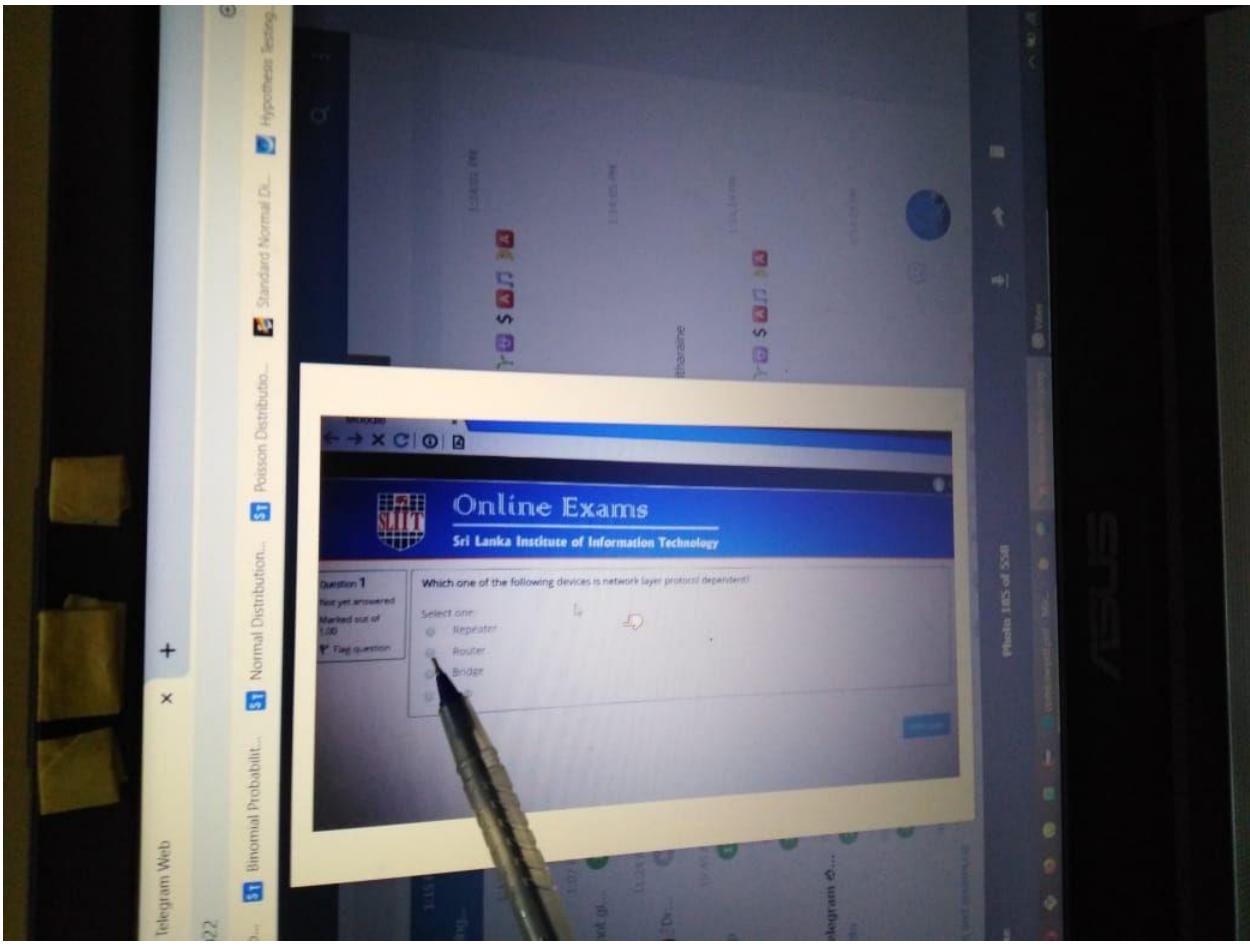
Select one or more:

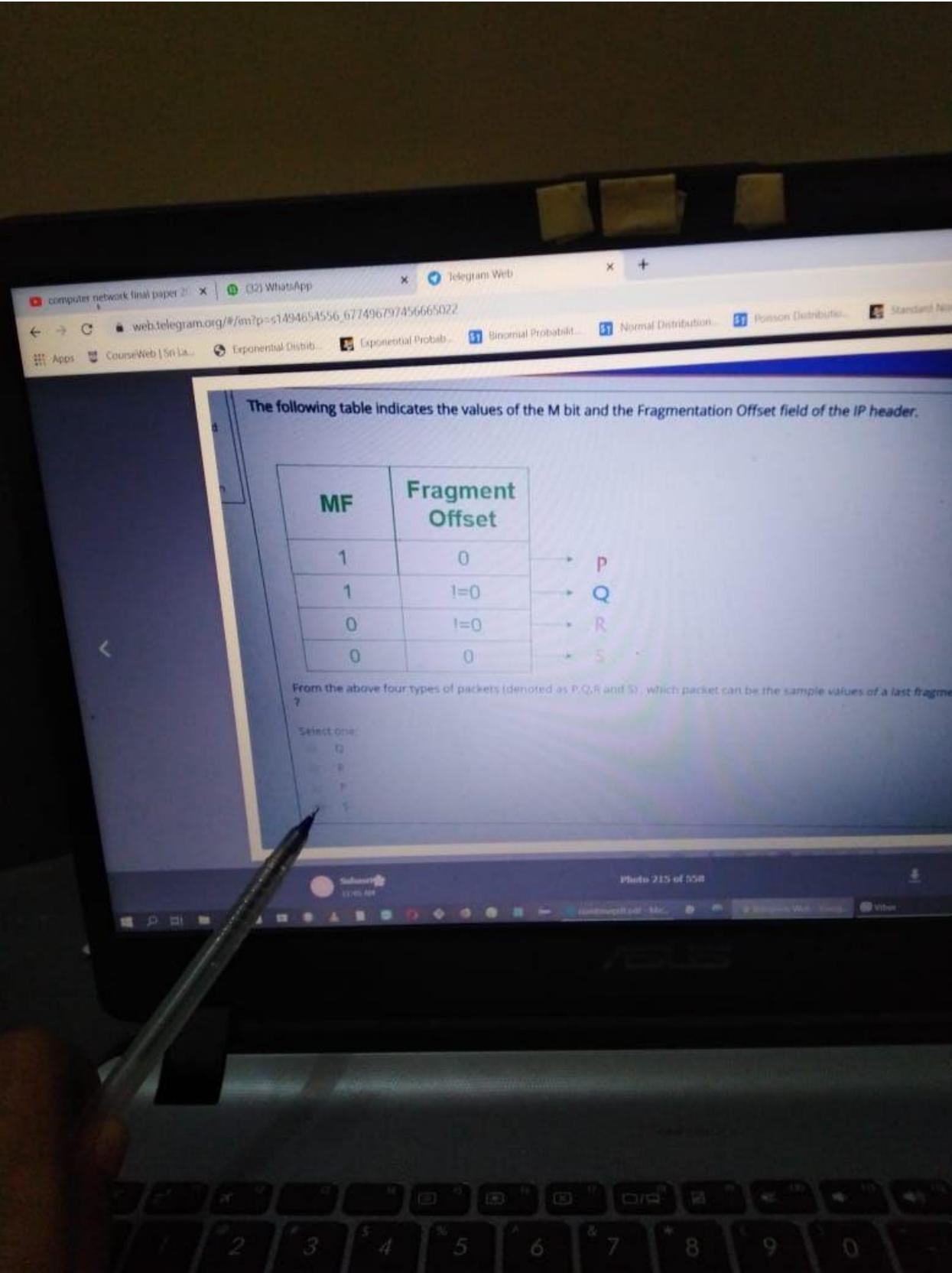
- Client
- Static
- Dynamic
- Transparent
- Server

