

SLIIT Online Exams
Sri Lanka Institute of Information Technology

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	0	22	44
20	176	20	176
20	148		

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

Select one:

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

DISC
MULTI
1
8
15
22
29
36

SLIIT Online Exams
Sri Lanka Institute of Information Technology

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



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

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 Exams

Sri Lanka Institute of Information Technology

Question 34

Not yet answered

Marked out of
0.00

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

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

(34 - 16)
0.0.15.255

* Saving running-config to startup-config.
Router# copy running-config startup-config

* Set Console password

```
Router(config)# line console 0  
Router(config-line)# password C543  
Router(config-line)# login  
Router(config-line)#{
```

* Telnet password.

- To access the CLI of a router via IP Networks we can configure Telnet using following commands

```
Router(config)# line vty 0 4  
Router(config-line)# password T654  
Router(config-line)# login
```

From your PC use cmd.
C:\> telnet 192.168.2.8
Trying 192.168.2.8... open
User Access Verification
password:
Router> en

* Encrypt all passwords

```
Router(config)# service password-encryption  
Router(config)#{
```

Now type 'Show running-config' command, to see the encrypted passwords



Dynamic Routing

* RIP Configuration :-

```
Router(config)# router rip  
Router(config-router) # version 2  
Router(config-router) # network [network address]  
" " " "
```

No auto-summary

[network address] - Directly connected network address

```
# router rip  
# version 2  
# network 10.1.0.1  
# no auto-summary
```

* EIGRP Configuration

```
Router(config)# router eigrp [AS Number]  
Router(config-router) # network [network address]
```

[AS Number] - Autonomous Number

```
# router eigrp 100  
# network 192.168.5.3  
# no auto-summary
```

CN - Practicals.

User mode ->

Privileged mode - #

Global Configure mode:- (Config ~~mod~~) #

Router >

Router > enable (en)

Router # config t (Configure terminal)

Router (config) #

type 'exit' or ctrl+z to exit



* Router# show running-config [Running configuration]

* Router > show history [View history commands]

* Changing the hostname :- Router(config) # hostname AnyName

* Set a message-of-the-day banner :-

Router(config)# banner motd @ Your message @

Passwords

User Level

- Console password
- Telnet password
- Auxiliary password

Privilege Level

- Enable password
- Secret password (High priority)

* Set Enable password ➡ Router(config)

Router > en

Router # config t

Router (config) # enable password A123

Router (config)

* Set secret password

Router(config) # enable secret A123

* Remove privilege mode password. (Use 'no' keyword)

Router(config) # no enable password.

Router(config) # no enable secret

IP address configurations & Static and Default Routing

- (1) * Assign IP address to the router interfaces

Router(config)# interface fa0/0

Router(config-if)# ip address 192.168.10.1 255.255.255.0

Router(config-if)# no shutdown

Router(config)# interface se2/0
Router(config-if)# ip address 10.1.0.1 255.255.255.0
Router(config-if)# clock rate 64000
Router(config-if)# no shutdown

* Clock rate assigns for DCE Interface only.

- (2) * Verify the connectivity within the LANs.

Use ping command [eg:- c1> ping 192.168.10.6]

* View the routing table with directly connected networks

Router# show ip route

- (3) * Enable inter LAN communication by Configuring static routing and Default routing.

Router(config)# ip route <Destination network address> <Dest. network subnetmask> <int interface and next hop ip address>

Ex:-

Router 4

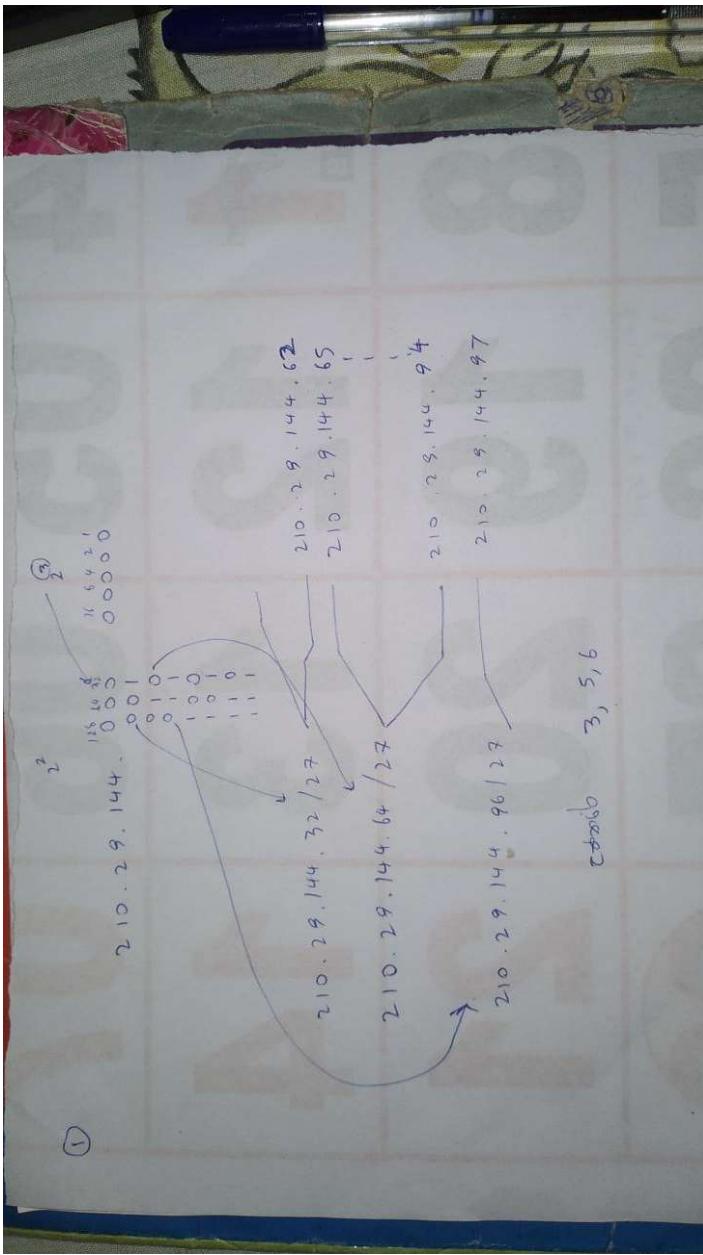
R4(config)# ip route 192.168.11.0 255.255.255.0 10.1.0.2 ↗ equal,
R4(config)# ip route 192.168.12.0 255.255.255.0 10.1.0.2 ↗ Default routing
R4(config)# ip route 0.0.0.0 0.0.0.0 10.1.0.2

Router 5

R5(config)# ip route 192.168.10.0 255.255.255.0 10.1.0.1

R5(config)# ip route 192.168.12.0 255.255.255.0 11.2.0.2

- (4) * Verify the inter LAN communication, giving ping Command



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.

See all photos

+ Add to

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

4A 0C 0E 07
01 A0 2A 00
09 06 00 00
5A 3C 02 09
A4 0C 0E 07

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

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

6to4 Prefix: 2002:CUA8:14ab::/48

All 4 of the Possible /26 Networks for 192.168.20.*

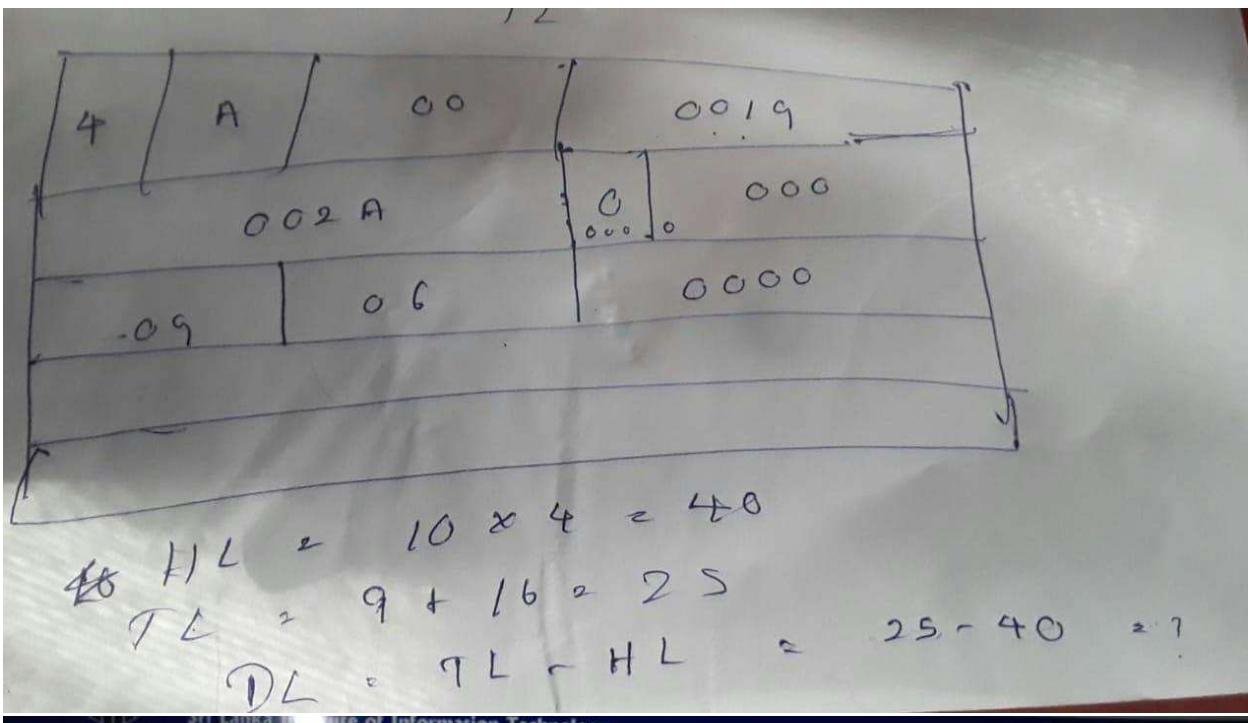
Network Address	Usable Host Range	Broadcast Address:
192.168.20.0	192.168.20.1 - 192.168.20.62	192.168.20.63
192.168.20.64	192.168.20.65 - 192.168.20.126	192.168.20.127
192.168.20.128	192.168.20.129 - 192.168.20.190	192.168.20.191
192.168.20.192	192.168.20.193 - 192.168.20.254	192.168.20.255

Network Class Any A B C

Subnet

IP Address

Calculate **Clear**



Sri Lanka Institute of Information Technology

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)

←

VER 4 bits	HLLEN 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 size of the Data field? (in Bytes)

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

5 //

Select one:

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

MULTIPLE CHOICE QUESTIONS

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 QUESTIONS

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

FEEDBACK

44

in-addr.arpa:	166.20.168.192.in-addr.arpa
IPv4 Mapped Address:	::ffff:c0a8.14a6
6to4 Prefix:	2002:c0a8.14a6::/48

All 4 of the Possible /26 Networks for 192.168.20.*

Network Address	Usable Host Range	Broadcast Address:
192.168.20.0	192.168.20.1 - 192.168.20.62	192.168.20.63
192.168.20.64	192.168.20.65 - 192.168.20.126	192.168.20.127
192.168.20.128	192.168.20.129 - 192.168.20.190	192.168.20.191
192.168.20.192	192.168.20.193 - 192.168.20.254	192.168.20.255

Network Class Any A B C

Subnet

IP Address

Calculate  **Clear**

Mozilla Firefox seems slow... to... start.

https://www.calculator.net/ip-subnet-calculator.html?cclass=any&csubnet=268&cip=192.168.20.166&ctype=ipv4

Calculator.net

IP Subnet Calculator

This calculator returns a variety of information regarding Internet Protocol version 4 (IPv4) and IPv6 subnets including possible network addresses, usable host ranges, subnet mask, and IP class, among others.

IPv4 Subnet Calculator

Result

IP Address:	192.168.20.166
Network Address:	192.168.20.128
Usable Host IP Range:	192.168.20.129 - 192.168.20.190
Broadcast Address:	192.168.20.191
Total Number of Hosts:	64
Number of Usable Hosts:	62
Subnet Mask:	255.255.255.192
Wildcard Mask:	0.0.0.63
Binary Subnet Mask:	11111111.11111111.11111111.11000000
IP Class:	C
CIDR Notation:	/26
IP Type:	Private

DigitalOcean® Cloud Hosting
Spin Up an SSD Cloud Server in Less Than a Minute.
60-Day Free Trial With \$100 Credit.
DigitalOcean® [Open >](#)

Search

Other Calculators

- [Age](#)
- [Date](#)
- [Time](#)
- [Hours](#)
- [GPA](#)
- [Grade](#)
- [Height](#)
- [Concrete](#)
- [IP Subnet](#)
- [Bra Size](#)
- [Password Generator](#)
- [Dice Roller](#)

8. An IP datagram has arrived with the following information in the header (in hexadecimal):
 45 00 00 54 00 03 00 00 20 06 00 00 7C 4E 03 02 B4 0E 0F 02

VER 4 bits	HLEN 5 bits	DS 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						

4 – Version – IPv4
 5 – HLEN – 5*4 → 20Bytes → No option fields → Only standard fields
 00 – DS – Normal Service
 00 54 – Total Length → $(54)_{16} \rightarrow (84)_{10} \rightarrow 84$ bytes → 84-20 → 64 Data Bytes
 00 03 - Identification# → 3
 00 00 - Flags and offset → 000 0 0000 0000 → D=0 , M=0 , Offset = 0
 20 - TTL – $(20)_{16} \rightarrow 32$ Routers
 06 - Protocol - TCP
 00 00 - Header checksum → No Errors



Question 11

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	$\neq 0$
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 an intermediate fragment?

Select one:

- Q
- R
- S
- P

$$\begin{array}{r}
 16^3 \quad 16^2 \\
 1 \quad 9 \\
 \hline
 16 + 9 = 25
 \end{array}$$

$A = 10$
 \downarrow
 $AL = A * 4$
 $10 * 4$
 $= 40$

Data
~~Total length = (19)₁₆ + 40~~
 $= 25$ ~~40~~

Data length = 25

Total Length \rightarrow Data length + header length

$$\therefore 25 + 40$$

$$\underline{\underline{65}}$$

Online Exams
Sri Lanka Institute of Information Technology

Section 6
Yet answered
0 out of
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

Online Exams
Sri Lanka Institute of Information Technology

Section 8
Yet answered
0 out of
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

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?

Online Exams
Sri Lanka Institute of Information Technology

An organization is granted the IP Address block 136.40.0.0 in class B. The administrator wants to create 7 subnets and it is required to take minimum number of bits to create subnetworks.
How many usable IP addresses are available for each subnetwork ?

Select one:

- 8190
- 4094
- 254
- 5192
- 4090

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
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Time left 0:46:55

Online Exams

Sri Lanka Institute of Information Technology

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

Here is a question :

Given a class B network of **155.44.200.0**, what mask could be used to provide 15 networks each supporting 120 users :

A 255.255.252.0
B 255.255.248.0
C 255.255.240.0
D 255.255.255.128
E 255.255.255.240

The correct answer is "C".
But i think option "A", "B", "C" and "D" are correct

Because if i want 15 networks so i will use **4 network bits** and for 120 users **7 host bits**. So if i use 255.255.252.0 (Option A) i will have **Network Bits = 6** and **Host bits = 10**. If i use 255.255.248.0 i have **Network Bits = 5** and **Host bits = 11**. For 255.255.240.0 i have **Network Bits = 4** and **Host bits = 12** and for 255.255.255.128 i have **Network Bits = 9** and **Host bits = 7**.

I know i am missing something but cant figure out what. Kindly explain this in detail.

[Twitter](#) 0 [Share](#) 0 [Share](#) 0 [Email](#) 0

f

NetExam
Sri Lanka Institute of Information Technology

Dashboard Examinations Lockdown Browser Practice Test

Home My courses Computer Networks - IT2050

MID SEMESTER EXAMINATION - 2021 SEMESTER 1

IT2050 / CSIT2050 - 2021 Semester 1 - Monday 5th April - 11.30am-12.30pm

Not attempted
Due 5 April 2021

Duration : 1 hour
Type : ONLINE - 30 MCQs
Navigation : Forward Sequential ONLY
Lockdown Browser Enabled

2019 - S2 - MID SEMESTER EXAMINATION

Not available

Topic 3
Not available

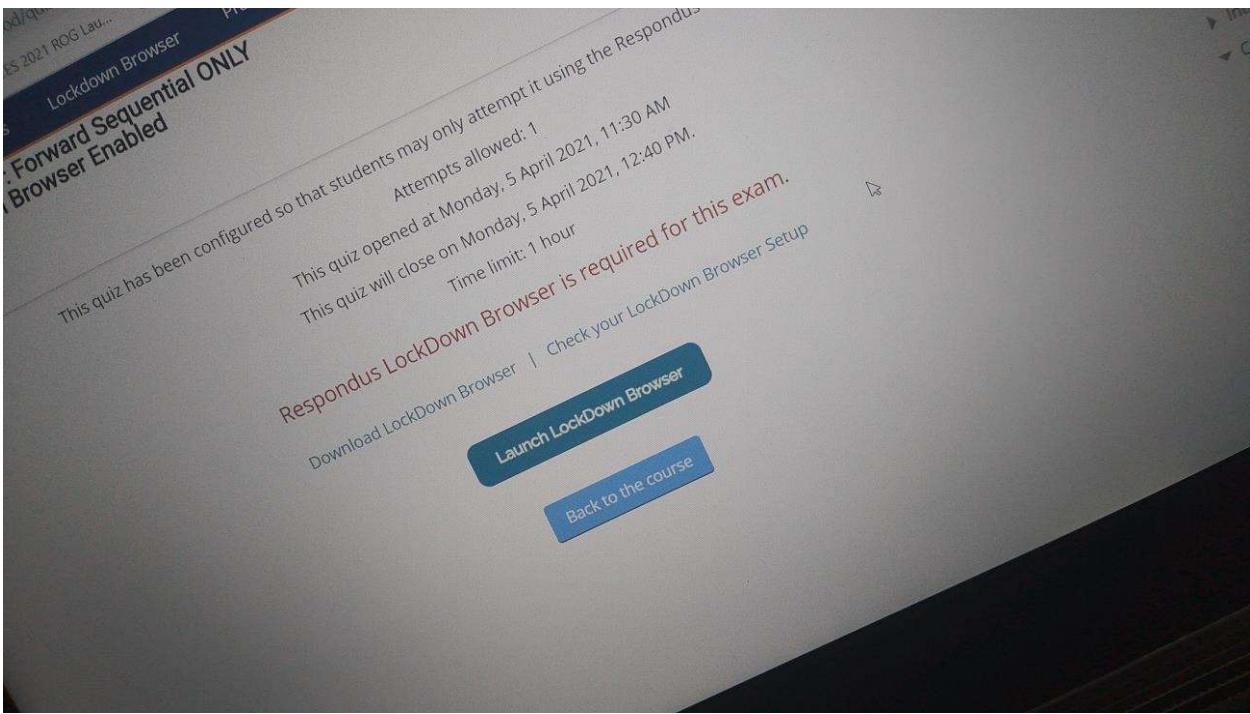
The first and the last bit combinations of the host ID section respectively represents :

Select one:

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

DELL





The image shows a computer screen displaying a web-based examination system. The top portion of the screen is dark, likely a window title bar or a background image. Below this, the browser's address bar and control buttons are visible.

The main content area is titled "NetExam" and features the "Sri Lanka Institute of Information Technology" logo. On the left side, there is a sidebar with the following information:

- Question 1
- 1 answered
- 1 out of 1
- Completed question

The main content area contains a question:

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
- 150.17.45.62
- 150.17.45.60

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?