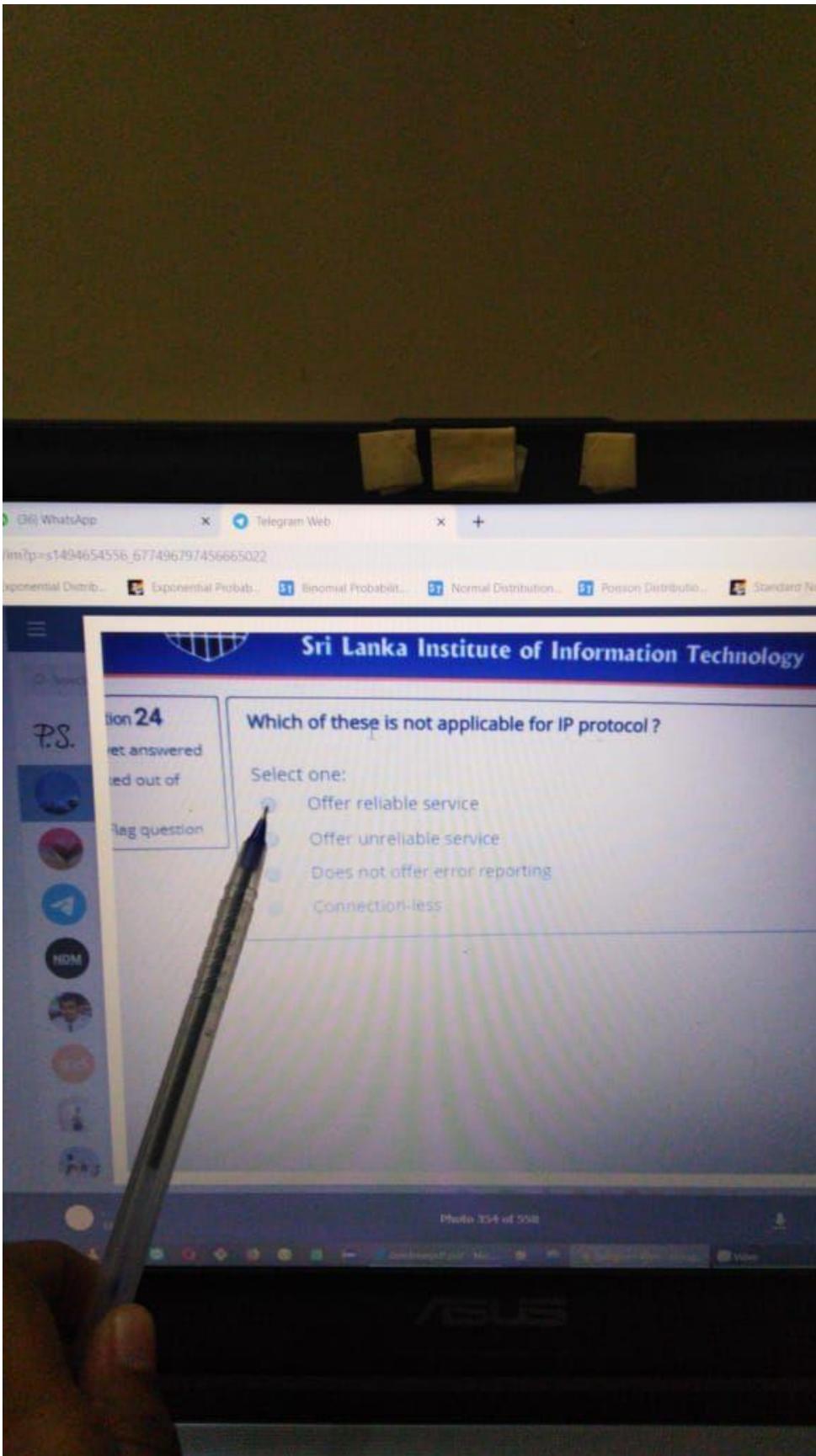
The browser's taskbar at the bottom shows other open tabs and windows, including WhatsApp, Telegram Web, and several distribution-related links.