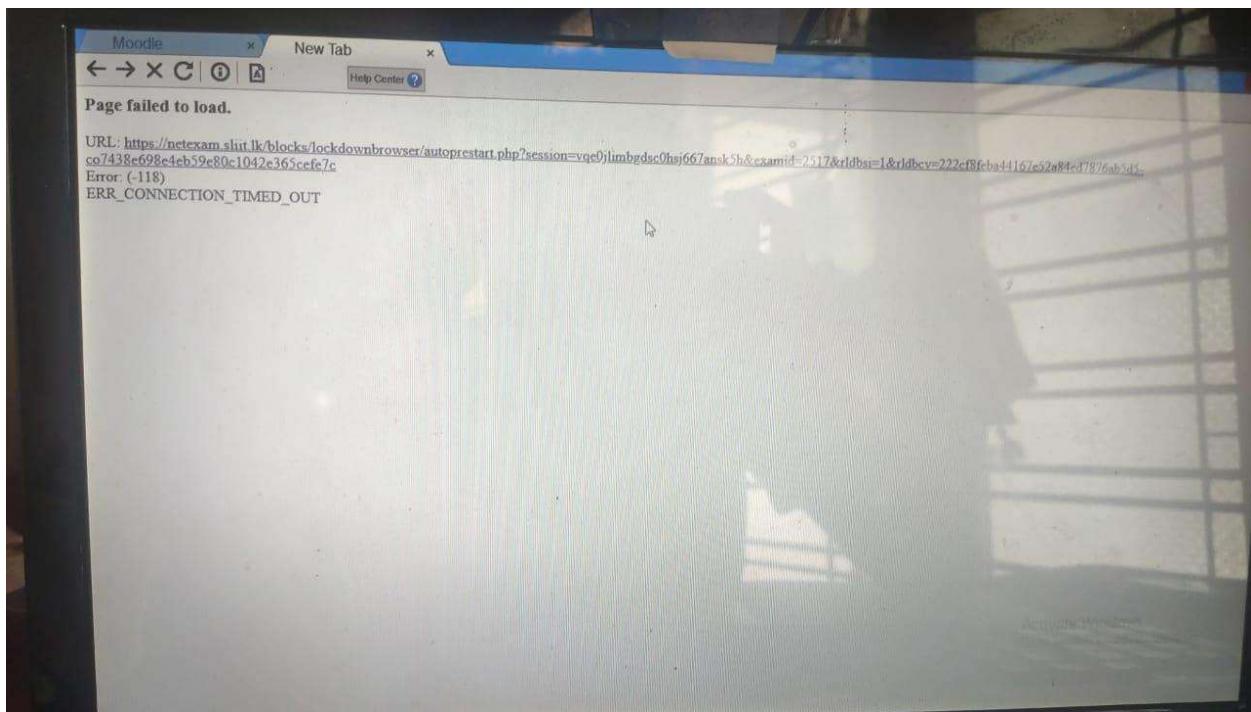
Network A
80 Hosts

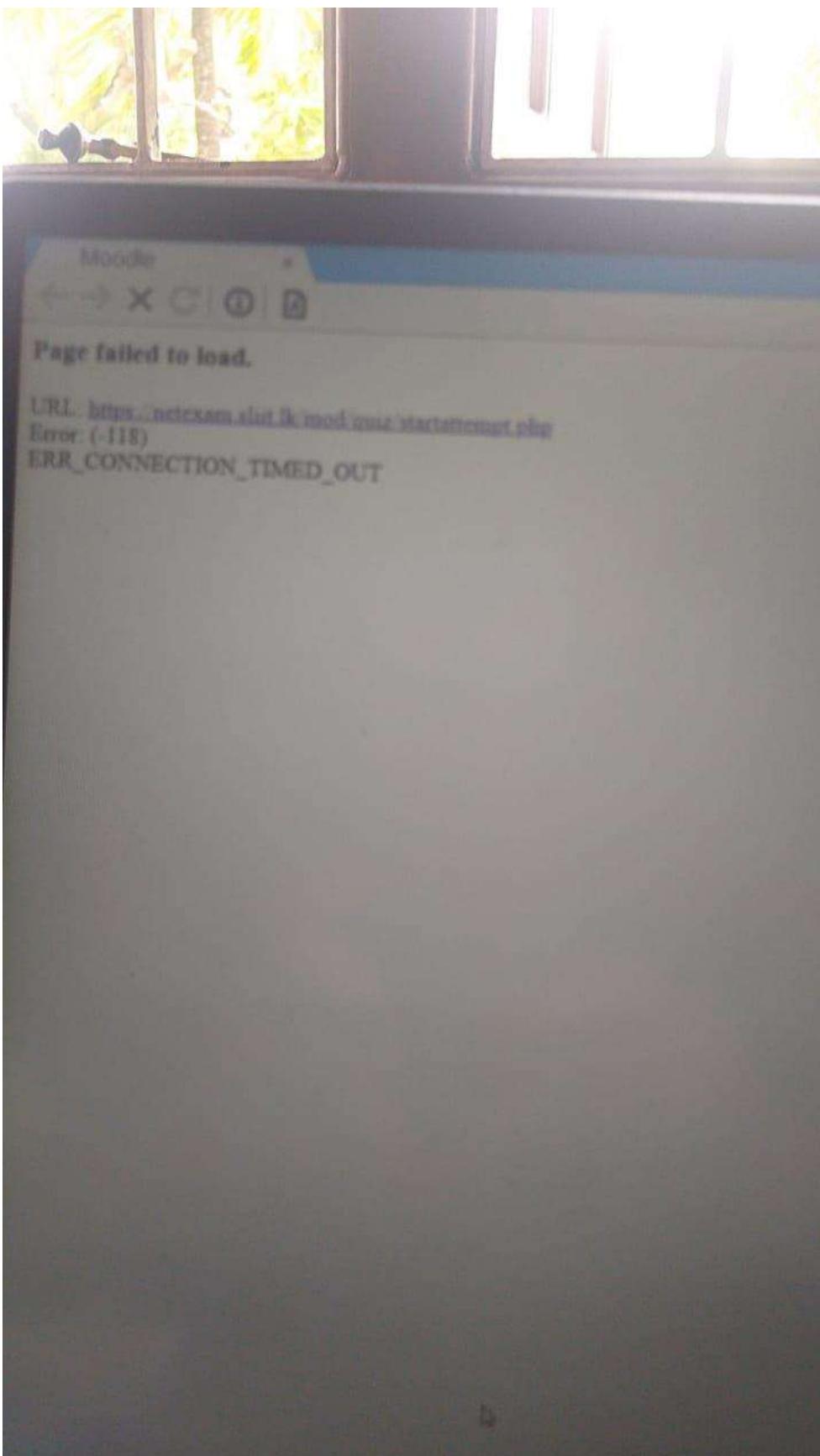


Network B
425 Hosts

Select one:

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





NetExam
Sri Lanka Institute of Information Technology

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

Select one:

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

NetExam
Sri Lanka Institute of Information Technology

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?

32 96 160

Select one:

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

Sri Lanka Institute of Information Technology

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

[Next page](#)

Sri Lanka Institute of Information Technology

MAC of PC_A is d600:0ABB:28FC

The interface ID of the IPv6 address generated by EUI64 method is d900:0A FF :FE B3:28FC

[Next page](#)

Moodle

Page failed to load.

URL: <https://netexam.sliit.lk/mod/quiz/processattempt.php?cmid=2517>

Error: (-118)
ERR_CONNECTION_TIMED_OUT

NetExam
Sri Lanka Institute of Information Technology

Search Courses

Confirm

You are already logged in as it20263058 Silva H. C. M. It20263058, you need to log out before logging in as different user.

Log out Cancel

SLIIT Sri Lanka Institute of Information Technology

FINANCIAL ACCOUNTS

Question 1
Not answered
1 out of 1
Mark question

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

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

Select one:

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

Next page

Moodle

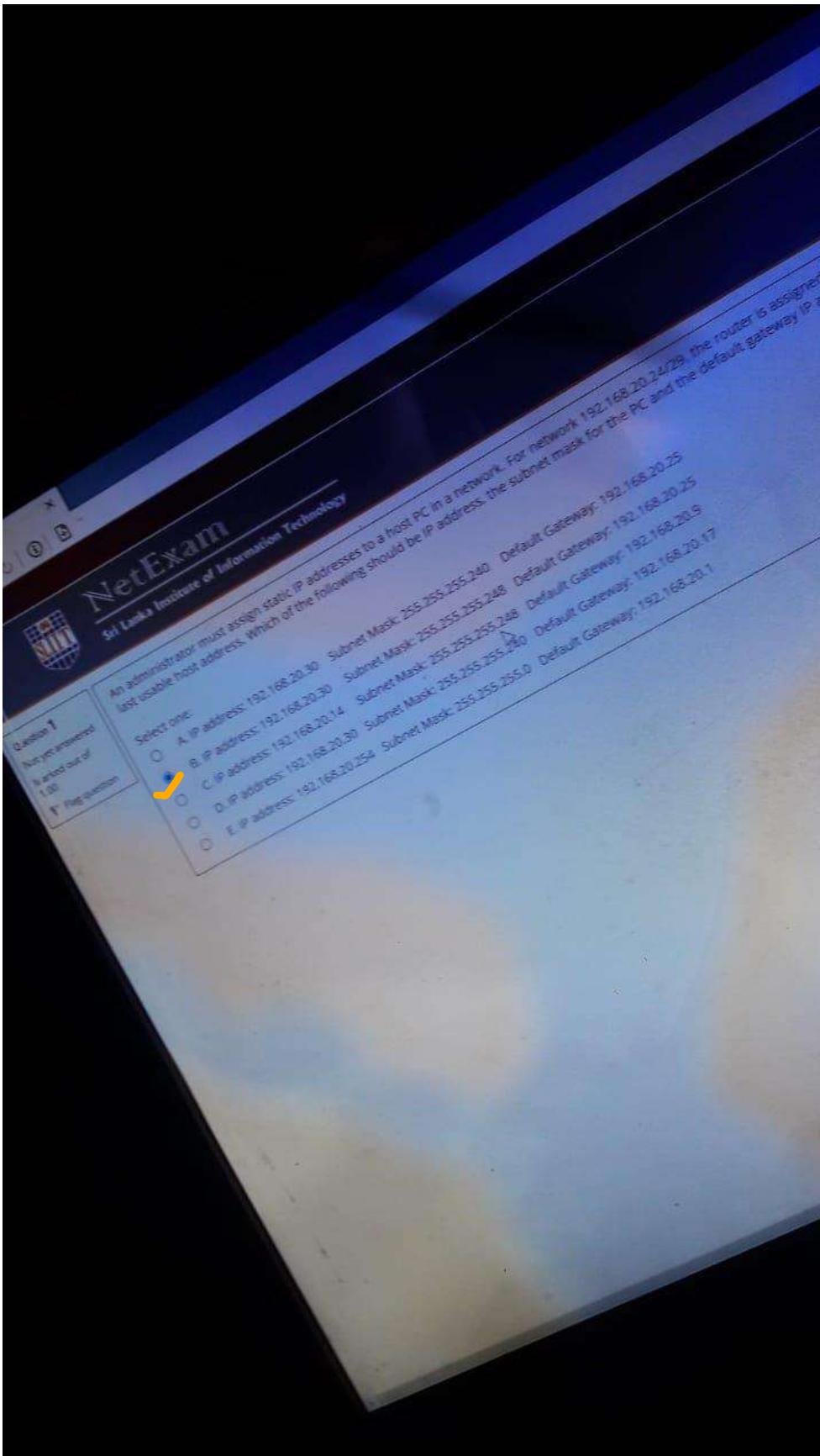
NetExam

Sri Lanka Institute of Information Technology

A required parameter (attempt) was missing

More information about this error

Continue



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 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.
- A new mask of 255.255.0.0 would yield 256 usable networks with 1024 usable hosts per network.

Next

Not yet answered
Marked out of 1.00
 Flag question

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
- 164.12.14.7
- 90.60.0.0
- 90.0.0.0

Finish

Time left

MULTI

1

8

15

22

29

30

FEEDBACK

31

Question 2

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?



Select one:

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

Quiz navigat

Finish attempt...

Time left 0:54:23

MULTIPLE CHOICE

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

FEEDBACK

31

Question 1

Not yet answered

Marked out of
1.00 Flag question

The following table indicates the values of the M bit and the Fragmentation Offset for four packets P, Q, R and S.

MF	Fragment Offset	
1	0	P
1	!=0	Q
0	!=0	R
0	0	S

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

Select one:

- S
- R
- P
- Q

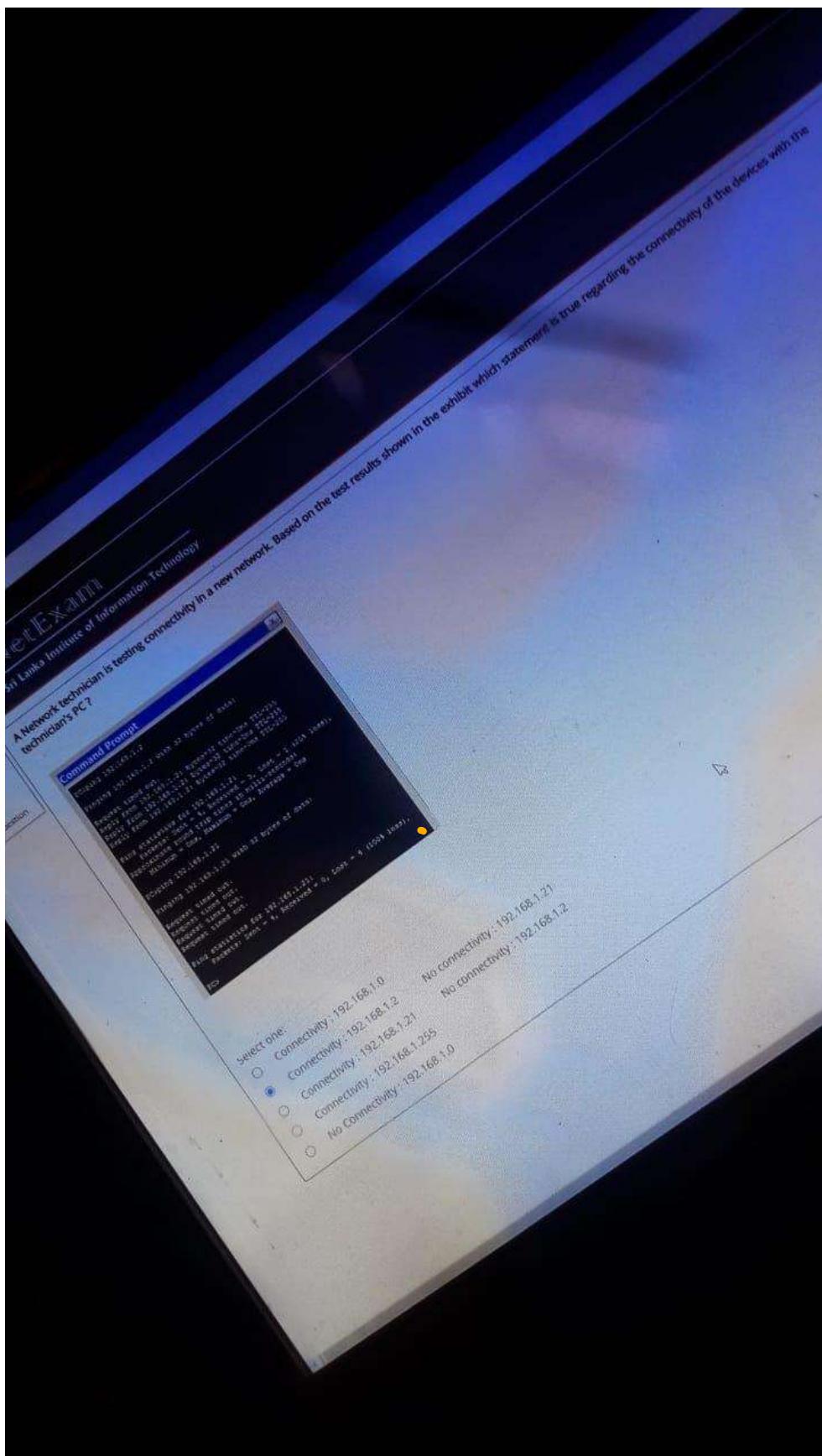


Which of the following memory locations describes the possible locations from which the operating system would be loaded at system initialization?

Select one:

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

Next page



Question 2
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
- 90.60.2.9
- 90.60.0.0
- 164.12.0.0

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:

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

Module

NetExam

Sri Lanka Institute of Information Technology

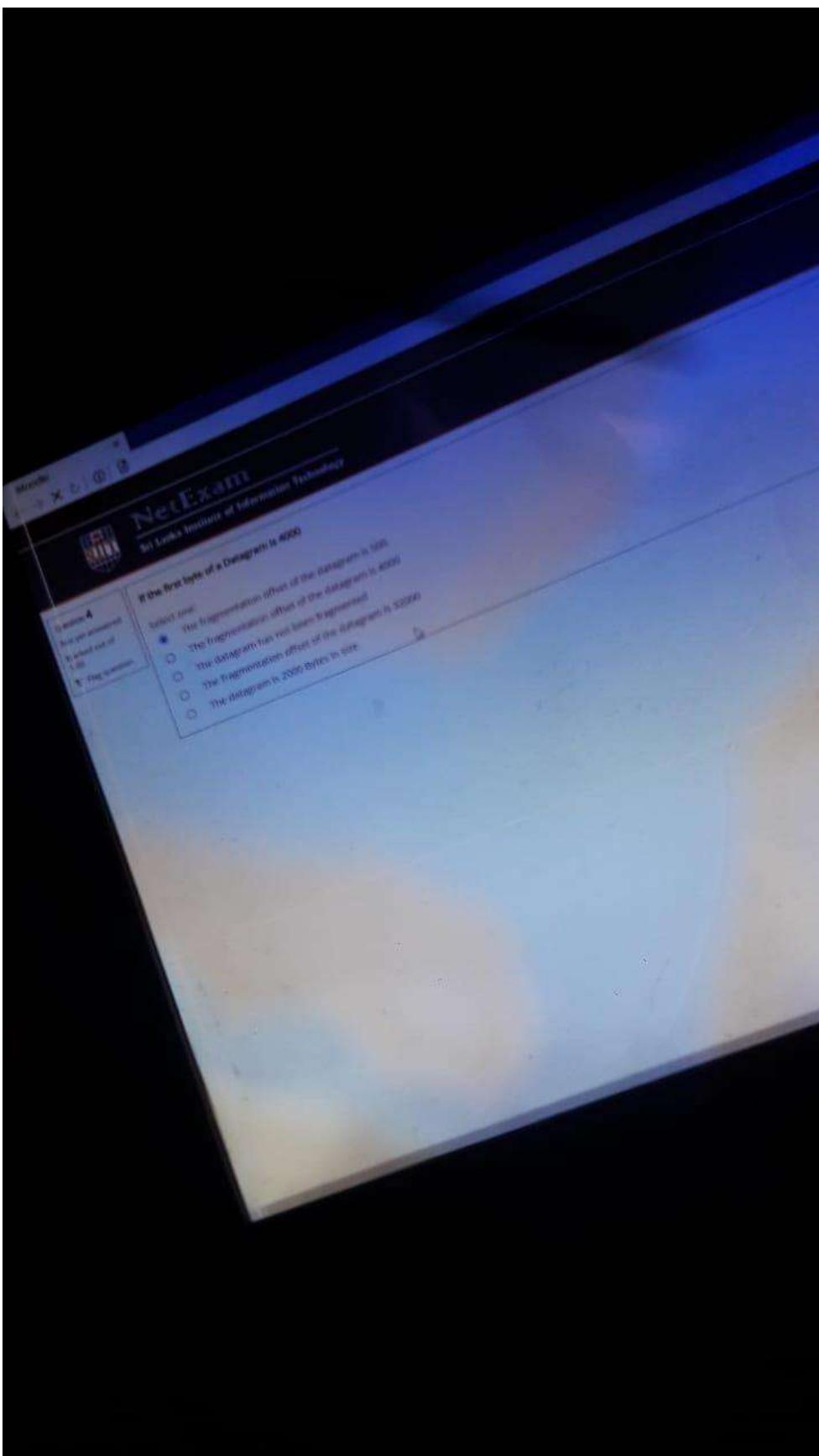
Section 3
Not yet answered
Marked out of 1.00
Flag question

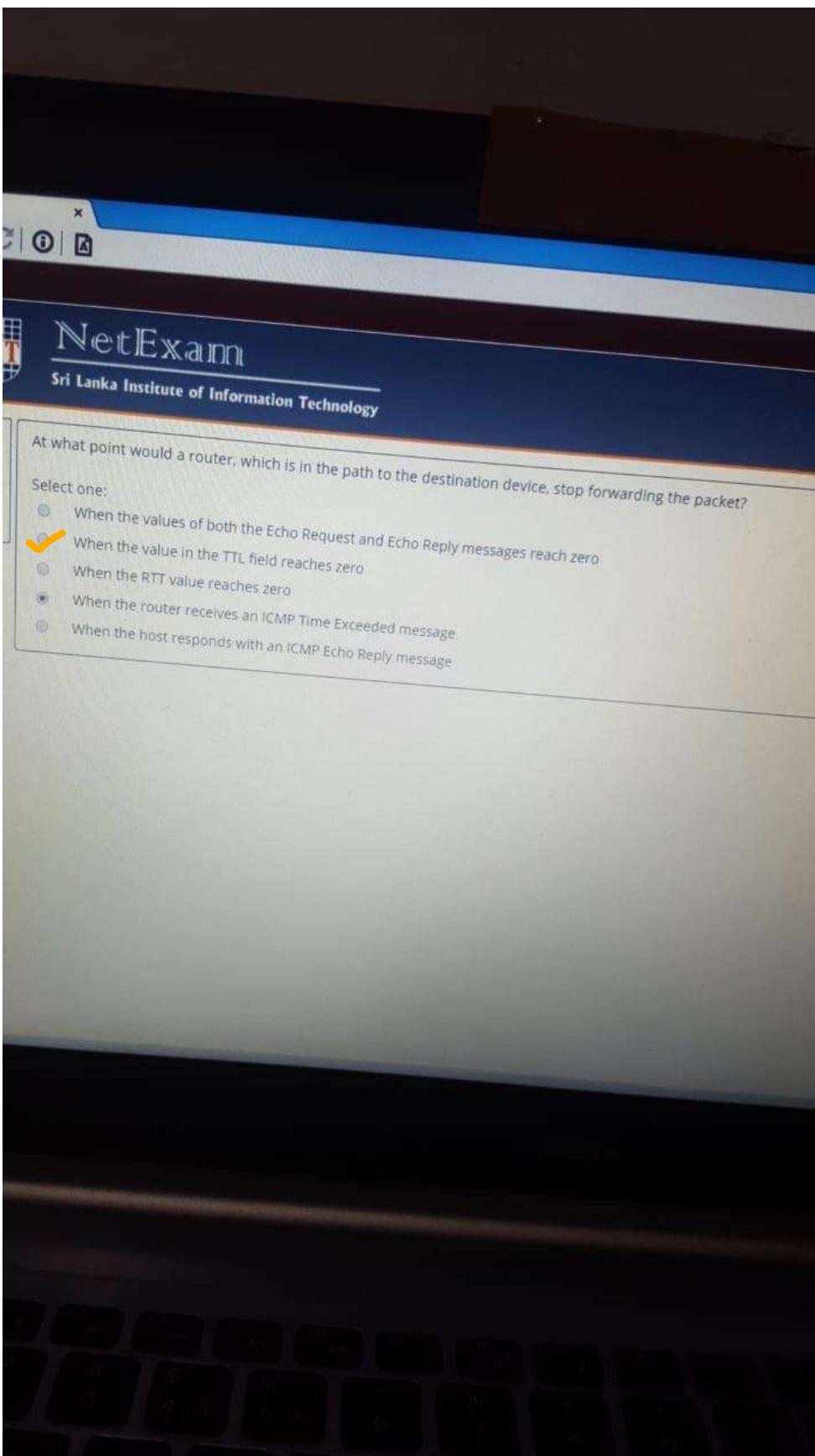
A router has a valid operating system and a configuration stored in NVRAM. When the router boots up, which mode will display?

Select one:

- setup mode
- global configuration mode
- user EXEC mode
- ROM monitor mode

Next page





NetExam
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.

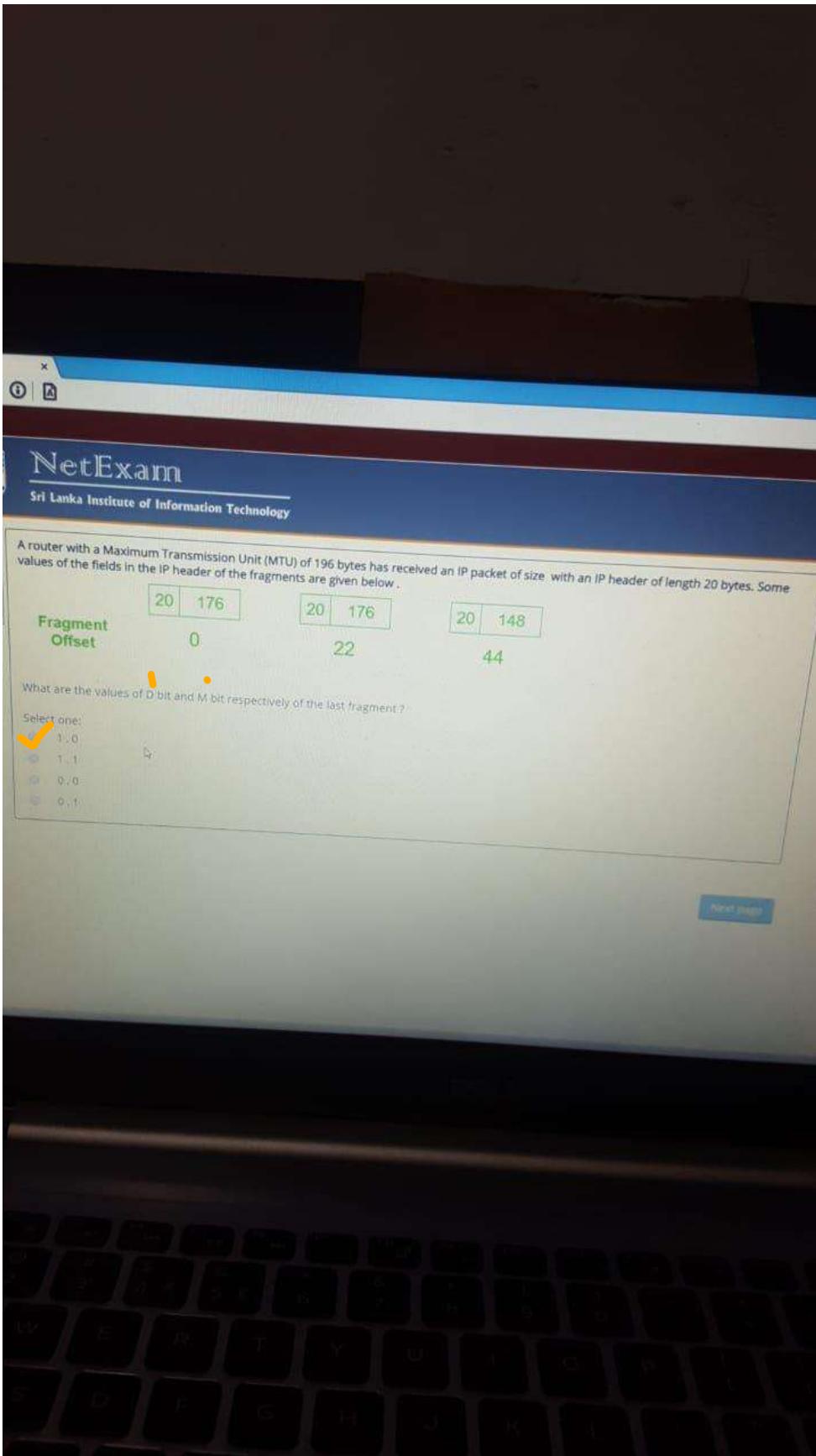
Fragment Offset	20	176	20	176	20	148
0	0	22	22	44	44	

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

Select one:

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

[Next page](#)



NetExam
Sri Lanka Institute of Information Technology

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

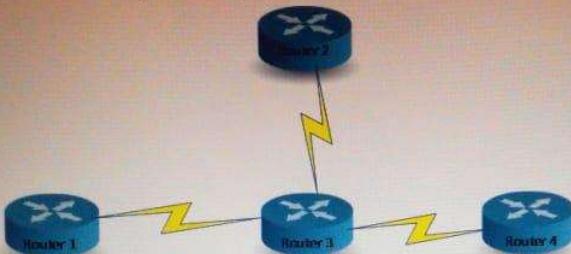
Select one:

- RAM ✓
- NVRAM
- ROM
- Flash Memory

[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

Moodle

NetExam
Sri Lanka Institute of Information Technology

SLIIT

Question 8
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:

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

NetExam
Sri Lanka Institute of Information Technology

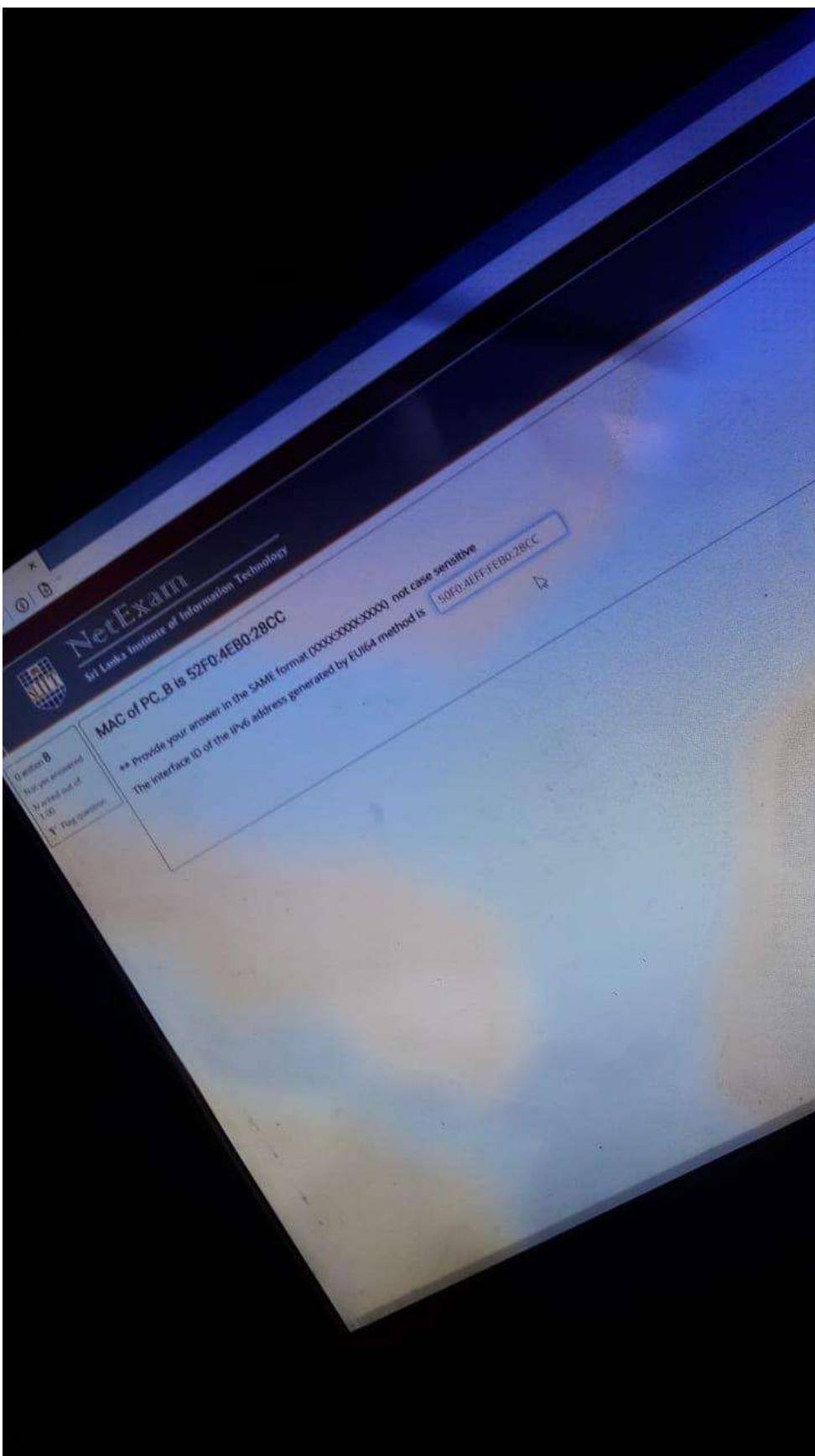
SLIIT

Question 9
Not yet answered
Marked out of 1.00
Flag question

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

Select one:

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



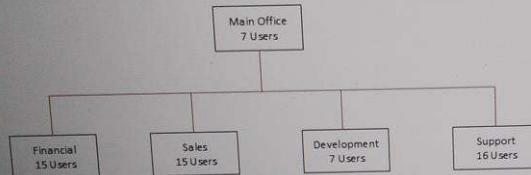


Question 10

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 host addresses for each department specified in the diagram?



Select one:

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

Quiz navigation

Finish attempt ...

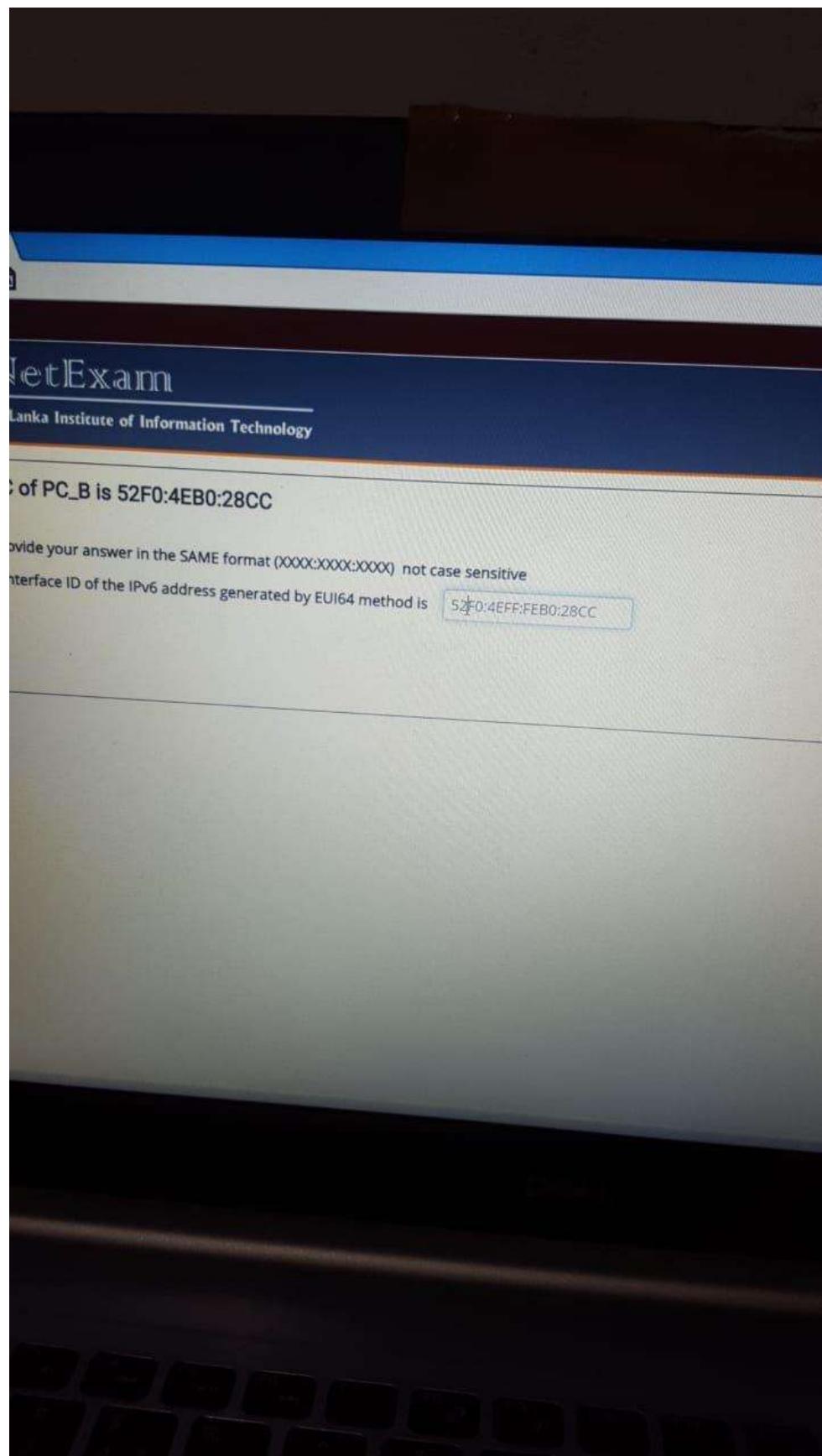
Time left 0:39:19

MULTIPLE CHOICE Q

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

FEEDBACK

31



NetExam
Sri Lanka Institute of Information Technology

2
Answered
out of
question

Which of these is not applicable for IP protocol ?

Select one or more:

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

Next page

NetExam
Sri Lanka Institute of Information Technology

Question 13
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.
- 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.
- A new mask of 255.255.0.0 would yield 256 usable networks with 1024 usable hosts per network.