(34) WhatsApp X Telegram Web X +

g/#/im?p=s1494654556_677496797456665022

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

Question 7
You 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
      * - candidate default
      c - 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 10.22.18.21
S    10.10.10.0/24 [1/0] via 10.22.18.41
S    10.10.10.10/31 [1/0] via 10.22.18.51
S*   0.0.0.0/0 [1/0] via 10.22.18.1

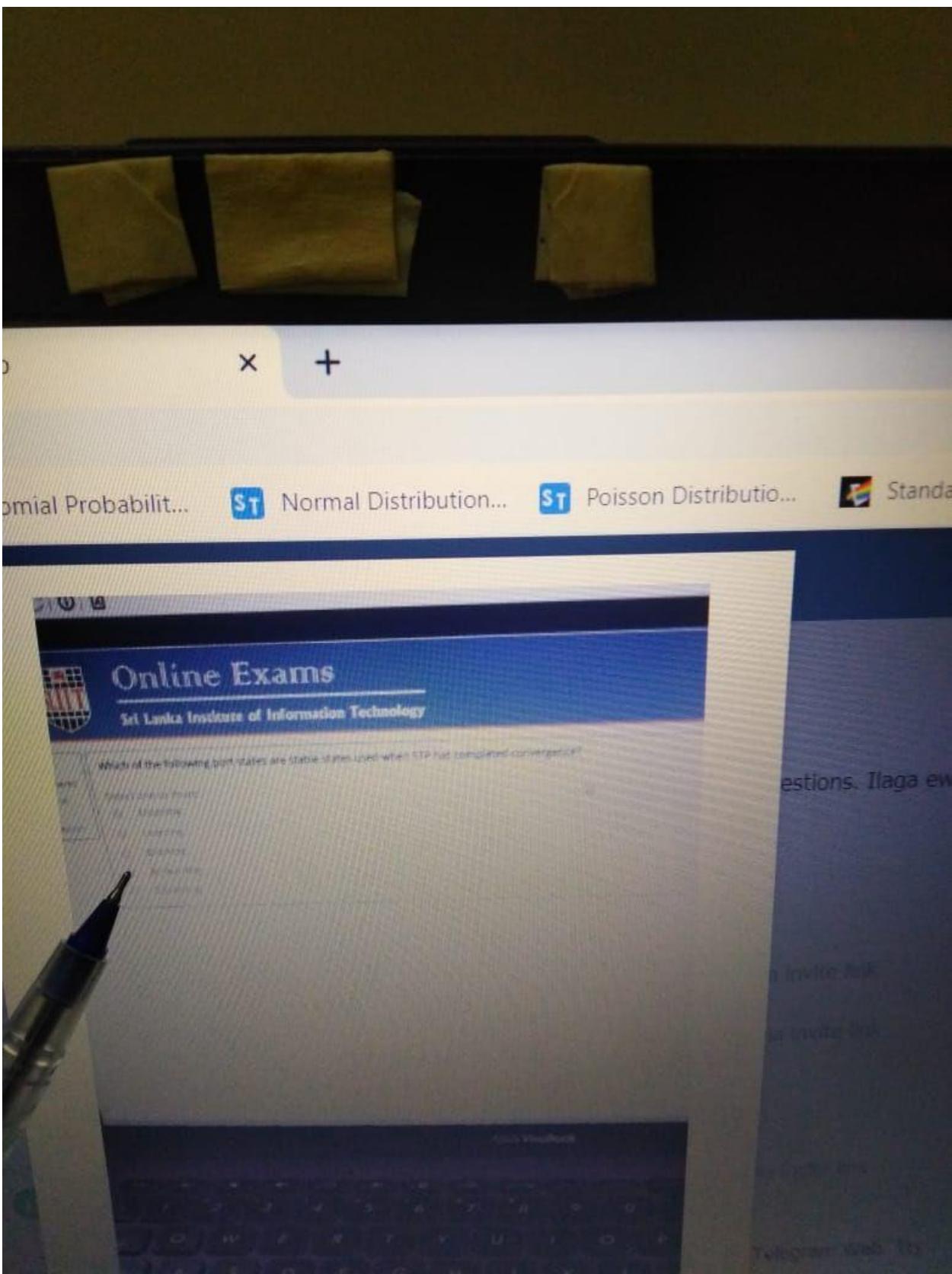
iproute#
```

Select one:

- A. 10.22.18.1
- B. 10.22.18.41
- C. 10.22.18.21
- D. 10.22.18.51

Kavindra Ariyaratne
11:56 AM

Photo 267 of 554





Online Exams

Sri Lanka Institute of Information Technology

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.

satsApp  Telegram Web

1494654556_677496797456665022

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

Online Exams

Sri Lanka Institute of Information Technology

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

Select one:

- TIA 568B
- Crossover
- Rollover
- Straight Through

Kavindra Arivarajah
LUSM 09

Pluto 779 m 500

0 X Telegram Web X +

54556_677496797456665022

ib... Exponential Probab... ST Binomial Probabilit... ST Normal Distribution... ST Po

SLIT Online Exams
Sri Lanka Institute of Information Technology

Question 9
Not yet answered
Marked out of 4.00
Flag question

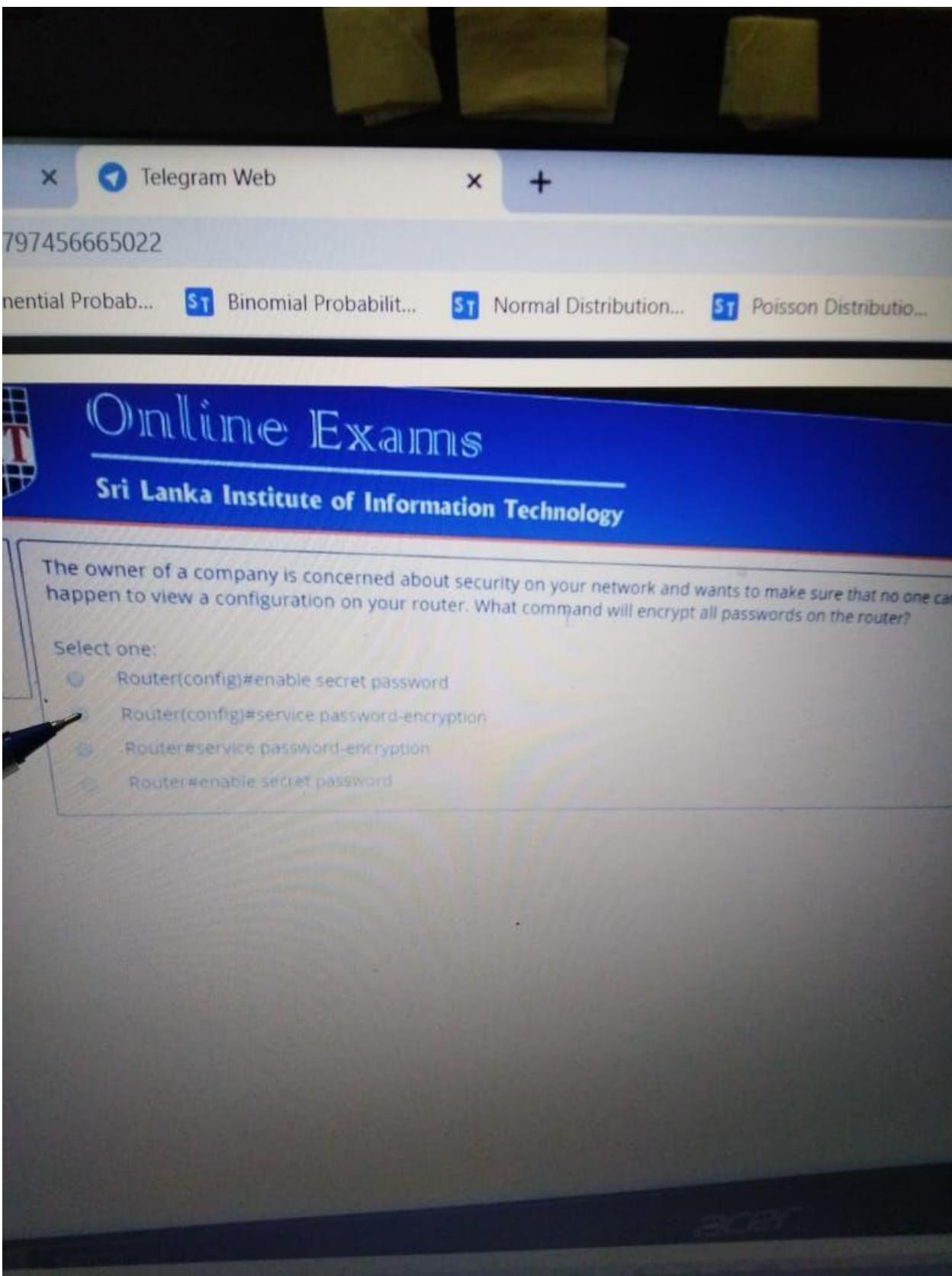
Identify the values of L, M, N respectively for the following connection establishment process by filling the boxes.

Client Server

SYN
SYN, ACK
ACK
ACK

ISN-L
ISN-M
ISN-N
ISN-10000

```
sequenceDiagram
    participant Client
    participant Server
    Client->>Server: SYN, ISN-L
    activate Client
    Server-->>Client: SYN, ACK, ISN-N
    deactivate Client
    Client-->>Server: ACK, ISN-M
    deactivate Client
    Server-->>Client: ACK, ISN-10000
    deactivate Server
```

A screenshot of a computer monitor displaying a web browser window titled "Telegram Web" with the URL "797456665022". Below the browser, there is a math resource page from "Sri Lanka Institute of Information Technology" featuring probability distributions. A question about router password encryption is displayed, with four options listed. A pen is visible on the left edge of the screen.

Online Exams

Sri Lanka Institute of Information Technology

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

Telegram Web

54556_677496797456665022

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

Provide answers to the questions given below.

9C400017000007D000000C51E0121000000000000

TCP Header Format.

The diagram illustrates the structure of a TCP header. It starts with a 'Header' field (16 bits) followed by a 'Data' field. Below this, the header is broken down into several fields:

- Source port address: 16 bits
- Destination port address: 16 bits
- Sequence number: 32 bits
- Acknowledgment number: 32 bits
- HLEN: 4 bits
- Reserved: 6 bits
- Control bits (URG, ACK, PSH, RST, SYN, FIN): 6 bits (represented by colored squares U, R, G, A, C, K, P, S, H, R, T, S, Y, N, F, I, N)
- Window size: 16 bits
- Checksum: 16 bits
- Urgent pointer: 16 bits
- Options and Padding: A large yellow area representing variable-length options and padding.

1. The Acknowledgement number is (in Decimal).
2. The Sequential number is (in Decimal).

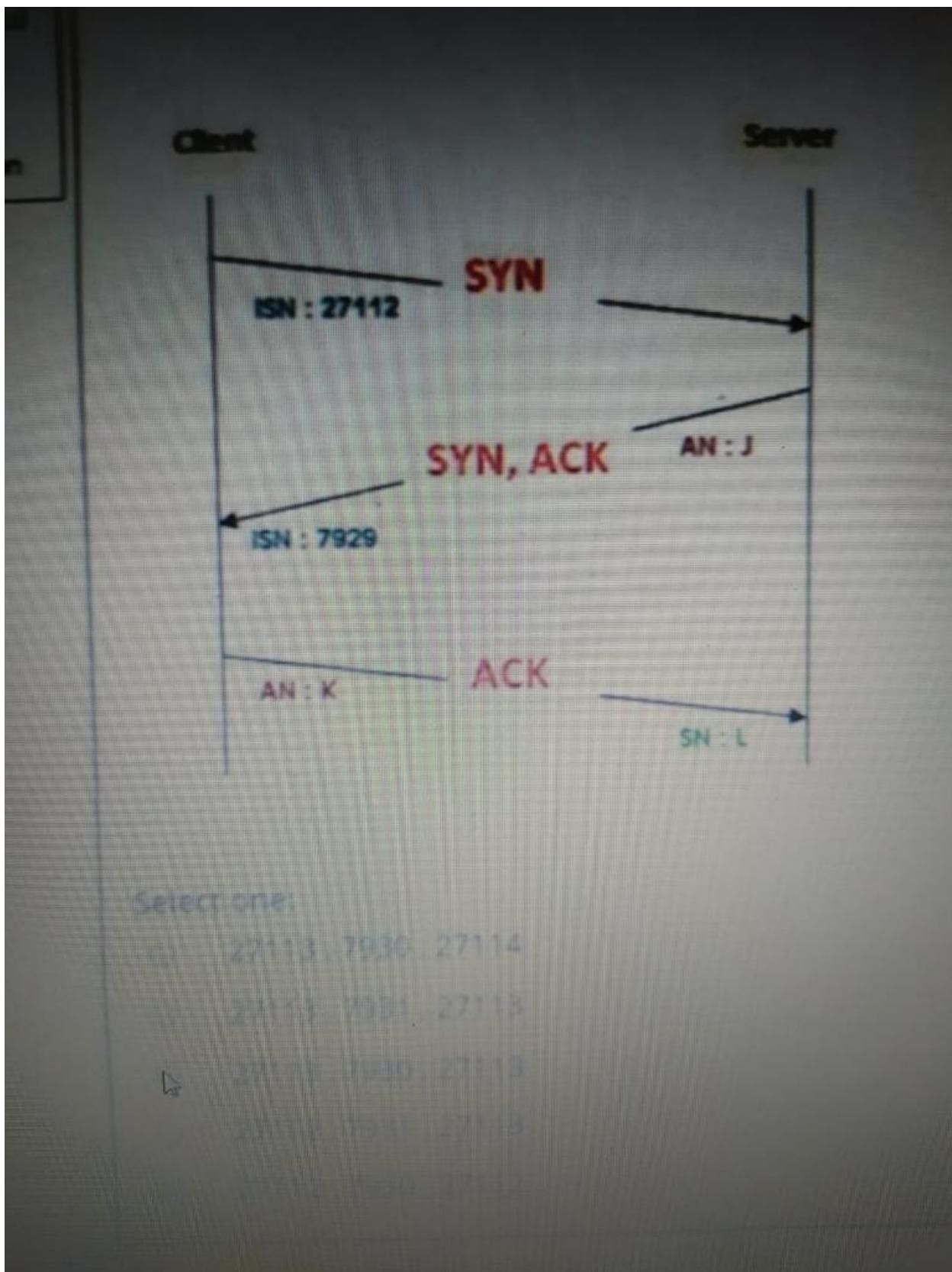
The image shows a computer monitor displaying a web browser window. The browser has several tabs open, including "WhatsApp", "Telegram Web", and several math-related tabs like "Exponential Distrib...", "Binomial Probabilit...", and "Normal Distribution...". The main content of the page is a question from the "Sri Lanka Institute of Information Technology". The question asks: "Which of the following port states are stable states used when STP is running? Select one or more: Listening, Learning, Blocking, Discarding, Forwarding." A pen is resting on the desk in front of the monitor.

Sri Lanka Institute of Information Technology

Which of the following port states are stable states used when STP is running?

Select one or more:

- Listening
- Learning
- Blocking
- Discarding
- Forwarding



Online Exams

Sri Lanka Institute of Information Technology

Refer the following router output:

Router#show cl

% Ambiguous command: "show cl"

What is the reason to receive this error message?

Select one:

- The command is being executed from the wrong router mode
- There is more than one show command that starts with the letters of
- There is no show command that starts with *cl*
- The command requires additional options or parameters

Online Exam

Sri Lanka Institute of Information Technology

Which of the following statement would best describe the 192.192.192.56 IP address and 255.255.255.240 subnet?

Select one:

- This is a Class B address that is masking 12 bits for subnetting, yielding 14 valid subnets.
- The subnet mask is borrowing 4 host bits which creates 16 usable subnets with 14 usable hosts per subnet.
- This is a Class C address that is using 4 host bits which creates 14 subnets with 14 hosts per subnet.
- This is a Class C address that is using 4 host bits which creates 16 usable subnets with 16 usable hosts per subnet.

Next page

Marked out of
100
▼ Flag question