Moodle

NetExam
Sri Lanka Institute of Information Technology

Question 3
Not yet answered
Marked out of 1.00
Flag question

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:

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

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

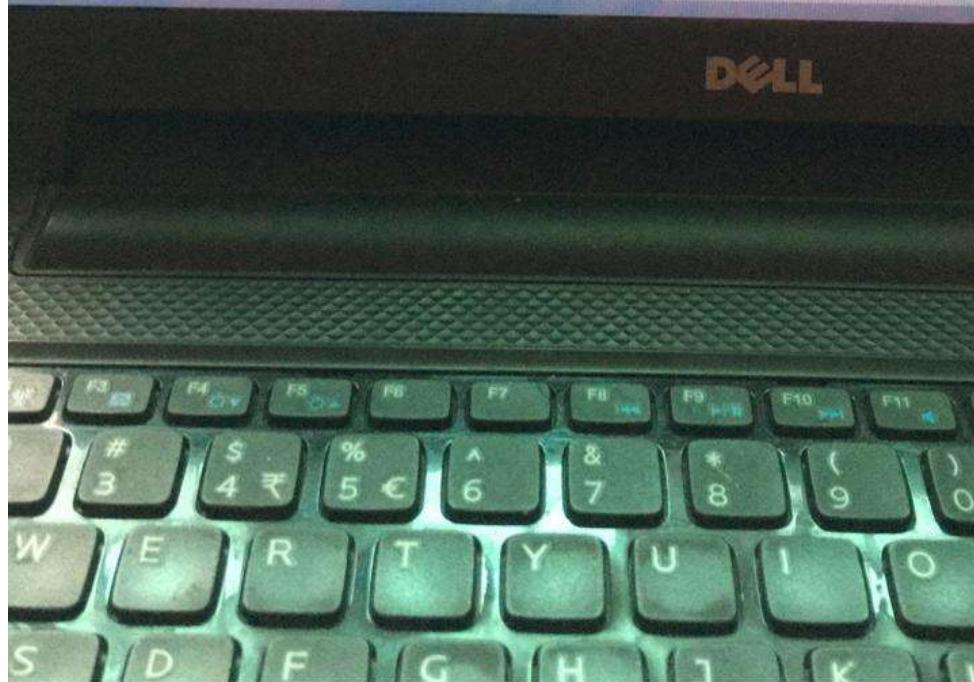
Gateway of last resort is not set

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



Question 2
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	$\neq 0$
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:

- Q
- S
- R
- P



NetExam

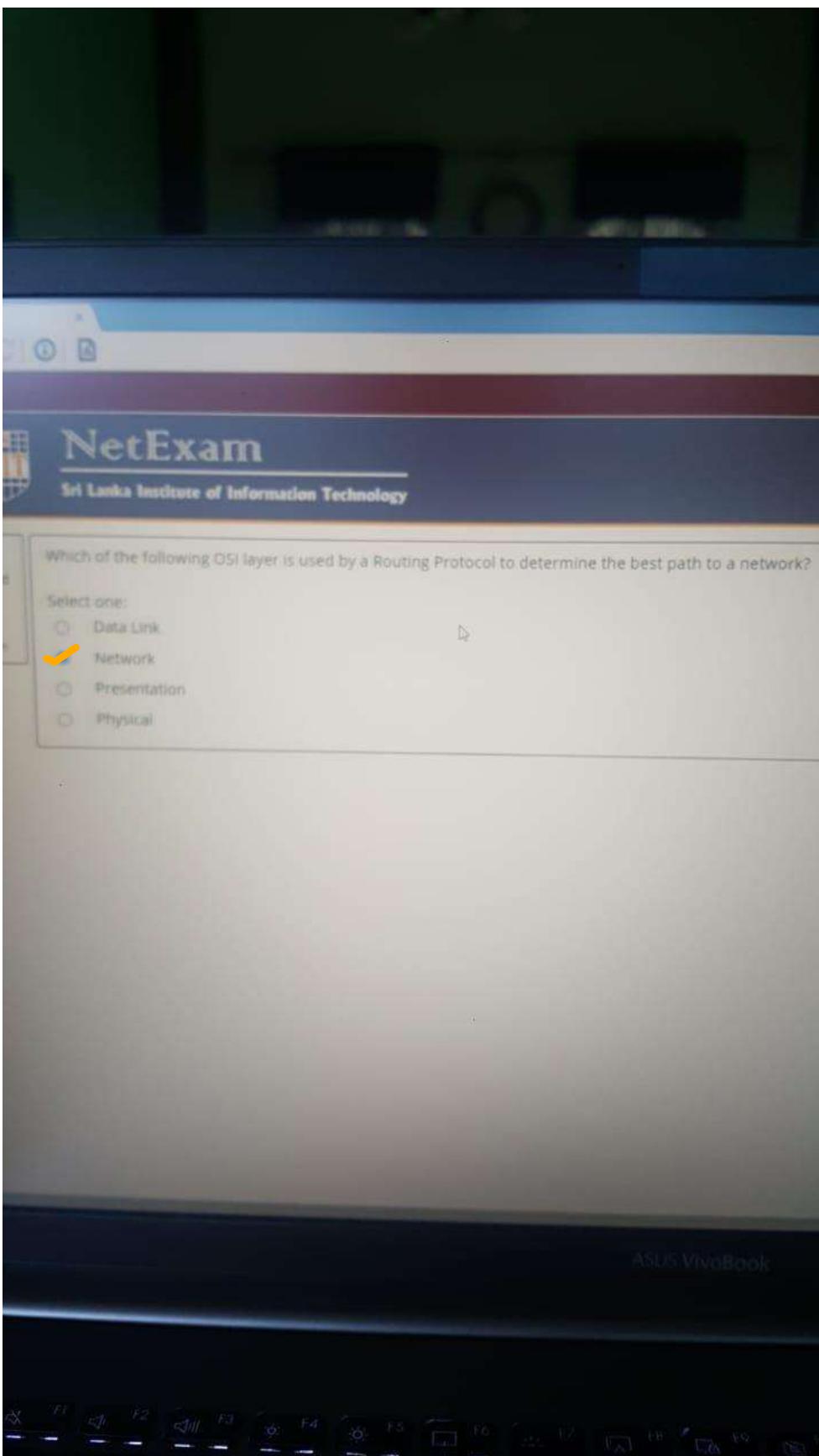
Sri Lanka Institute of Information Technology

Question 1
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 host responds with an ICMP Echo Reply message
- When the RTT value 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 value in the TTL field reaches zero





1
answered
out of
question

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:

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

Next page

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:

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

Ne

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
- P
- S
- Q

[Next page](#)

NetExam
Sri Lanka Institute of Information Technology

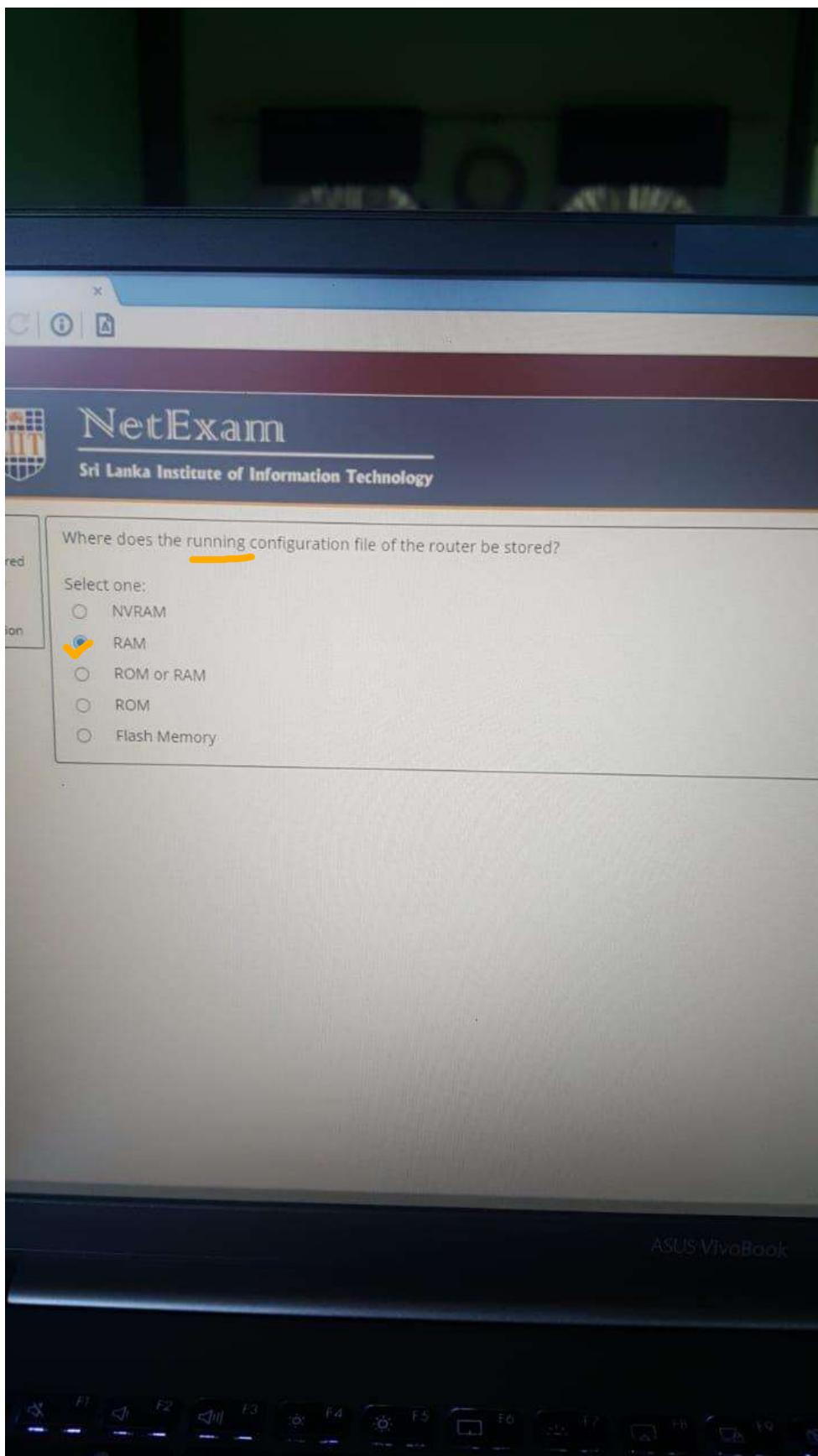
Two devices in the same Local Area Network are having the following IP addresses.
Select the network to which they can belong to :

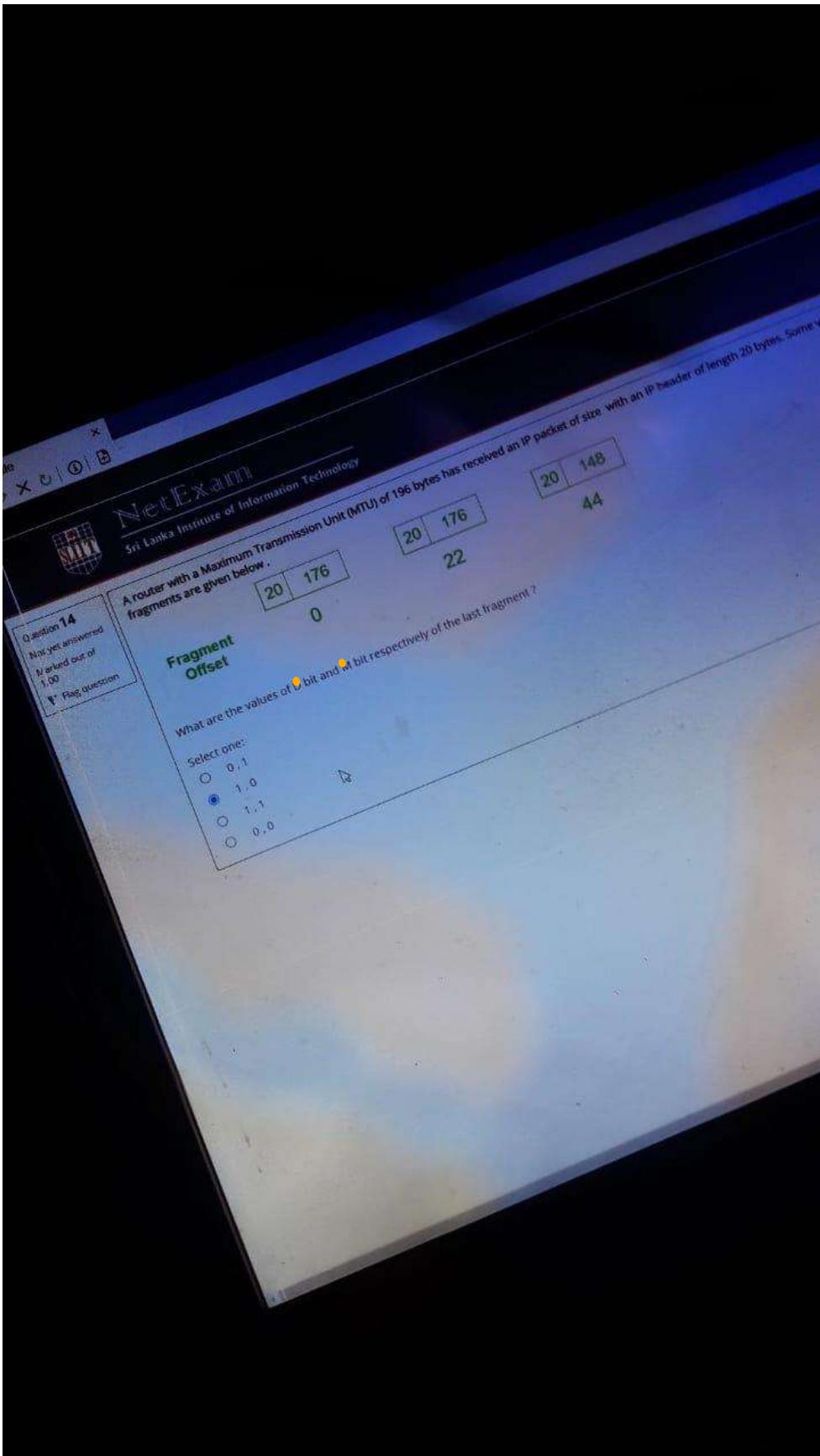
192.168.100.135 and 192.168.100.144

Select one or more:

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

ASUS VivoBook





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

le

x

X

C

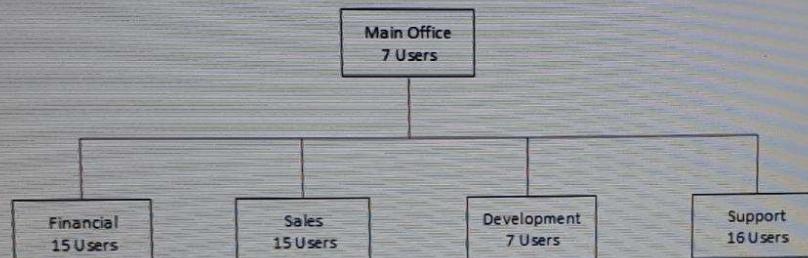
I

A

4
awered
t of

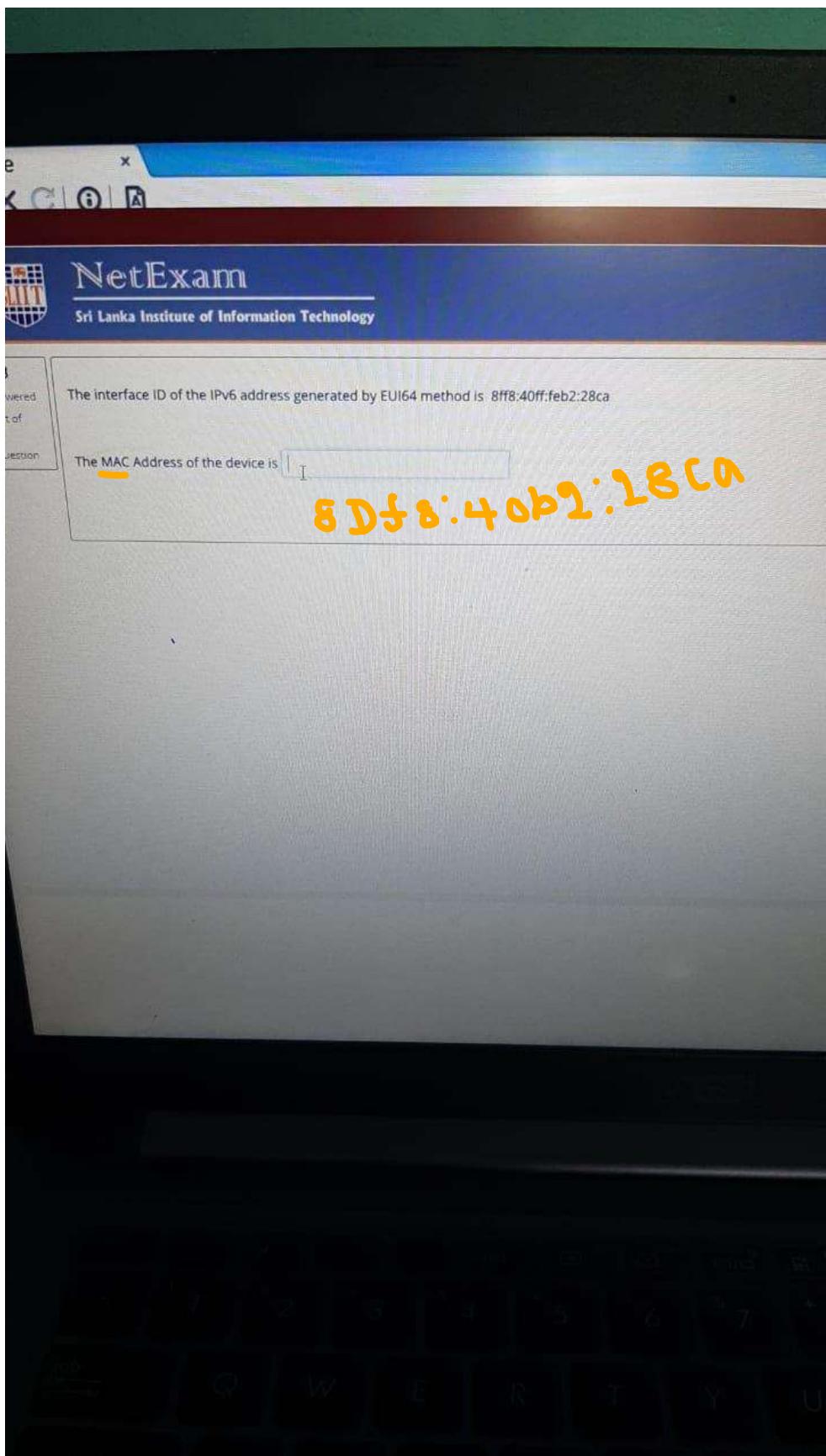
estion

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. 255.255.255.248
- B. 255.255.255.224
- C. 255.255.255.0
- D. 255.255.255.240



NetExam
Sri Lanka Institute of Information Technology

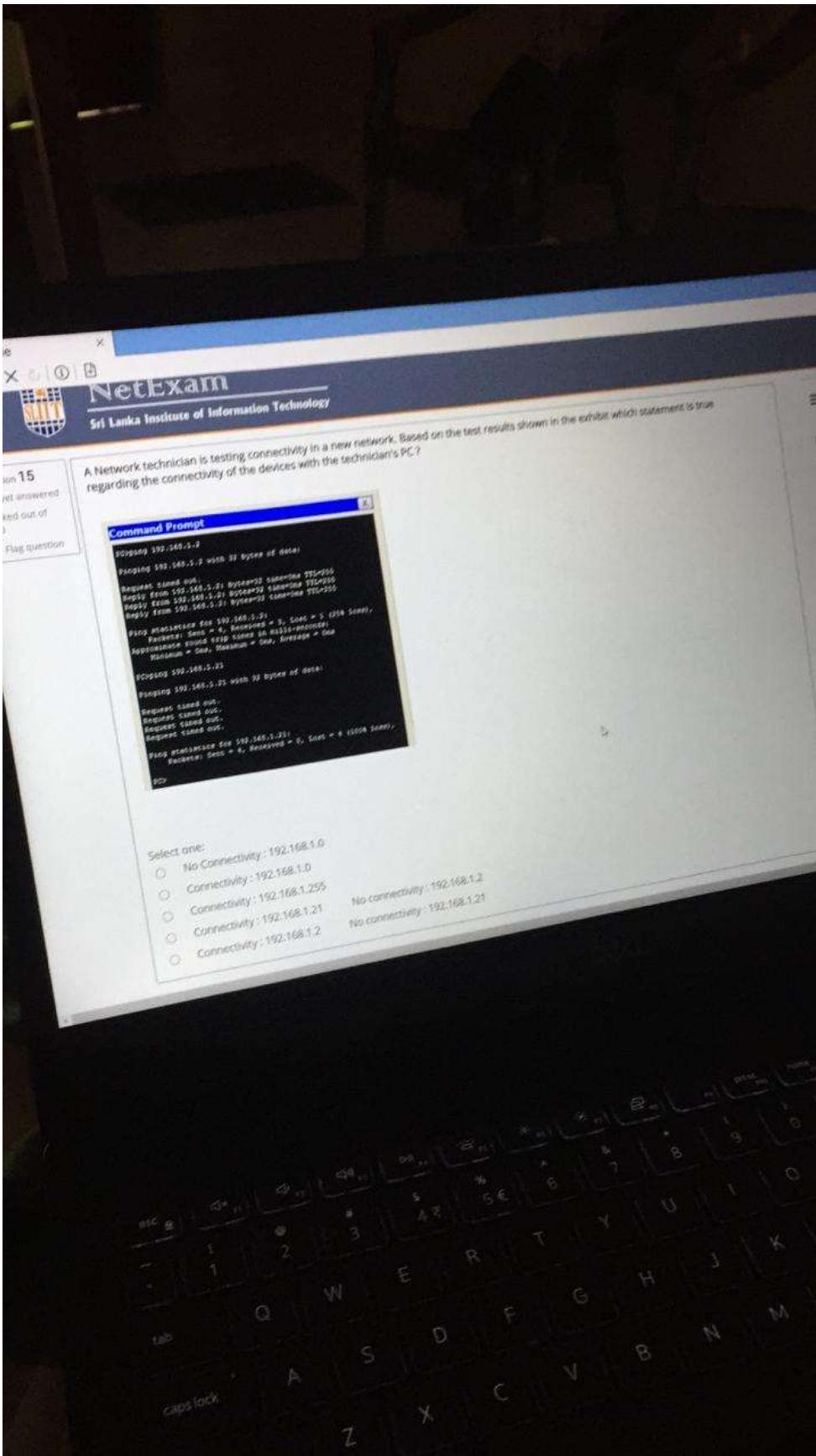
Ques 15
1 point
Net unanswered
Marked out of 1
Flag question