```
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
      * - 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
*   0.0.0.0/0 [1/0] via 10.22.18.1
```

router1#

Select one:

- 10.22.18.31
- 10.22.18.51
- 10.22.18.1
- 10.22.18.41
- 10.22.18.21

Online Exams

Sri Lanka Institute of Information Technology

an engineer needs to delete the second line in ACL 101, which currently has four commands.

Select one or more:

- Delete one line from the ACL using the no access-list... global command
- Delete the last three lines from the ACL from global configuration mode, and then add the into the ACL
- Delete one line from the ACL by entering ACL configuration mode for the ACL and then delete based on its sequence number
- Delete the entire ACL and reconfigure the three ACL statements in that order in the ACL

23

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Interface ID of the IPv6 address generated by EUI64 method is 02BB:CCFF:FE00:1122

Address of the device is

Next page

428 MEMBERS

MEMBER	NAME	STATUS
	Nisal	online
	Senith sula	online
	Desh Dissanayake	online
	J	online
	Gawesha Sathyang	online



Online Exams

Sri Lanka Institute of Information Technology

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of
estion

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:

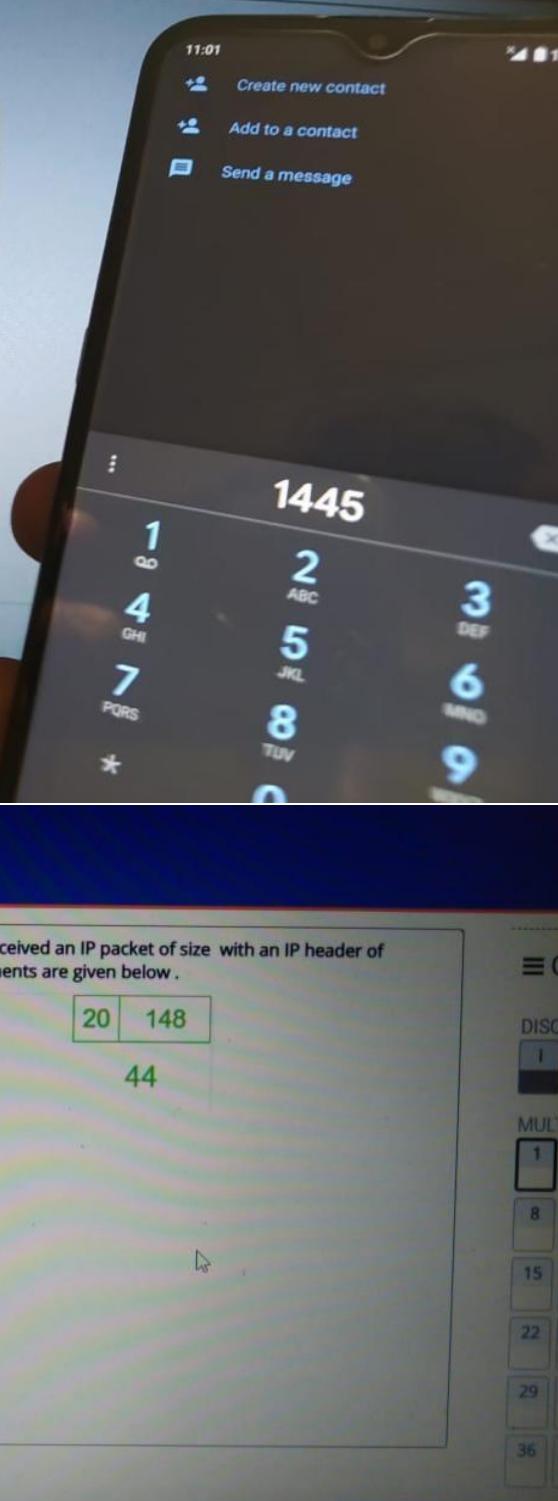
- 192.168.20.159
- 192.168.20.255
- 192.168.20.190
- 192.168.20.254
- 192.168.20.158
- 192.168.20.191

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

05A50017 00000001 00000000 500207FF 00000000

Source port address 16 bits		Destination port address 16 bits	
Sequence number 32 bits			
Acknowledgement number 32 bits			
HLEN 4 bits	Reserved 6 bits	U A P R S F R C S Y I G K H T N N	Window size 16 bits
Checksum 16 bits			Urgent pointer 16 bits
Options & padding			

What is the source port number in Decimal ?



1
answered
out of
question

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

20 176

20 148

0

22

44

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

Select one:

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



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on

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:

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

Next page



Online Exams

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Question 2

Not yet answered

Marked out of
1.00

Flag question

Under which circumstance is needed to configure a clock rate on a serial interface?

Select one:

- When the interface is terminated with the DTE end of the cable.
- When the interface is terminated using a loopback adapter.
- When the interface is terminated using the DCE end of the cable.
- When the interface is terminated using a Category 3 Cable.

Next page

Marked out of 1.00

Flag question

Provide answers to the questions given below.

9C400017000007D000000C51E0121000000000000 . . .

TCP Header Format.

The diagram illustrates the structure of a TCP header. It starts with a 'Header' field (16 bits) indicated by a pink box and a red arrow pointing left. This is followed by a 'Data' field (variable length). Below the header, there are several fields: 'Source port address' (16 bits), 'Destination port address' (16 bits), 'Sequence number' (32 bits), 'Acknowledgment number' (32 bits), 'Window size' (16 bits), 'Checksum' (16 bits), and 'Urgent pointer' (16 bits). The 'Options and Padding' field is shown as a large yellow area at the bottom. To the right of the header fields, there is a row of colored boxes labeled U, A, P, R, S, F, I, each representing a specific flag or option. The first four boxes (U, A, P, R) have a red background, while the last four (S, F, I, options) have a green background. The entire TCP header is contained within a blue-bordered box.

DISCLAIMER
1

MULTIPLE CHOICE
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 31 32 33 34 35 36 37 38 39

STRUCTURED QUESTIONS
41 42 43

FEEDBACK
44

Finish attempt ...

Time left 1:48:02

Marked out of 1.00

Provide answers to the questions given below.

9C40001700007D000000C51E0121000000000000 . . .

TCP Header Format.

The diagram illustrates the structure of a TCP header. It starts with a 'Header' field (indicated by a red arrow) followed by a 'Data' field. The header is divided into several fields:

- Source port address: 16 bits
- Destination port address: 16 bits
- Sequence number: 32 bits
- Acknowledgment number: 32 bits
- HLEN: 4 bits
- Reserved: 6 bits
- Control bits (URG, ACK, PSH, RST, SYN, FIN): 6 bits
- Window size: 16 bits
- Checksum: 16 bits
- Urgent pointer: 16 bits
- Options and Padding: A large yellow box representing variable-length fields.

DISCLAIMER

MULTIPLE CHOICE

1	2	3
8	9	10
15	16	17
22	23	24
29	30	31
36	37	38

STRUCTURED QUESTIONS

41	42	43
----	----	----

FEEDBACK

44

Finish attempt ...

Time left: 1:47:48

1. The Acknowledgement number is (in Decimal):
2. The Sequential number is (in Decimal):

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:

- 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.
- Borrowing 8 host bits would yield 256 usable networks, with 65,534 usable hosts per network.
- Borrowing 8 host bits would yield 254 usable networks, with 65,534 usable hosts per network.



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Question 5

Not answered
0 out of 1
Avg question

What is the host ID portion of the IP address 191.154.25.66 ,if classful addressing is used?

Select one:

- 191.154
- 66
- 191
- 0.0.25.66,
- 191.154.25
- 25.66

Next page

Question 6

Not yet answered

Marked out of
1.00 Flag question

Analyze the given output.

```

Switch# show spanning-tree vlan 30
VLAN0030
Spanning tree enabled protocol rstp
Root ID Priority 24606
Address 00d0.047b.2800
This bridge is the root
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Bridge ID Priority 24606 (priority 24576 sys-id-ext 30)
Address 00d0.047b.2800
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Aging Time 300
Interface Role Sts Cost Prio.Nbr Type
-----, ----, ---, -----, -----
Fa1/1 Desg FWD 4 128.1 p2p
Fa1/2 Desg FWD 4 128.2 p2p
Fa8/1 Desg FWD 4 128.257 p2p

```

It is generated at a switch. Which of these statement/s is/are true?

Select one or more:

- Thirty VLANs have been configured on this switch
- All designated ports are in a forwarding state.
- The bridge priority is higher than the default value for spanning tree
- The bridge priority is lower than the default value for spanning tree
- All the data should transmit via this switch

Quiz r**DISCLAIMER****MULTIPLE CHOICE**

1 2

8 9

15 16

22 23

29 30

36 37

STRUCTURE**FEEDBACK**

44

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	!=0
0	!=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:

- Q
- P
- R
- S



If the first byte of a Datagram is 2000 :

Select one or more:

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



Question 7

Not answered
0 out of 1
Avg question

Which of the following are transitory port states used only during the process of STP convergence?

Select one or more:

- Listening
- Discarding
- Blocking
- Forwarding
- Learning

Next page

Sri Lanka Institute of Information Technology

The administrator enter the following configurations that in router RTA. Then an administrator receives an error and users on VLAN 20 report that they are unable to reach users on VLAN 30. What is the reason for this problem?