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

```
Pingng 192.168.1.2 with 32 bytes of data:  
Request timed out.  
Reply from 192.168.1.2: bytes=32 time=9ms TTL=255  
Reply from 192.168.1.2: bytes=32 time=9ms TTL=255  
Ping statistics for 192.168.1.2:  
Packets: Sent = 4, Received = 3, Lost = 5 (125% loss),  
Approximate round trip times in ms:  
Minimum = one, Maximum = 9ms, Average = one  
RCPing 192.168.1.21  
Pingng 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),  
Select one:  
 No Connectivity : 192.168.1.0  
 Connectivity : 192.168.1.0  
 Connectivity : 192.168.1.255  
 Connectivity : 192.168.1.21  
 Connectivity : 192.168.1.2
```

No connectivity : 192.168.1.2
No connectivity : 192.168.1.21



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

[Next page](#)

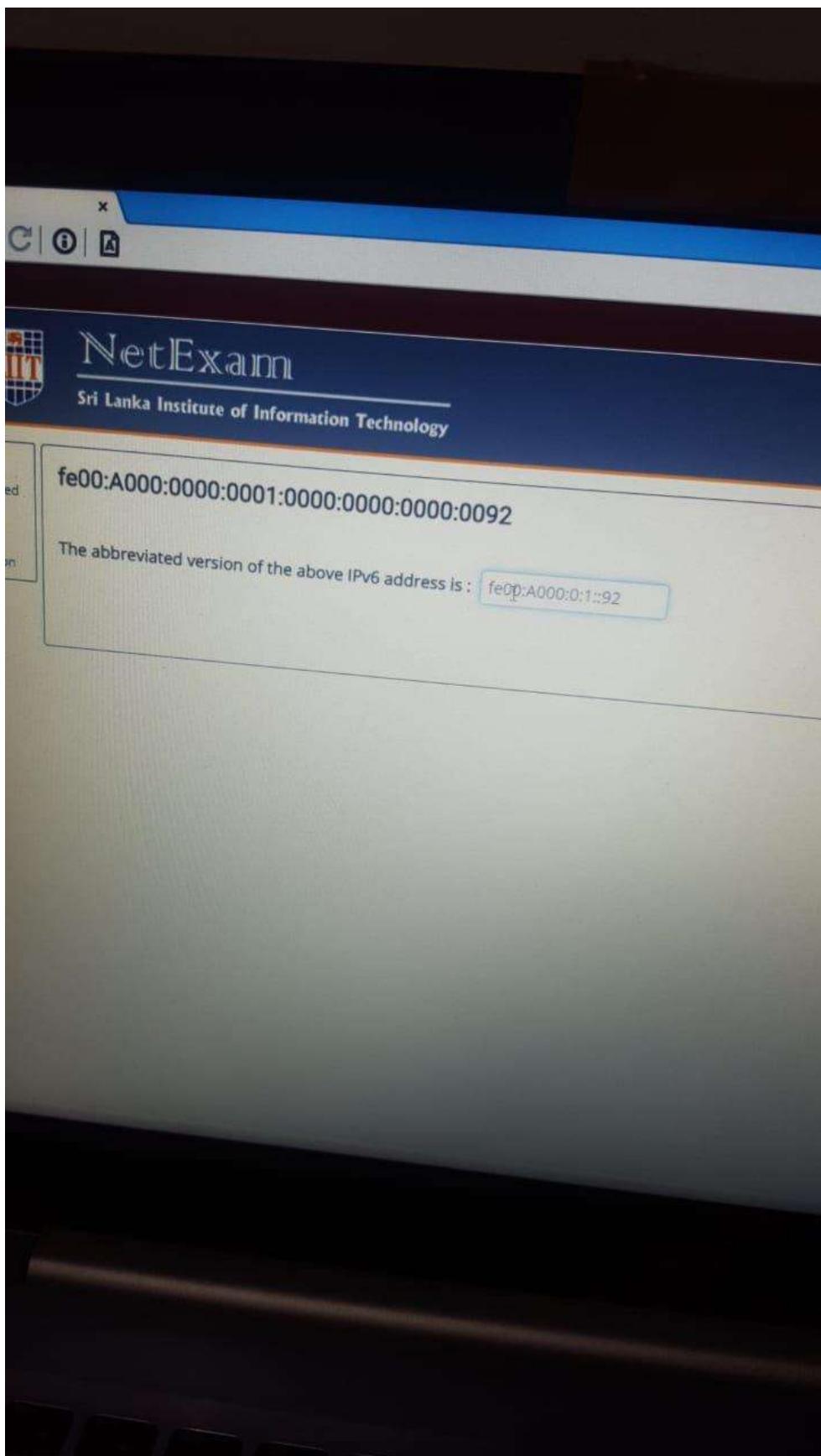
192.168.10.0/24 and 173.16.0.0/16 networks?

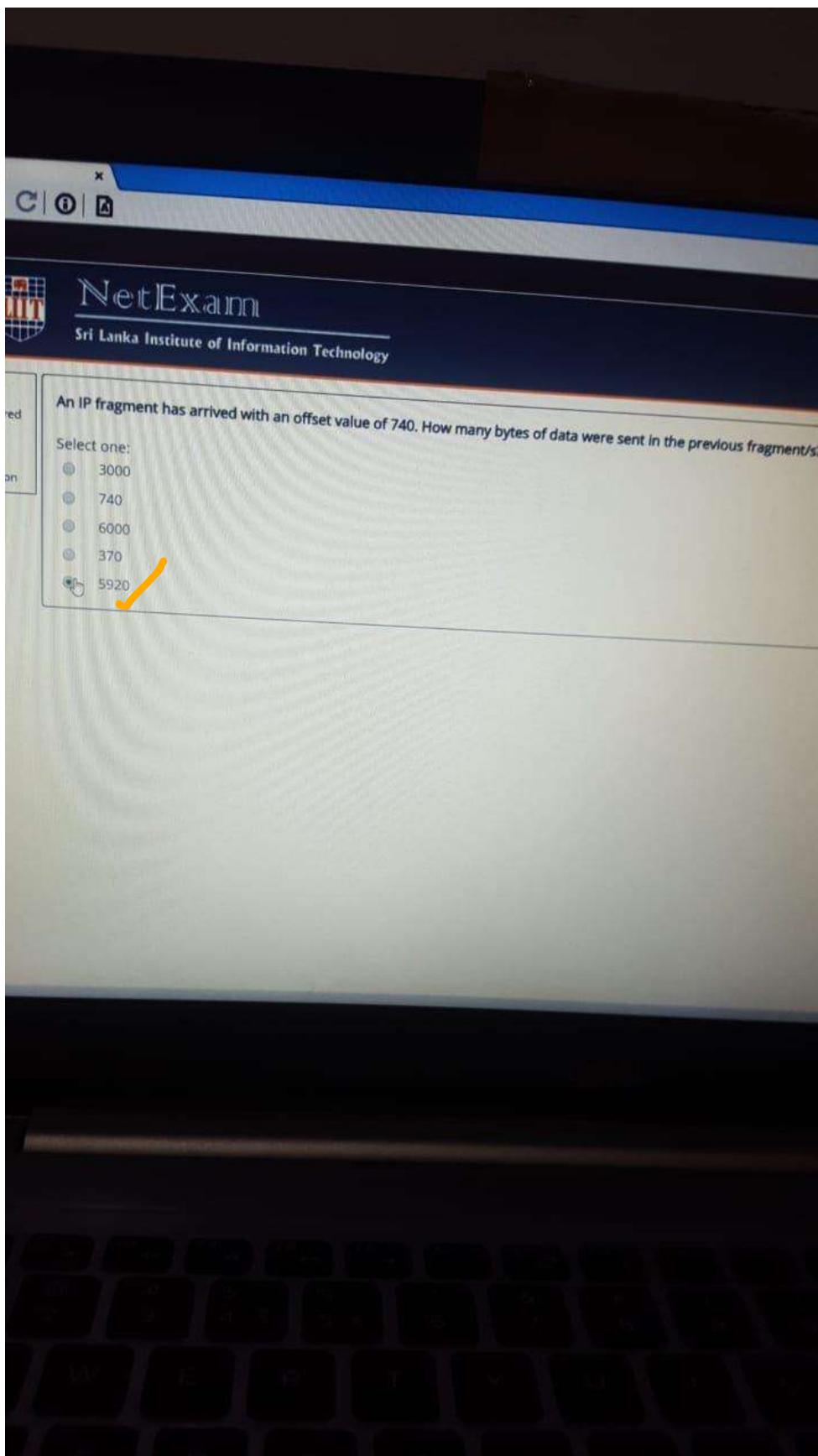
Note: Static Route command

```
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







NetExam

Sri Lanka Institute of Information Technology

Section 6

4 yet answered
Marked out of
10

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.

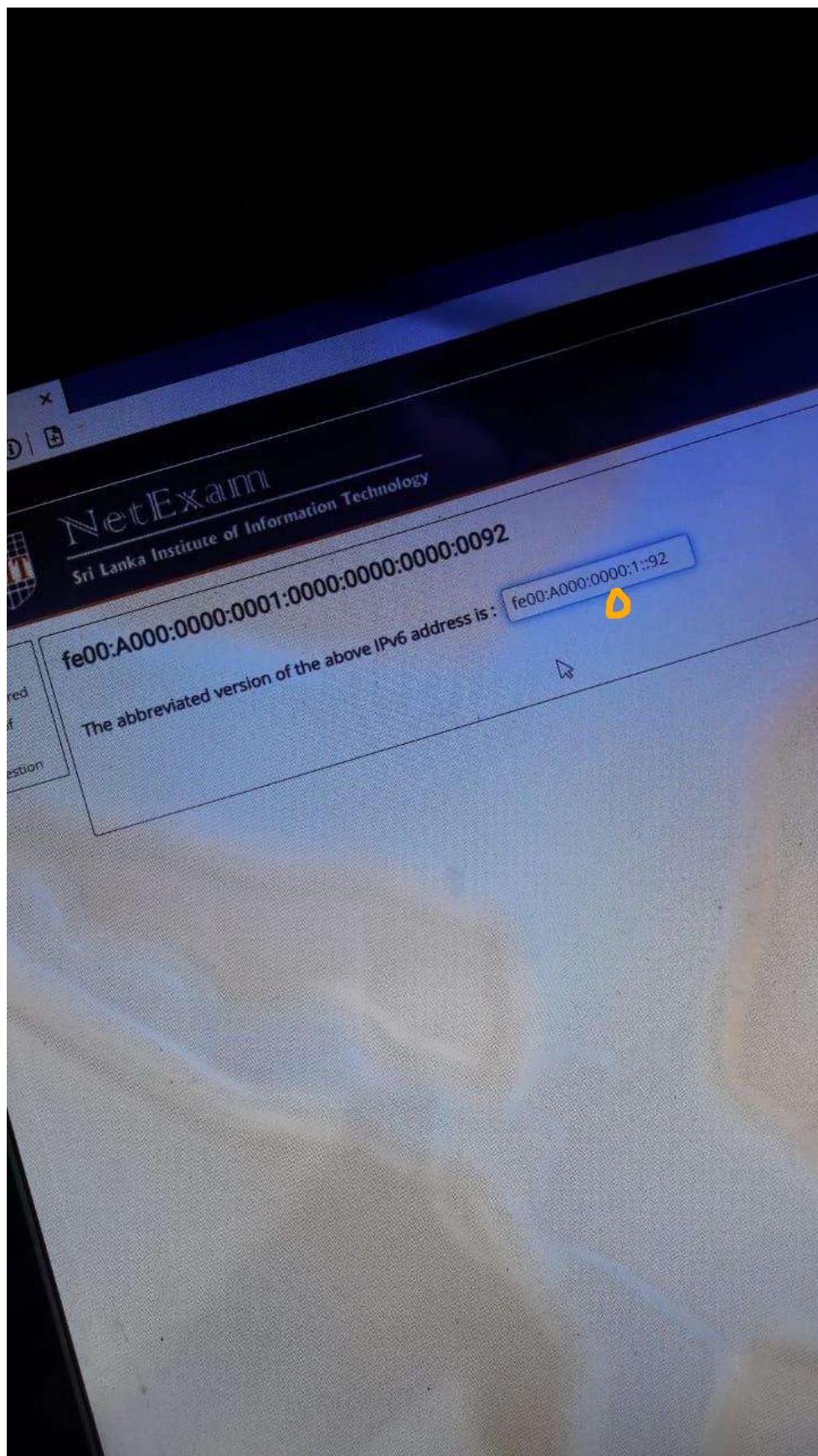
Select one:

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

What does the following command allow you to perform next?
RouterA(config)#line vty 0 3

Select one:

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



 NetExam

Sri Lanka Institute of Information Technology

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

NetExam
Sri Lanka Institute of Information Technology

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

[Next page](#)

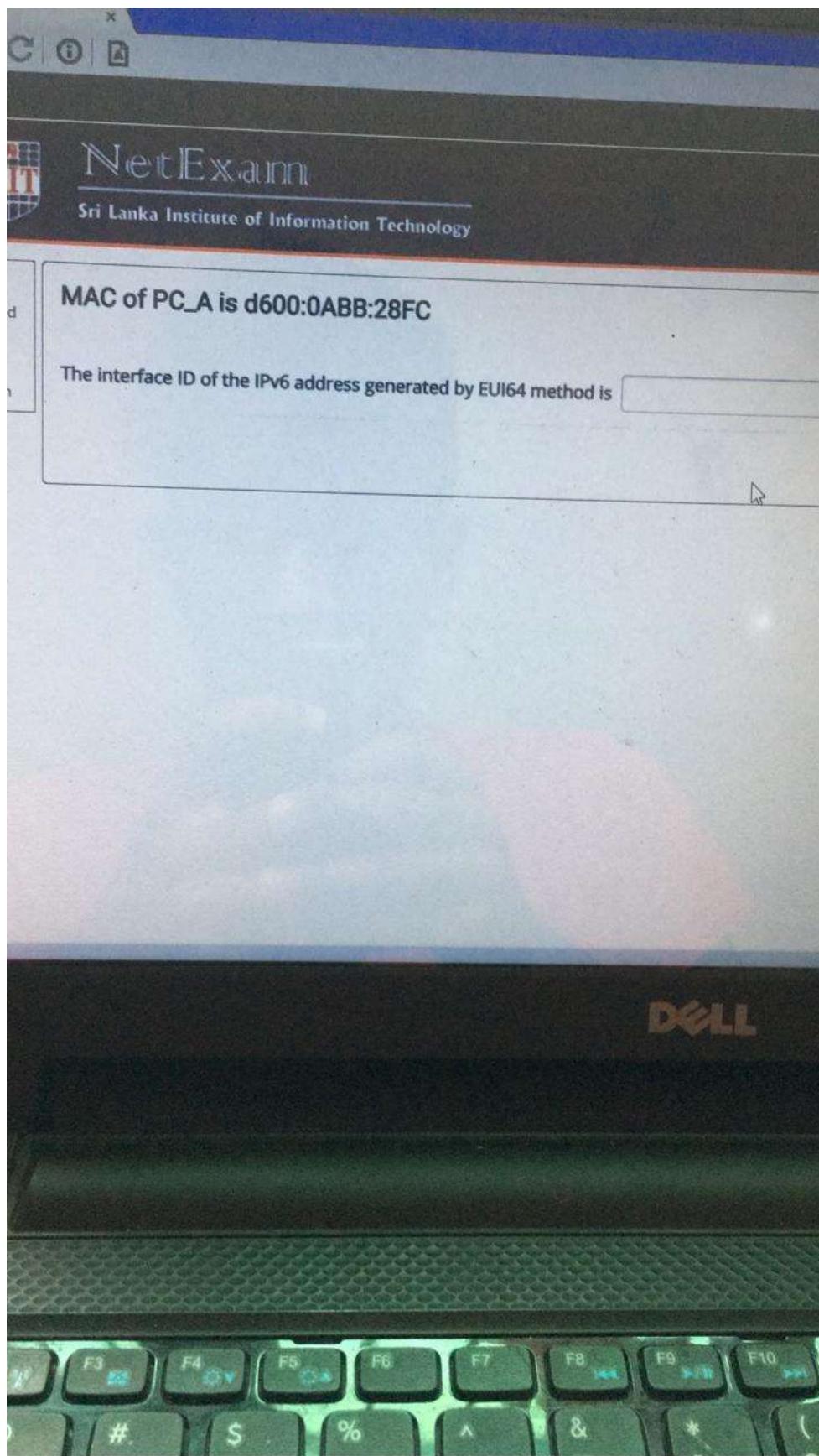
Quiz navigation
Time left 0:11:44
Multiple choice
1 2
3 4
5 6
7 8
9 10
11 12
13 14
15 16
17 18
19 20
21 22
23 24
25 26
Feedback
31

NetExam
Sri Lanka Institute of Information Technology

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



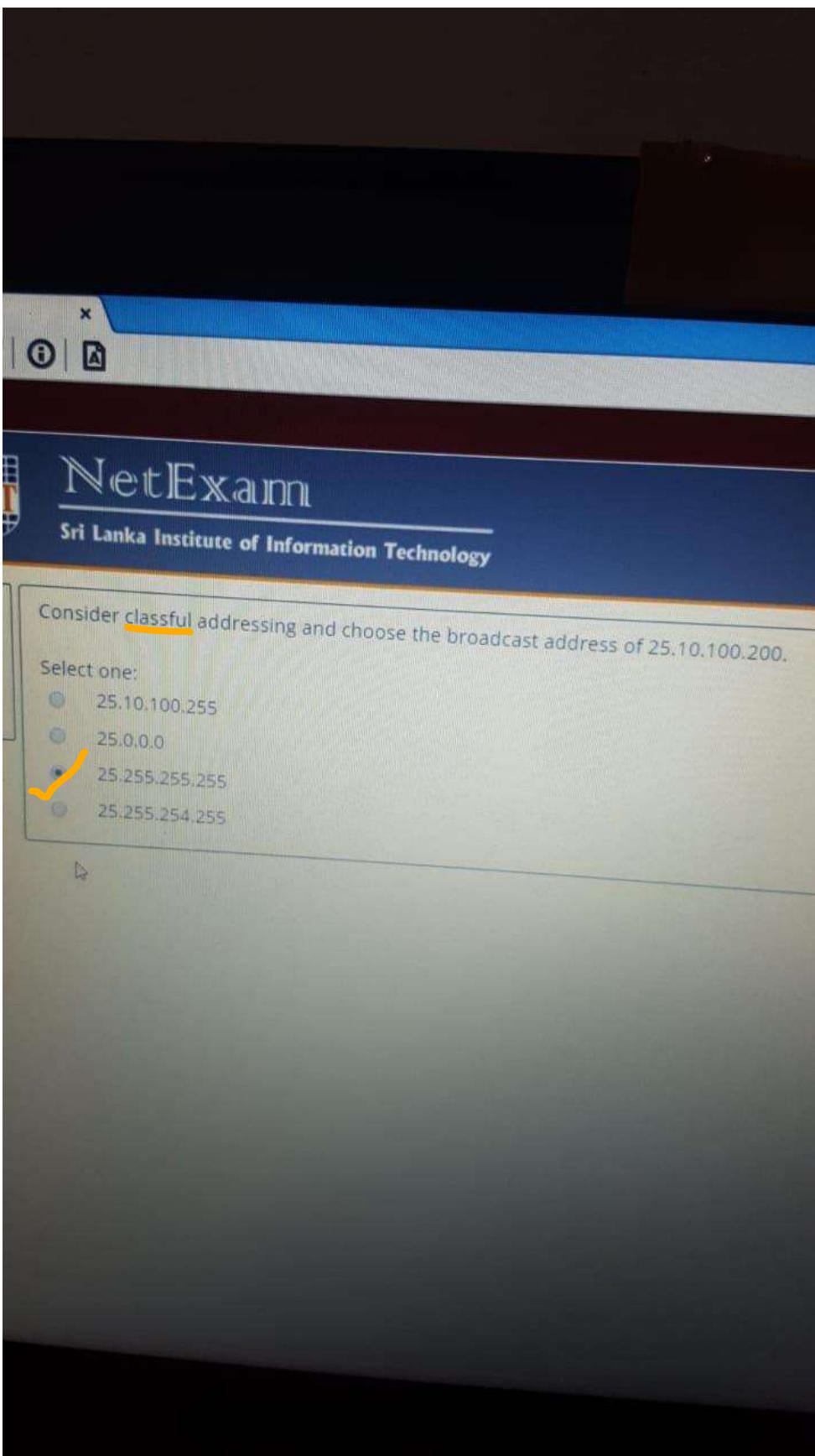
NetExam
Sri Lanka Institute of Information Technology

Q19. Which of the following OSI layer is used by a routing protocol to determine the best path to a network?

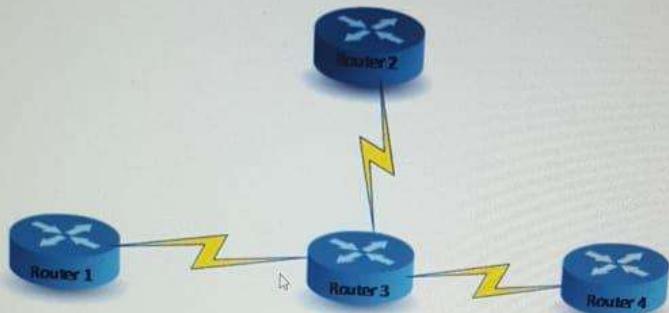
Select one:

- Presentation
- Data link
- Physical
- Session

A keyboard is visible in the foreground, showing keys such as F1 through F12, Esc, Tab, Del, and various function keys.



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

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
- 90.0.0.0
- 90.60.2.9
- 90.60.0.0
- 164.12.14.7

NetExamination
Sri Lanka Institute of Information Technology

Consider the following statements regarding the processes and threads:

- a) Processes creation is faster than thread creation.
- b) Inter thread communication is much faster than the inter process communication.
- c) User level threads are slower than the kernel level threads.

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only b) and c) are correct.
- d. All are correct.
- e. None of the above

OSSA **F***

NetExamination
Sri Lanka Institute of Information Technology

The primary difference between user-level threads and kernel threads is

Select one:

- a. User level threads do not use OS services via system calls, where kernel threads require system calls.
- b. User level threads are independent of each other, whereas kernel threads can write into each other's memory space.
- c. User level threads require memory management where kernel threads do not.
- d. All of the above
- e. None of the above

X X Y X **Next page**

NetExam
Sri Lanka Institute of Information Technology

Consider the following statements related to the real time operating system:

- a) Soft real time operating system uses the priority based scheduling.
- b) Linux is not a real time operating system.
- c) Real time operating system knows the time taken by each function implemented in the operating system

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only a) and b) are correct.
- d. All are correct
- e. None of the above

26 Answered
out of

Given the following set of processes with their arrival times and burst times:

Process	Arrival Time	Burst Time
A	0	8
B	1	6
C	3	3
D	5	2
E	6	4

Calculate the average waiting time for First Come First Serve algorithm.

Select one:

- a. 8.4
- b. 8.2
- c. 8.0
- d. 8.6
- e. 8.8

Consider the following statements regarding operating system:

- A. Most of the system calls are implemented using the assembly language and C language.
- B. Current operating systems are based on the modules concept
- C. Modern operating systems are interrupt driven
- D. Modern operating systems are always real time

Which of the following is correct:

Select one:

- a. Only A. and B. are correct.
- b. Only A, B and C. are correct.
- c. Only A. and C. are correct.
- d. All are correct
- e. None of the above

Thread-specific data is:

Select one:

- a. Not associated with any process.
- b. Has been modified by the thread but not yet updated to the parent process.
- c. Is generated by the thread independent of the thread's process.
- d. Is copied and not shared with the other threads
- e. None of the above

NetExam
Sri Lanka Institute of Information Technology

Question 28
Not yet answered
Marked out of 1.00
Flag 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	0	22	44
	20 176	20 176	20 148

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

Select one:

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

Question 30
Not yet answered
Marked out of 1.00
Flag question

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

Next page

MULT
1
8
15
22
29
31
FEED

on 27
t answered
d out of
g question

Sri Lanka Institute of Information Technology

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

Select one:

- Identification Number
- Flags
- Offset
- TOS

[Next page](#)

Sri Lanka Institute of Information Technology

For an online food ordering system, which of the following would be non-functional requirements?

Select one or more:

- a. Availability.
- b. Security.
- c. System should be developed using Cloud Platform.
- d. Place an order.

[Next page](#)

Question 30
Not yet answered
Marked out of 1.00

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

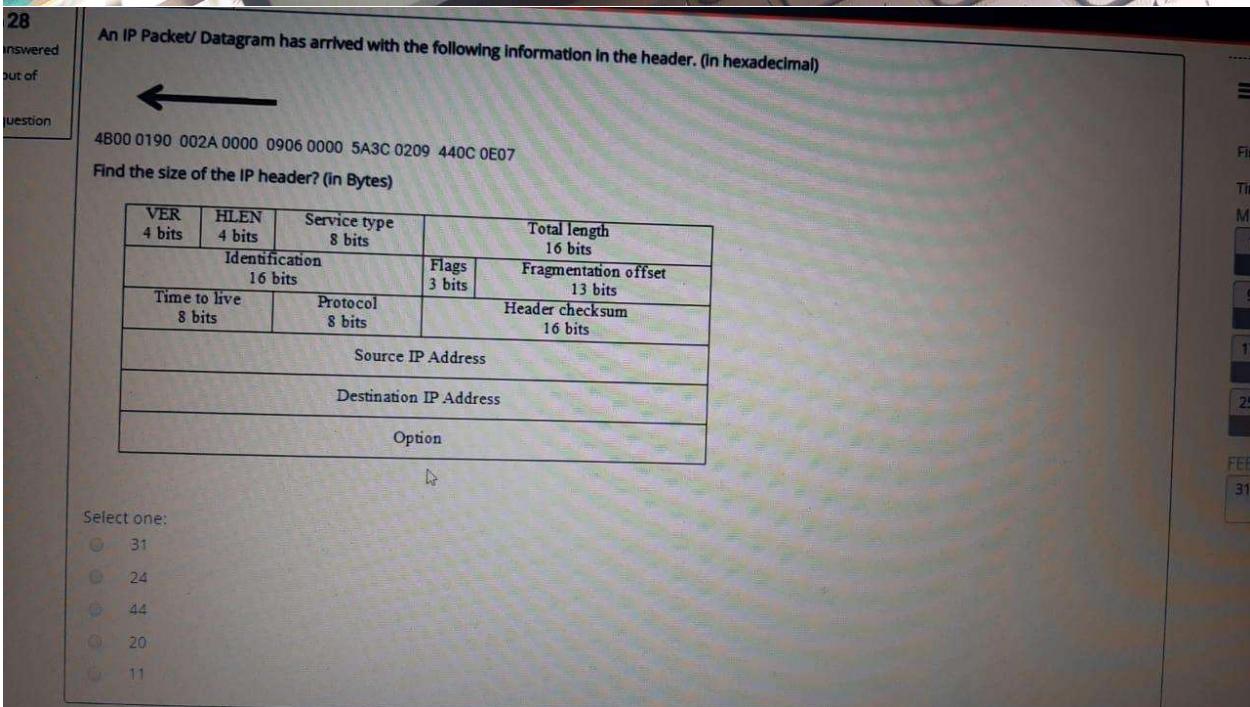
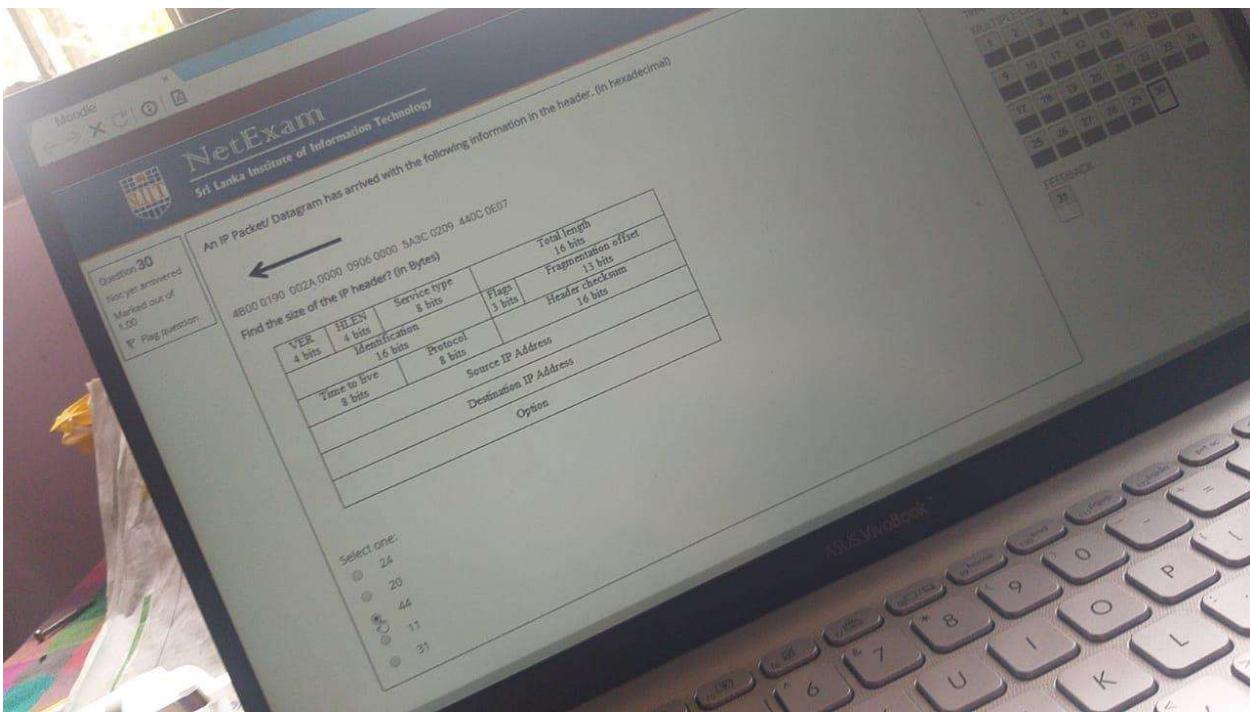
NetExam
Sri Lanka Institute of Information Technology

Question 22
Not yet answered
Marked out of 1.00

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

Select one:

- A. 25.66
- B. 191.154.0.0
- C. 191
- D. 191.154



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)

←

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
 20
 44
 11
 31

NetExamination
Sri Lanka Institute of Information Technology

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
 255.255.255.0
 10.0.0.2
 255.255.255.255
 192.168.1.0

NetExamination



Sri Lanka Institute of Information Technology

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

Select one:

- 0
- 2960
- 740
- 3000
- 370

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

SLIIT Online Exams
Sri Lanka Institute of Information Technology

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 and Header Checksum

Next page
Finish attempt ...
Time left 0:59:47

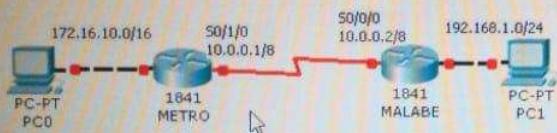
**Question 1**

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
Time left



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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

Online Exams

Sri Lanka Institute of Information Technology

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

Quiz

1	2
8	9
15	16
22	23
29	30

Finish attempt

Time left 0:51

Online Exams

Sri Lanka Institute of Information Technology

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?

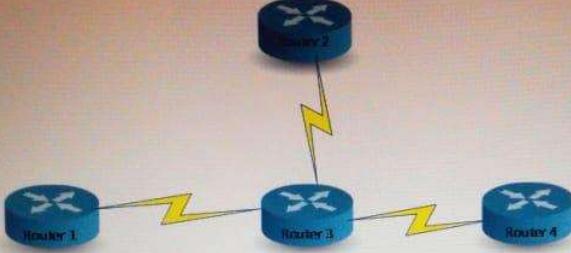
Select one:

- 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?



Router 1 — Router 2 — Router 3 — Router 4

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

SLIIT Online Exams
Sri Lanka Institute of Information Technology

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](#)

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

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

 Online Exams
Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

Section 10

Not yet answered

Marked out of

0

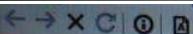
Flag question

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:

- A 255.255.240.0
- B 255.255.255.240
- C 255.255.255.0
- D 255.255.255.128
- E 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
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 0:42:47

it1901

Online Exams

Sri Lanka Institute of Information Technology

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

it1901

Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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

 Sri Lanka Institute of Information Technology

Question 12
Not yet answered
Marked out of 1.00
[Flag question](#)

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

Select one:

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

 Online Exams

Sri Lanka Institute of Information Technology

Question 13
Not yet answered
Marked out of 1.00
[Flag question](#)

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

Select one:

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

[Next page](#)

1 8 15 22 29

Finish attempt

Time left

 Online Exams

Sri Lanka Institute of Information Technology

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

 Online Exams

Sri Lanka Institute of Information Technology

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

Online Exams
Sri Lanka Institute of Information Technology

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

Online Exams

Sri Lanka Institute of Information Technology

Question 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

Finish attempt

Time left 0:31:56



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

R19013138 Fernando B.A.

Question 17

Not yet answered

Marked out of

0.0

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 D 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 ...

Next page

Time left 0:30:14



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 - CDR
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    192.168.1.0/24 [1/0] via 172.16.2.2
```

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

Select one:

Quiz nav

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

Finish attempt ...

Time left 0:29:57

C 172.16.3.0 is gateway connection
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:

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

 Online Exams

Sri Lanka Institute of Information Technology

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.

Quiz n
1 2
8 9
15 16 1
22 23 2
29 30

Next page

Finish attempt

Time left 0:28:32

IT19013

Online Exams
Sri Lanka Institute of Information Technology

19
Answered
1 out of
8 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

Next page

Finish attempt

Time left 0:26

1 2
8 9
15 16
22 23
29 30

IT19013138 Fernando B.A.

Online Exams
Sri Lanka Institute of Information Technology

Answered
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

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

SLIIT

Online Exams

Sri Lanka Institute of Information Technology

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

SLIIT

Online Exams

Sri Lanka Institute of Information Technology

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](#)

1
8
15
22
29

Finish a
Time left

 **Online Exams**
Sri Lanka Institute of Information Technology

Question 18
Not yet answered
Marked out of 1.00
 Reg 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.

 **Online Exams**
Sri Lanka Institute of Information Technology

Question 22
Not yet answered
Marked out of 1.00
 Reg 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

SLIIT Online Exams
Sri Lanka Institute of Information Technology

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

8
15
22
29

Next page

Finish Time

SLIIT Online Exams
Sri Lanka Institute of Information Technology

Question 19
Not yet answered
Marked out of 1.00
 Flag question

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

Select one:

- 3000
- 370
- 740
- 0
- 2960

Next

Online Exams
Sri Lanka Institute of Information Technology

it19013138

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 "sliit" in METRO router?

Select one:

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

Next page

Finish attempt

Time left: 0:17:44

Online Exams
Sri Lanka Institute of Information Technology

it19013138

Question 25
Not yet answered
Marked out of 1.00
Flag question

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

Select one:

- 150.17.45.61
- 150.17.45.62
- 150.17.45.60
- 150.17.45.63

Next page

Finish

Time

 Online Exams

Sri Lanka Institute of Information Technology

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

 Online Exams

Sri Lanka Institute of Information Technology

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

SLIIT Online Exams

Sri Lanka Institute of Information Technology

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

Sri Lanka Institute of Information Technology

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)?

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 0:11:45

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

Online Exams

Sri Lanka Institute of Information Technology

on 29
not yet answered.
earned out of
1.00
Flag question

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

Answer:

Next page

1
8
15
22
29
30

Finish attempt

Time left 00:00:00

Online Exams

Sri Lanka Institute of Information Technology

Section 23
not yet answered.
earned 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 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 and D only
 C only
 E and D only

Next page

SLIIT Online Exams
Sri Lanka Institute of Information Technology

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

SLIIT Online Exams
Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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

[Next page](#)



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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.



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

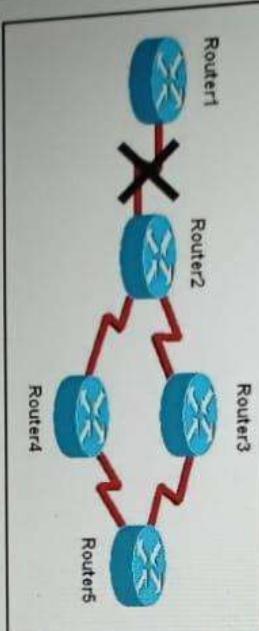
Sri Lanka Institute of Information Technology

IT1918774 Upama J

Question 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?

Flag question



- Select one:
- route poisoning
 - error condition
 - count to infinity
 - split horizon

≡ Quiz navigation

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

Finish attempt ...

Time left 00:01:03

Finish attempt

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

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

→ P
→ Q
→ R
→ S

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

Select one:

- S
- Q
- P
- R

Next page

Online Exams

Sri Lanka Institute of Information Technology

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

Select one:

- 4096 0200 1111 1111
- 4097 0200 2222 2222
- 32768 0200 1111 1111
- 32769 0200 2222 2222



Online Exams

Sri Lanka Institute of Information Technology

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)#schport port-security.mac-address 1

Online Test 2019

Sri Lanka Institute of Information Technology

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](#)



Fragmentation

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

MF	Fragment Offset	
1	0	P
1	f=0	Q
0	f=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 smaller than the MTU of the layer 2?