```
RTA# configure terminal
RTA(config)# interface Fa0/0
RTA(config-if)# no shutdown
RTA(config-if)# interface Fa0/0.10
RTA(config-subif)# encapsulation dot1q 10
RTA(config-subif)# ip address 192.168.3.30 255.255.255.224
RTA(config-subif)# interface Fa0/0.20
RTA(config-subif)# encapsulation dot1q 20
RTA(config-subif)# ip address 192.168.3.49 255.255.255.224
RTA(config-subif)# interface Fa0/0.30
RTA(config-subif)# encapsulation dot1q 30
RTA(config-subif)# ip address 192.168.3.62 255.255.255.224
```

Select one:

- Router RTA is using the same subnet for VLAN 20 and VLAN 30.
- The no shutdown command should have been issued on Fa0/0.20 and Fa0/0.30
- Dot1q does not support subinterfaces
- There is no address on Fa0/0 to use as a default gateway

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Online Exams

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Question 8
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
- Selected Multiple Neighbours

DISC 0
MULT 1
1
8
15
22
29
36

Next page

What is the eighth usable host IP address in the subnet 210.29.144.64/27?

Select one:

- 210.29.144.8
- 210.29.144.40
- 210.29.144.71
- 210.29.144.128
- 210.29.144.73
- 210.29.144.72



ONLINE EXAMINATIONS

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Question 5

Not yet answered

Marked out of
1.00

Flag question

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 of a routing protocol
- C - A metric is a measure of trustworthiness of a route

Select one:

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



Question 9

Not yet answered

Marked out of

1.00

 Flag question

The management of data flow between computers or devices or between nodes in a network is called as :

Select one:

- Flow control
- Data Management
- Error Control
- Congestion Control
- Data Control

[Next page](#)

Question 6

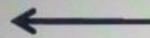
Not yet answered

Marked out of

1.00

 Flag question

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

Question 11

Not yet answered
Marked out of 1.00

Flag question

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

DISCLAIMER

1

1	2	3	4
8	9	10	11
15	16	17	18
22	23	24	25
29	30	31	32
36	37	38	39

STRUCTURED QUESTION

41 42 43

FEEDBACK

44

Which of the following steps below are required to enable IP RIP?

- A - Configure privileged 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:

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

Question 7
Not yet answered
Marked out of 1.00
 Flag question

Analyze the following TCP header dump given in Hexa-Decimal format.
Provide answers to the questions given below.

9C400017000007D000000C51E01210000000000000000 . . .

TCP Header Format.

```

graph TD
    TCPHeaderFormat[TCP Header Format] --> Header[Header]
    TCPHeaderFormat --> Data[Data]
    subgraph Header
        SP[Source port address  
16 bits]
        DP[Destination port address  
16 bits]
        SN[Sequence number  
32 bits]
        AN[Acknowledgment number  
32 bits]
        HLEN[HLEN  
4 bits]
        Reserved[Reserved  
6 bits]
        Flags[U R G A C K P S H T R Y S I F N  
32 bits]
        WindowSize[Window size  
16 bits]
        Checksum[Checksum  
16 bits]
        UrgentPointer[Urgent pointer  
16 bits]
        OptionsAndPadding[Options and Padding]
    end

```

Section 14
Not yet answered
Marked out of 0
 Flag question

A Network technician is testing connectivity in a new network. Based on the test results shown in the exhibit which statement is true regarding the connectivity of the devices with the technician's PC ?

Command Prompt

```

C:\> ping 192.168.1.2
Pinging 192.168.1.2 with 32 bytes of data:
Request timed out.
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255
Reply from 192.168.1.2: bytes=32 time=0ms TTL=255
Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\> ping 192.168.1.21
Pinging 192.168.1.21 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.21:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss).
C:\>

```

Select one:

- Connectivity : 192.168.1.0
- No Connectivity : 192.168.1.0
- Connectivity : 192.168.1.2 No connectivity : 192.168.1.21
- Connectivity : 192.168.1.21 No connectivity : 192.168.1.2
- Connectivity : 192.168.1.255

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Question 12
yet answered
1 out of
tag question

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

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Quiz na
DISCLAIMER
MULTIPLE CH
1 2 3
8 9 11
15 16 17
22 23 24
29 30 31
36 37 38

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Question 13
yet answered
1 out of
tag question

Which of the following statement/s is/are FALSE regarding Access Control Lists ?

Select one or more:

- The standard Access-list is generally applied close to the source
- As there is an implicit deny at the end of every access list
- Every new rule which is added into the access list will be placed at the top of the access list
- Improve network performance
- Improve network availability
- Provides security as administrator can configure the access list according to the needs and deny the unwanted packets from entering the network.

Next page

You are a system administrator and you want to deny access to a group of computers with addresses 172.30.16.0 to 172.30.31.0 Which wildcard mask would you use?

Select one:

- 0.0.31.255
- 0.0.15.255
- 0.0.127.255
- 0.0.255.255
- 0.0.255.255



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Question 14

Not yet answered
Marked out of 10

Flag question

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:

- 1
- 3
- 4
- 5
- 2

≡ Quiz navigation

DISCLAIMER



MULTIPLE CHOICE

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	31	32
33	34	35	36
37	38	39	40

Next page

The Administrator needs to prevent unauthorized users from plugging their laptops into the router. What type of password will help prevent this issue?

Select one:

- Console
- Enable
- Secret
- Telnet
- Line



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Question 8

Not yet answered

Marked out of

0

Flag question

Under which circumstance is needed to configure a clock rate on a serial interface?

Select one:

- When the interface is terminated using the DCE end of the cable.
- When the interface is terminated using a Category 3 Cable.
- When the interface is terminated using a loopback adapter.
- When the interface is terminated with the DTE end of the cable.

Where does a Router store routing tables, ARP cache, and packet buffers ?

Select one:

- ROM
- RAM
- NVRAM
- Flash Memory



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Which field of the IP header helps to check rearrangement of the fragments?

Select one:

- M Bit
- HLEN
- TTL
- D Bit
- Offset



Question 15

Not yet answered

Marked out of
1.00 Flag question

The administrator enter the following configurations that in router RTA. Then an administrator receives an error and users on VLAN 20 report that they are unable to reach users on VLAN 30. What is the reason for this problem?