Information in the header: (In
4A00 0140 002A 0000 0010 0000 0A00 0209 A400 DE00

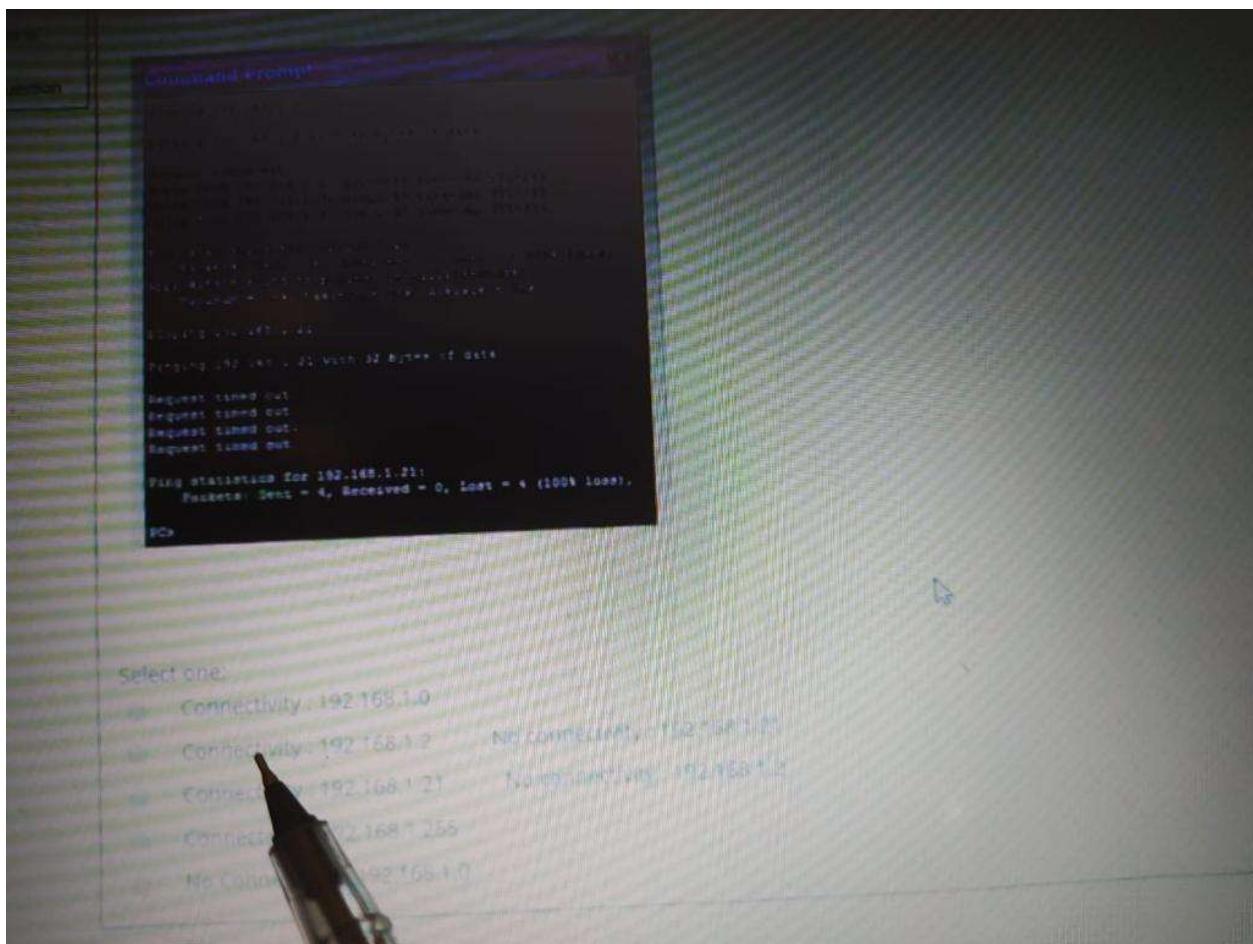
The diagram illustrates the structure of an IP header. It consists of several fields arranged in rows:

- Version (4 bits)**
- Header Length (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:

- 164.12.127
- 90.0.0.0
- 90.60.2.9
- 164.12.0.0
- 93.62.1.1



Online Exams

Sri Lanka Institute of Information Technology

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:



Send Exam



Online Exams

Sri Lanka Institute of Information Technology

4

Answered

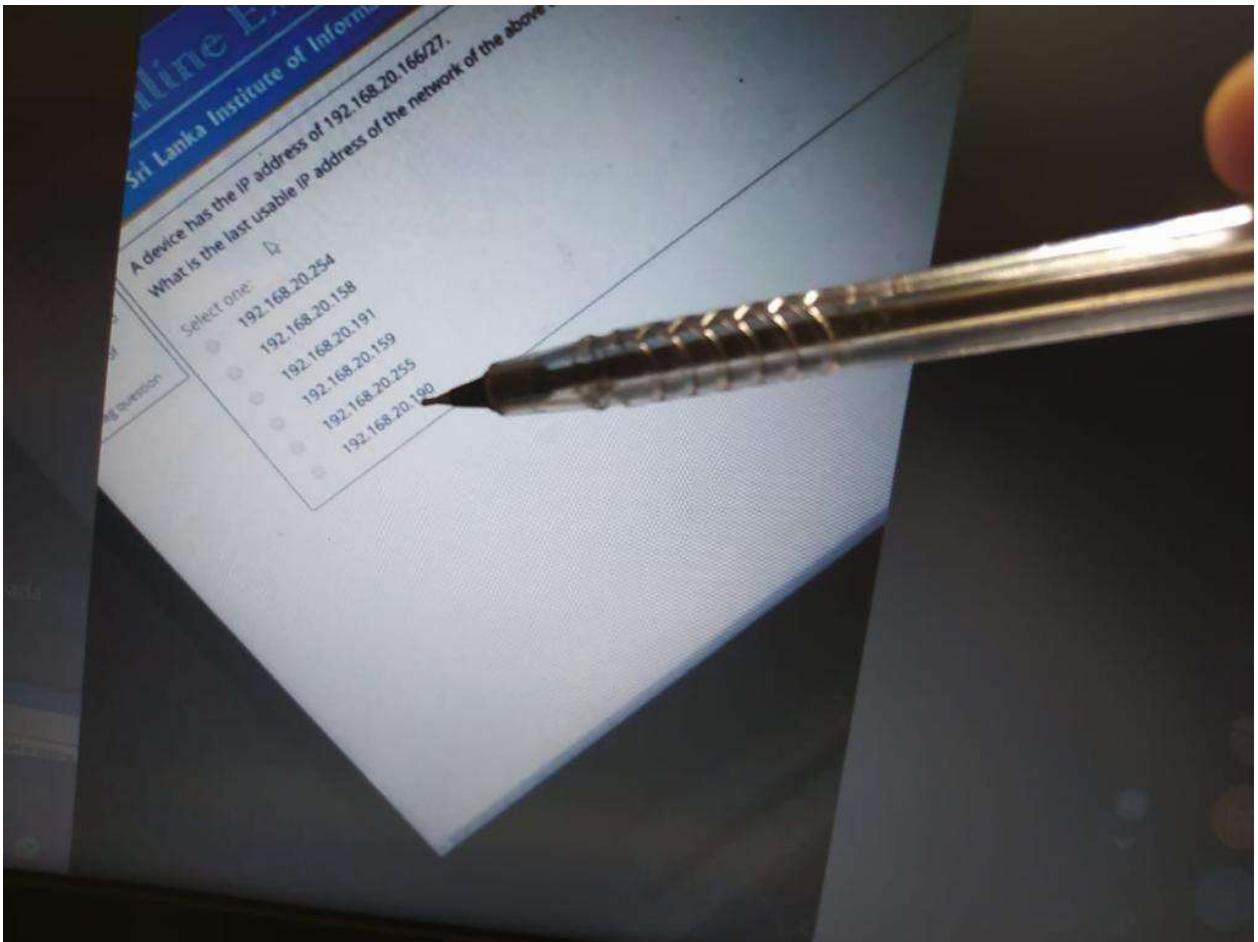
of

session

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 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

Next page

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

A router with a Maximum Transmission Unit (MTU) of 196 bytes has received an IP packet of size 196 with an IP header of length 20 bytes. Some 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 value of the M header of the second fragment?

Select one:

1. 22

2. 20

3. 176

4. 148

5. 196

6. 176

7. 196

8. 176

9. 196

10. 176

11:06

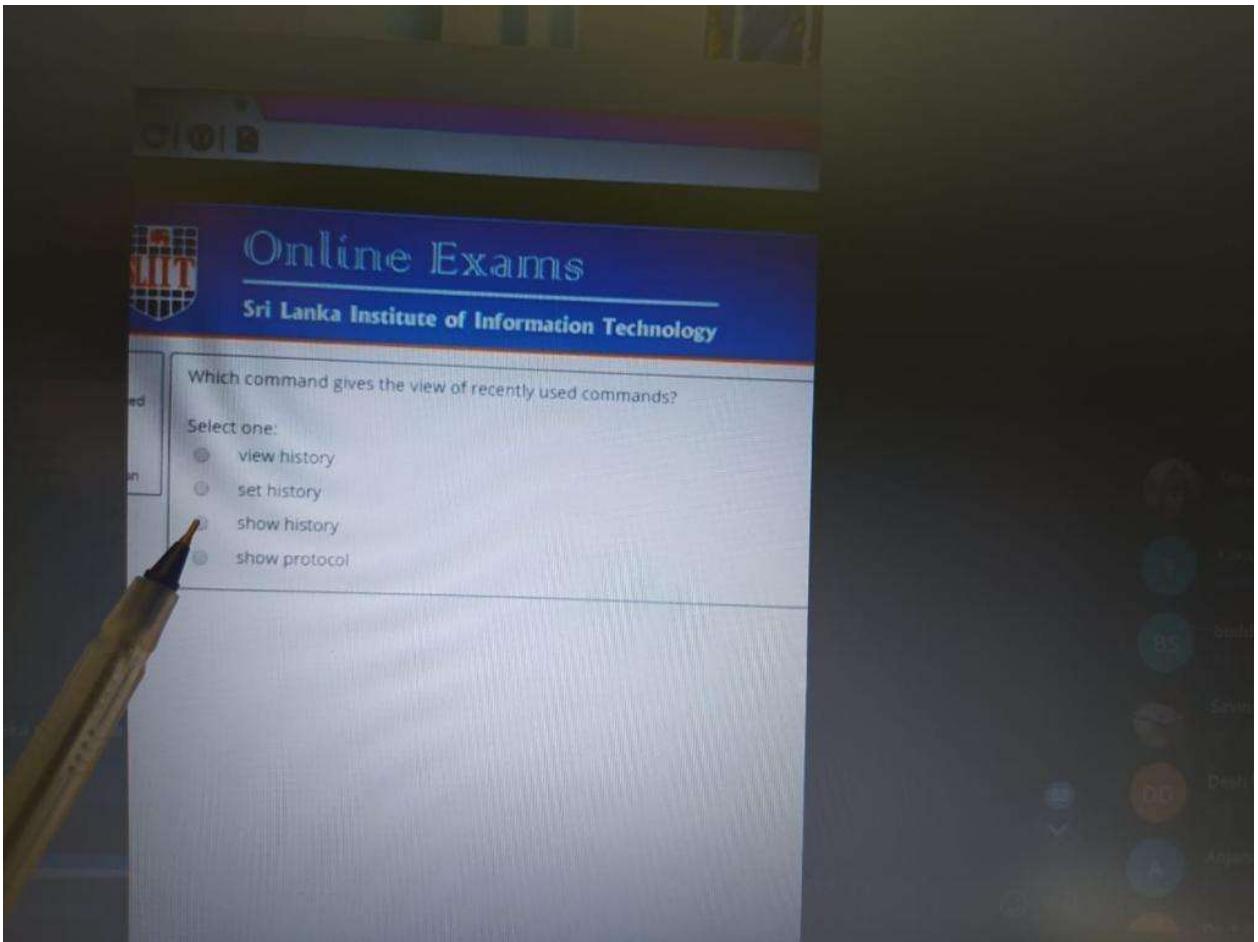
Create new contact

Add to a contact

Send a message



msi



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

Submit



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 172.30.31. 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

Q9
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

ed 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

Sri Lanka Institute of Information Technology

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

Select one:

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

[Next page](#)

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

310 MEMBERS

- LM Lakindu Minuka
- M Mindula Yasith
- Y YaxaSRI
- BS buddhika senanayaka



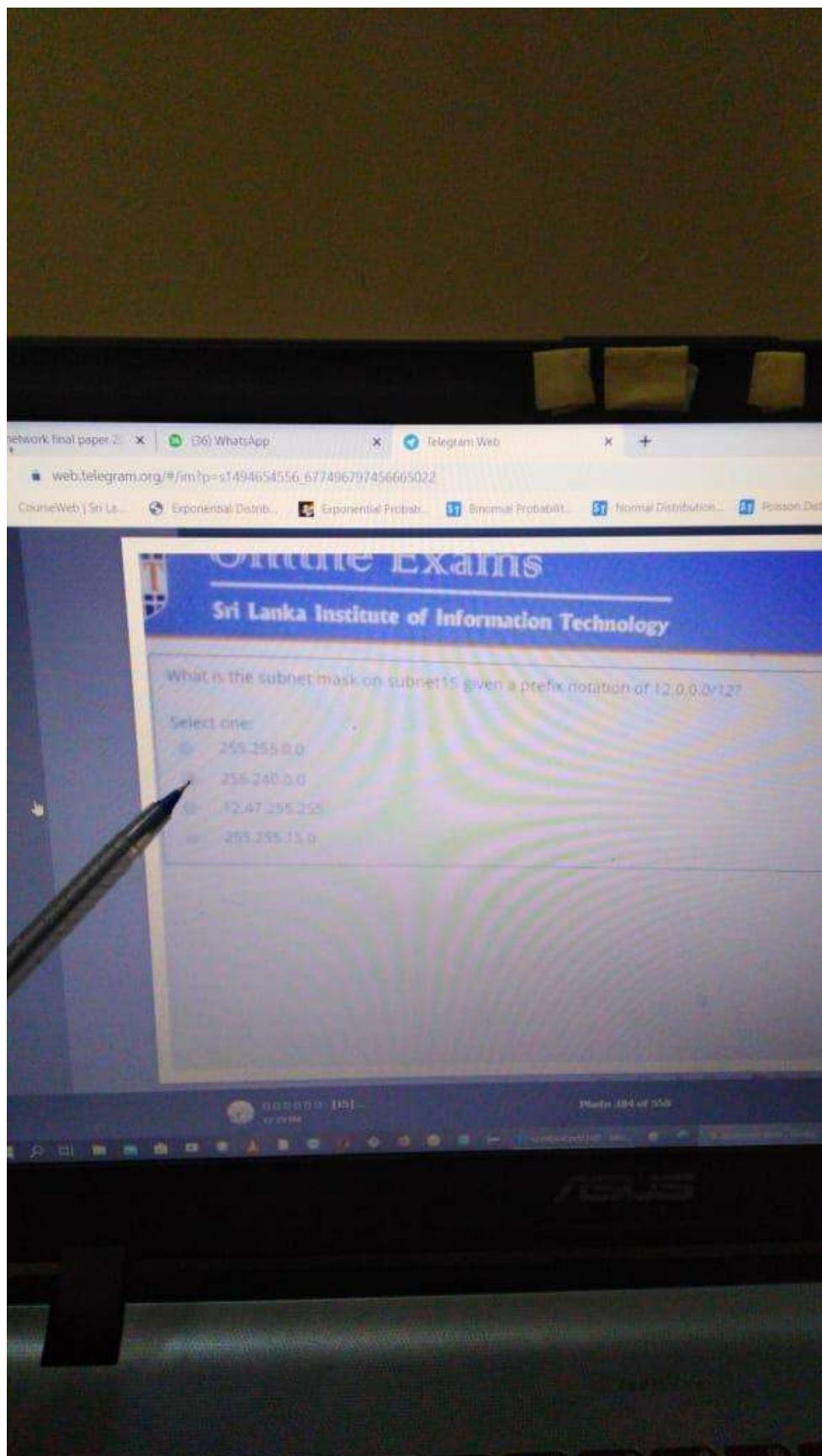
Online Exams

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.



app X Telegram Web ← X +

554556_677496797456665022

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

Online Exams

Sri Lanka Institute of Information Tech

If the first byte of a Datagram is 4000

Select one:

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

Photo 329 of 556

al paper 20 X | (36) WhatsApp X Telegram Web X +

eb.telegram.org/#/im?p=s1494654556_677496797456665022

eb | Sri La... Exponential Distrib... Exponential Probab... Binomial Probabilit... Normal

 Online Exams
Sri Lanka Institute of Information Technology

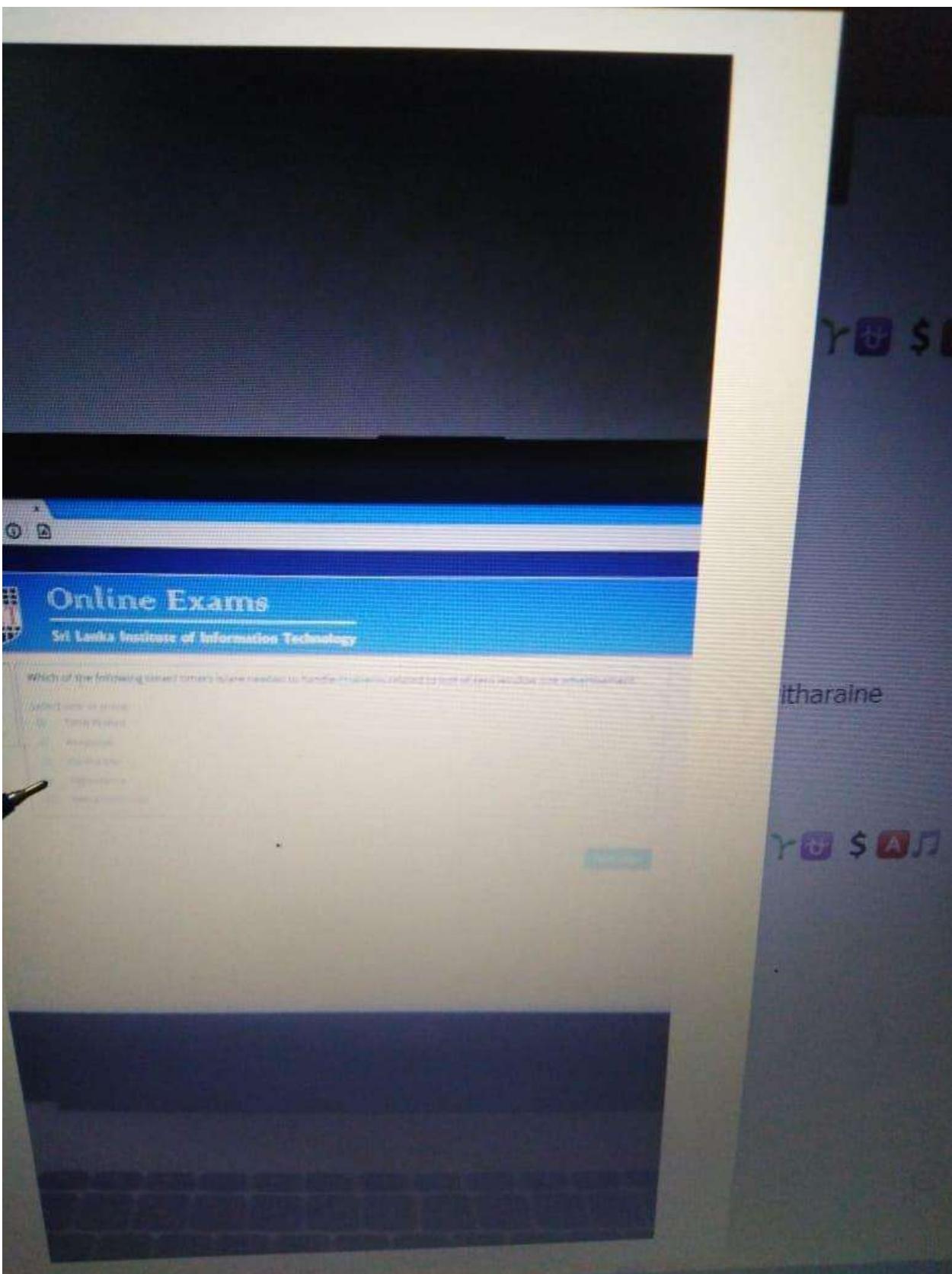
Consider a TCP client and a TCP server running on two different machines. If the client terminates the connection and a _____ P _____ segment is sent to the server, which is received by the client-side TCP.