```
RTA# configure terminal
RTA(config)# interface Fa0/0
RTA(config-if)# no shutdown
RTA(config-if)# interface Fa0/0.10
RTA(config-subif)# encapsulation dot1q 10
RTA(config-subif)# ip address 192.168.3.30 255.255.255.224
RTA(config-subif)# interface Fa0/0.20
RTA(config-subif)# encapsulation dot1q 20
RTA(config-subif)# ip address 192.168.3.49 255.255.255.224
RTA(config-subif)# interface Fa0/0.30
RTA(config-subif)# encapsulation dot1q 30
RTA(config-subif)# ip address 192.168.3.62 255.255.255.224
```

Select one:

- There is no address on Fa0/0 to use as a default gateway
- The no shutdown command should have been issued on Fa0/0.20 and Fa0/0.30
- Router RTA is using the same subnet for VLAN 20 and VLAN 30.
- Dot1q does not support subinterfaces

 Next pageDIS
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29
36
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41

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 6 bits	U R A C P C R S S S F Y I N	Window size 16 bits
Checksum 16 bits		Urgent pointer 16 bits	
Options & padding			

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



Question 16

Not yet answered

Marked out of
1.00 Flag question

fe00:A000:0000:0001:0000:0000:0000:0092

The abbreviated version of the above IPv6 address is :

[Next page](#)

9

answered

out of

 question

Which of the following fields cannot be compared based on an extended IP ACL?

Select one or more:

- Source and Destination IP addresses
- URL
- Protocol
- Filename for FTP transfers
- Credentials for remote access

a colon (:) .

Enter an IPv6 address:

fe00:A000:0000:0001:0000:0000:0000:00

Go »

Related Tools: [IPWHOIS Lookup](#) [Decimal IP Calculator](#) [Traceroute](#) [Vector Trace](#) [IPv6 CIDR to Range](#)
[Expand](#) [IPv6 Info](#) [CIDR/Netmask](#) [IPv4 to IPv6 Conversion](#) [Range to IPv6 CIDR](#) [Local IPv6 Range](#)

Compressed Address: [fe00:a000:0:1::92](#)

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



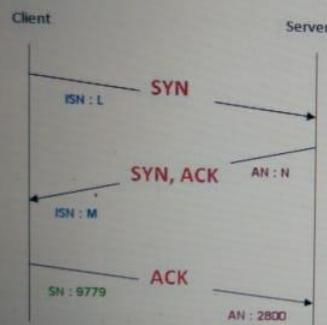
What is the last byte number of the data field of the second fragment?

Select one:

- 195
- 352
- 175
- 351
- 196
- 176

18
answered
out of
question

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



Select one:

- 9778, 2799, 9778
- 9777, 2799, 9779
- 9778, 2799, 9779
- 2799, 9778, 9779
- 9779, 2799, 9779

Quiz navigation

DISCLAIMER

1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30	31	32	33
36	37	38	39	40

STRUCTURED QUESTIONS

41	42	43
44		

FEEDBACK

44



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Question 11

Not yet answered

Marked out of

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Flag question

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	!0
0	!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 the sample values of an intermediate fragment?

Select one:

- Q
- R
- S
- P

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Question 19

Not yet answered

Marked out of 1.00

Flag question

Where does the running configuration file of the router be stored?

Select one:

- ROM
- ROM or RAM
- Flash Memory
- NVRAM
- RAM

Next page

Quiz n

DISCLAIMER

MULTIPLE C

1	2	
8	9	
15	16	
22	23	2
29	30	3
36	37	3
41	42	4

STRUCTURED

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Which of the following memory locations describes the possible locations from which the operating system would be loaded at system initialization?

Select one:

- RAM, ROM
- Flash Memory, ROM
- NVRAM, RAM
- NVRAM, ROM



Question 12

Not yet answered

Marked out of
1.00

Flag question

Identify the purpose of ICMP?

Select one or more:

- Collision detection
- Send control messages
- Send error messages
- Transporting routing updates
- Avoiding routing loops.

Which of the following statement/s is/are FALSE regarding Access Control Lists ?

Select one or more:

- Improve network performance
- As there is an implicit deny at the end of every access list
- The standard Access-list is generally applied close to the source
- Provides security as administrator can configure the access list according to the needs and deny the unwanted packets from entering the network.
- Improve network availability
- Every new rule which is added into the access list will be placed at the top of the access list

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Question 13

Not yet answered

Marked out of
1.00

Flag question

In a LAN, which of the following terms best equates to the term VLAN?

Select one or more:

- Subnet
- Single Switch
- Trunk
- Collision Domain
- Broadcast domain



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Question 24

Not yet answered

Marked out of
1.00

Flag question

MAC of PC_A is d600:0ABB:28FC

The interface ID of the IPv6 address generated by EUI64 method is

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36

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

←

4B00 0190 002A 0000 0906 0000 5A3C 0209 440C 0E07

Find the size of the IP header? (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:

24
 31
 44
 11
 20

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Question 30
Not yet answered
Marked out of 1.00
 Flag question

A switch receives a frame with a unicast destination MAC Address, but the switch does not have an entry for that MAC in its MAC address table. What is the default action of the switch?

Select one:

The switch will send an ARP Request for the MAC address of the destination
 The frame is filtered
 The switch will forward the frame out every port, except the one it came in on
 The frame is sent out any port that the switch has no MAC table entry for

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a) Compare and contrast TCP and UDP protocols. (4 Marks)

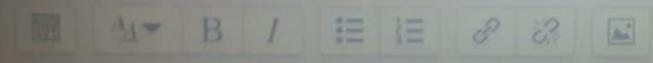
b) Briefly explain the Dynamic port numbers including the number range. (3 Marks)

c) Explain how a client TCP process goes through different states when establishing a connection with a CLOSED state. (5 Marks)

d) Briefly explain 'Round Trip Time' and 'Re-transmission Timer.' (4 Marks)

e) Briefly explain the three situations in which the Reset control field in the TCP header ("Reset" control flag) is used. (4 Marks)

Text editor toolbar:



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Question 32
Not yet answered
Marked out of 00
Flag question

The Administrator needs to prevent unauthorized users from plugging their laptops into the router. What type of password will help prevent this issue?

Select one:

- Telnet
- Console
- Secret
- Line
- Enable

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Question 34

Not yet answered

Marked out of
1.00

Flag question

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:

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



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Question 35

Not yet answered

Marked out of
1.00

Flag question

fe00:A000:0000:0001:0000:0000:0000:0092

The abbreviated version of the above IPv6 address is :

odle

X C | I | A

 Sri Lanka Institute of Information Technology

36
answered
out of
question

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

Select one:

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