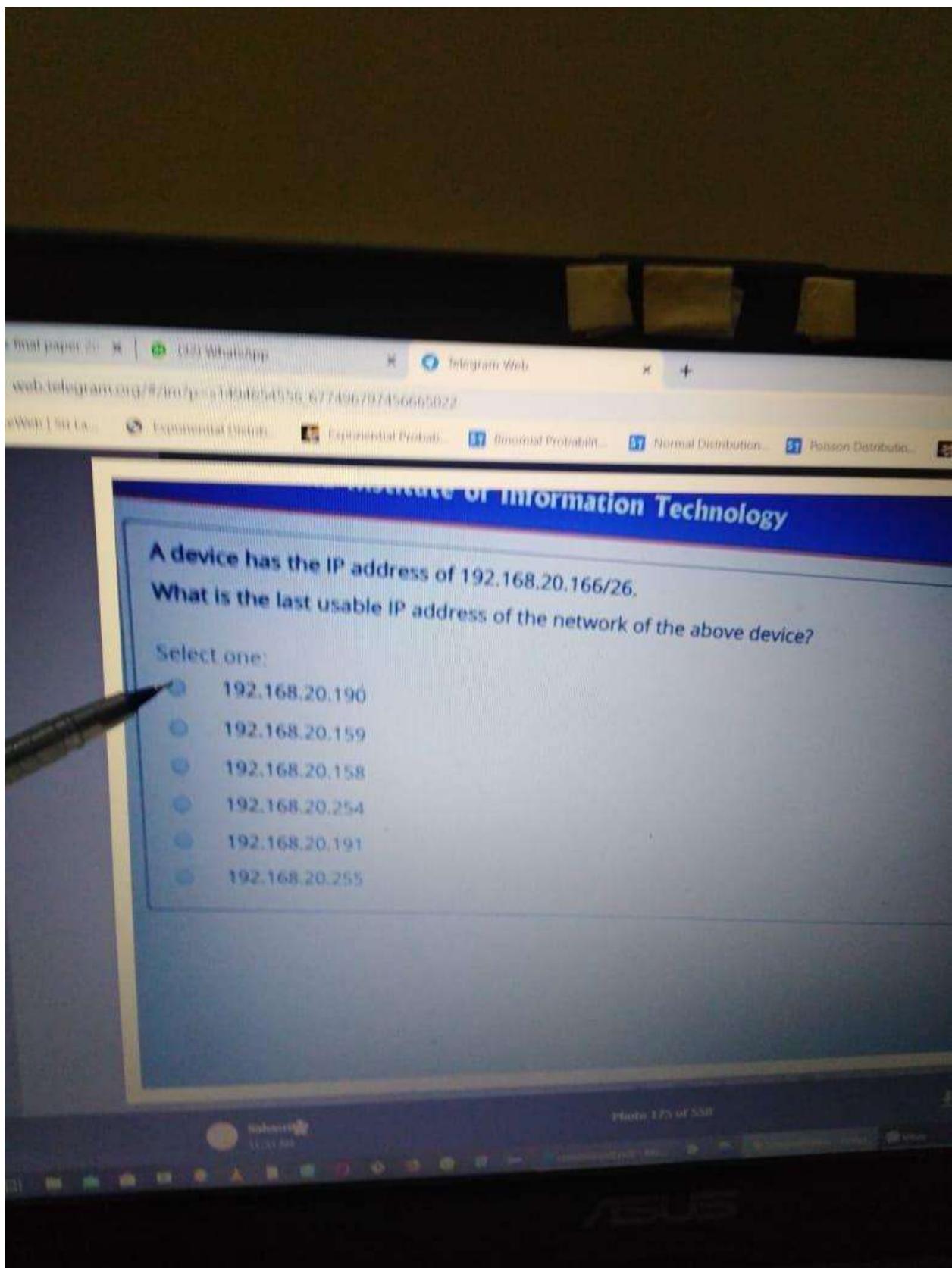
Identify 'P' and 'Q' respectively

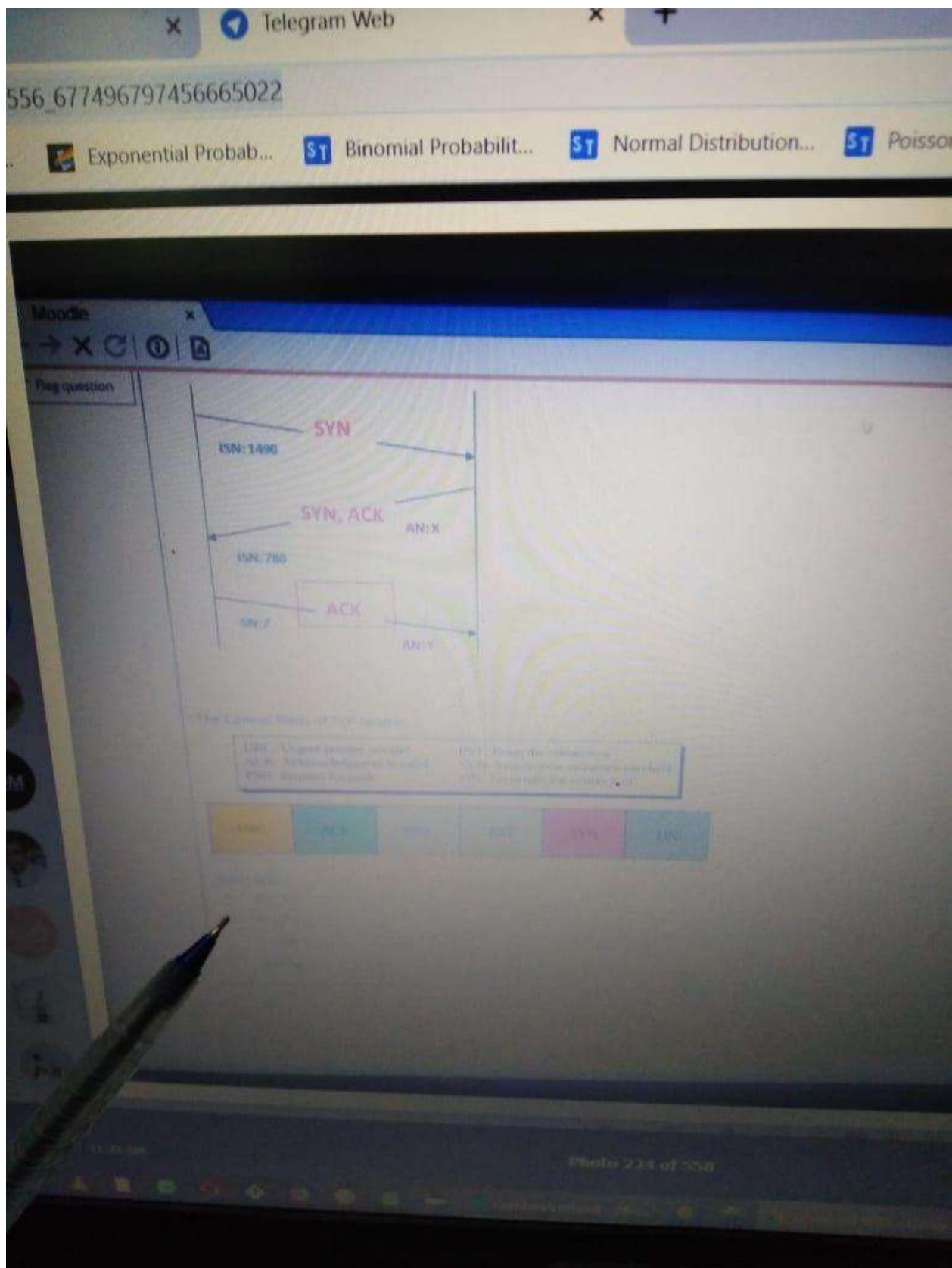
Select one:

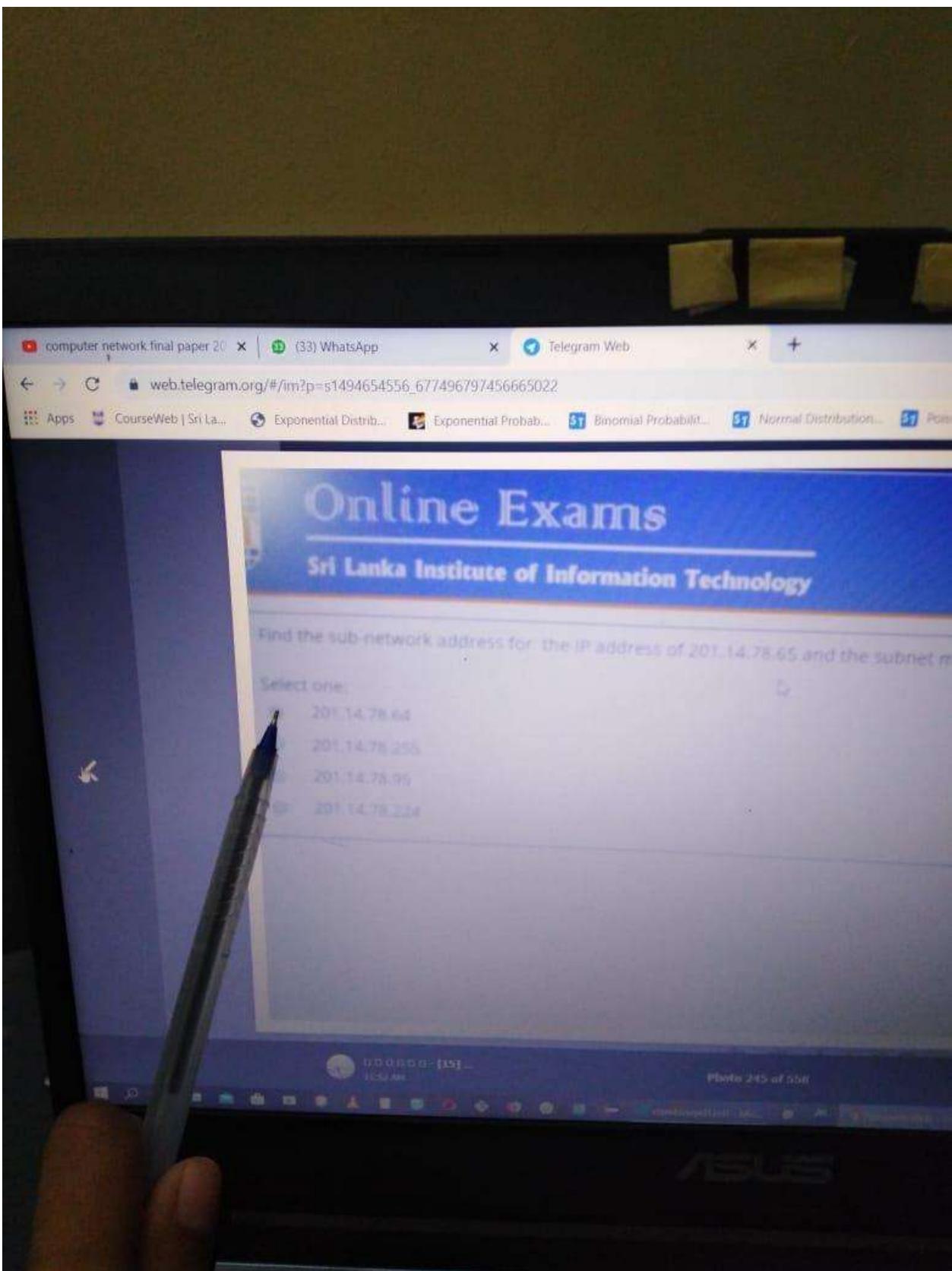
- FIN & FIN
- FIN & RST
- FIN & ACK
- ACK & FIN
- FIN & FIN+ACK

Photo 319 of 550









The screenshot shows a mobile browser window with a question about IPv6 addresses. The browser has tabs for WhatsApp, Telegram Web, and several links related to probability distributions like Exponential Distribution, Exponential Probability, Binomial Probability, and Normal Distribution.

The main content is a question from "The 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

At the bottom, there is a footer with the text "Digitally Enabled Society" and "Photo 730 of 500".



Online Exams

Sri Lanka Institute of Information Technology

Question 4

Not yet answered

Marked out of
1.00

Flag question

Which is not a valid type of routing

Select one:

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

/im?p=s1494654556_677496797456665022

Exponential Distrib...



Exponential Probab...



Binomial Probabilit...

QUESTION 11 AND 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 protocols?

- 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

QUESTION 10: You are verifying the configuration of interface Gi0/0 on router R1. What is the problem?



```
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. Show 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 ACK C PSH S SYN T FIN N N	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

CHAN

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 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 ?

Answer: 445



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
- M Mindula Yasith
- Y YaxaSRI
- BS buddhika senanayaka



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

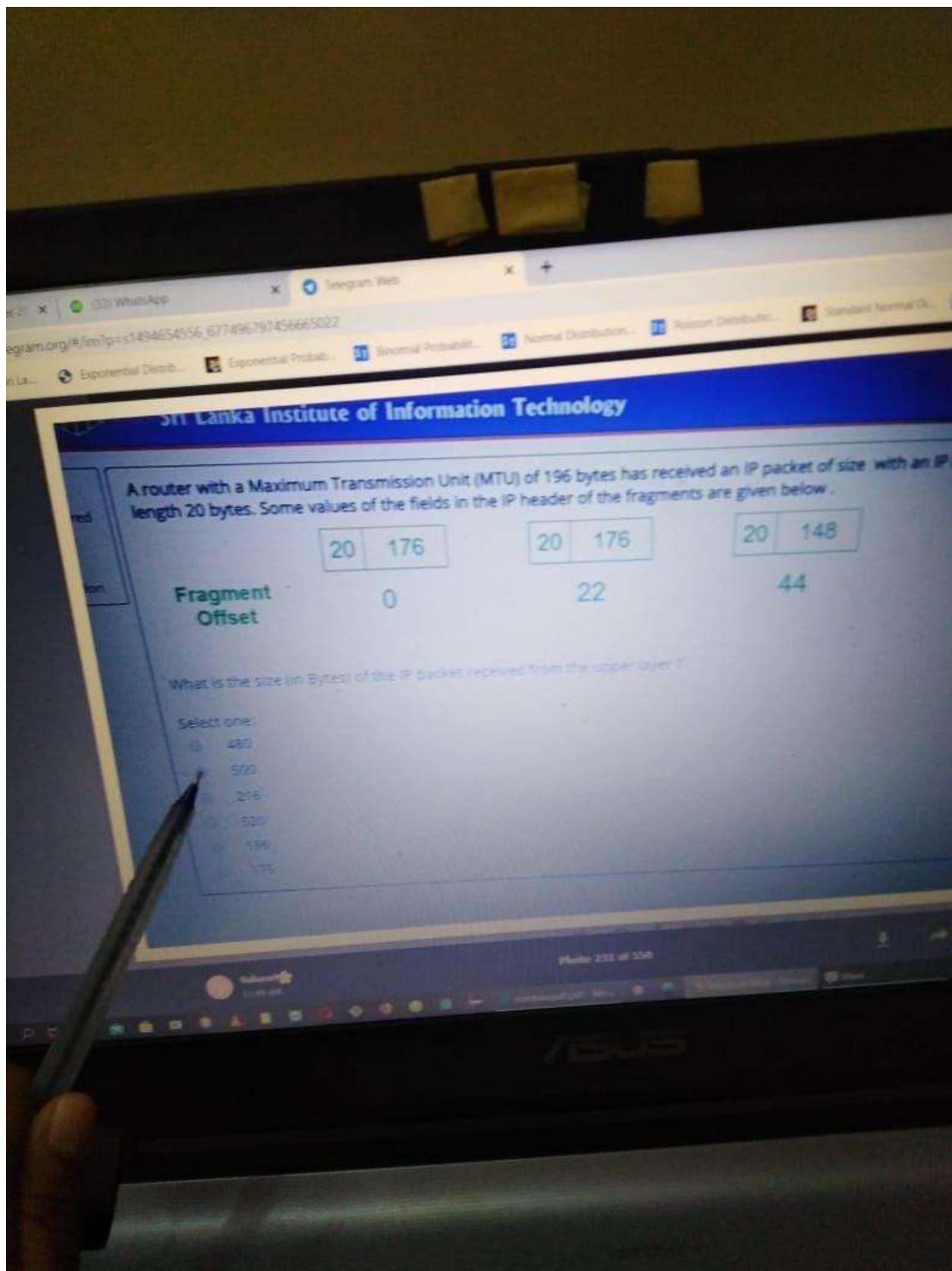
 Answer & Explanation

 Report

Answer : [c]

Explanation :

The smallest numeric bridge ID wins the election.



Sri Lanka Institute of Information Technology

An IP packet has been received with the following information in the header. An answer

←

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

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

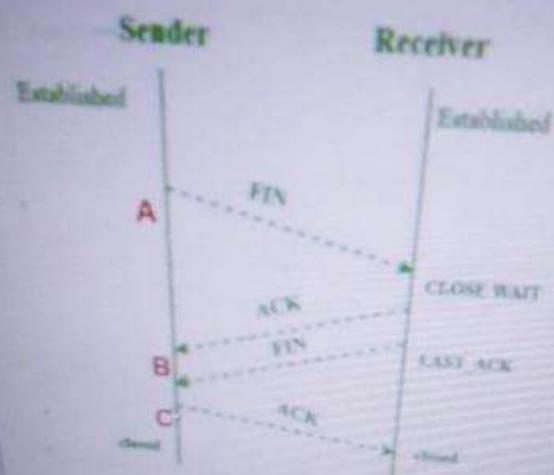
VER 4 bits	HLEN 4 bits	Service type 8 bits	Total length 16 bits	
		Identification 16 bits	Flags 3 bits	Fragmentation offset 13 bits
Time to live 8 bits		Protocol 8 bits	Header checksum 16 bits	
Source IP Address				
Destination IP Address				
Option				

Select one:

31
33
44
20
24



Identify the TCP State denoted by "A".



Sequence
1. TIME_WAIT_2
2. TIME_WAIT_1
3. TIME_WAIT_0
4. TIME_WAIT_1
5. TIME_WAIT_2

Online Exams

Sri Lanka Institute of Information Technology

Question 1

Not yet answered

Marked out of 1.00

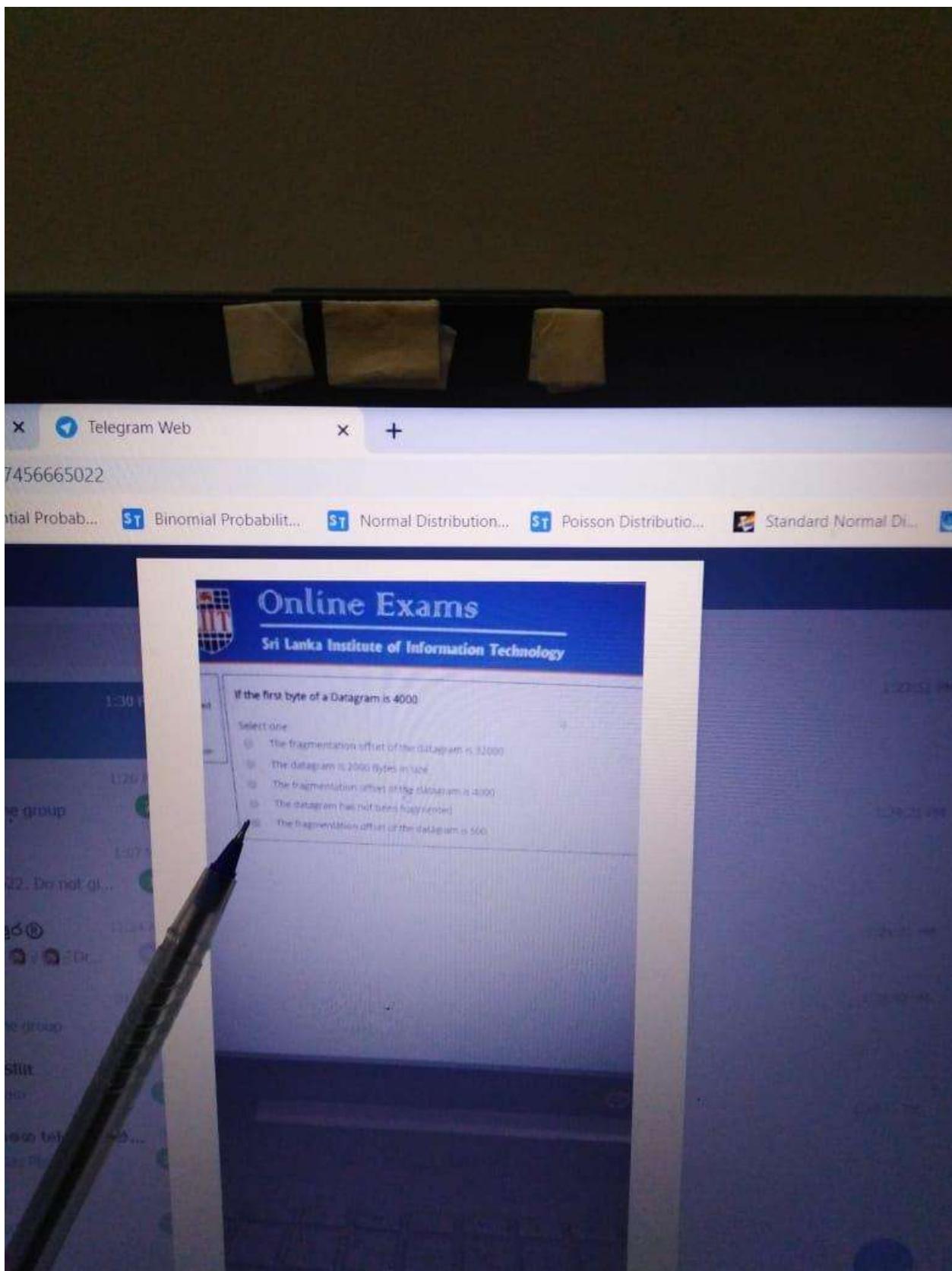
Flag question

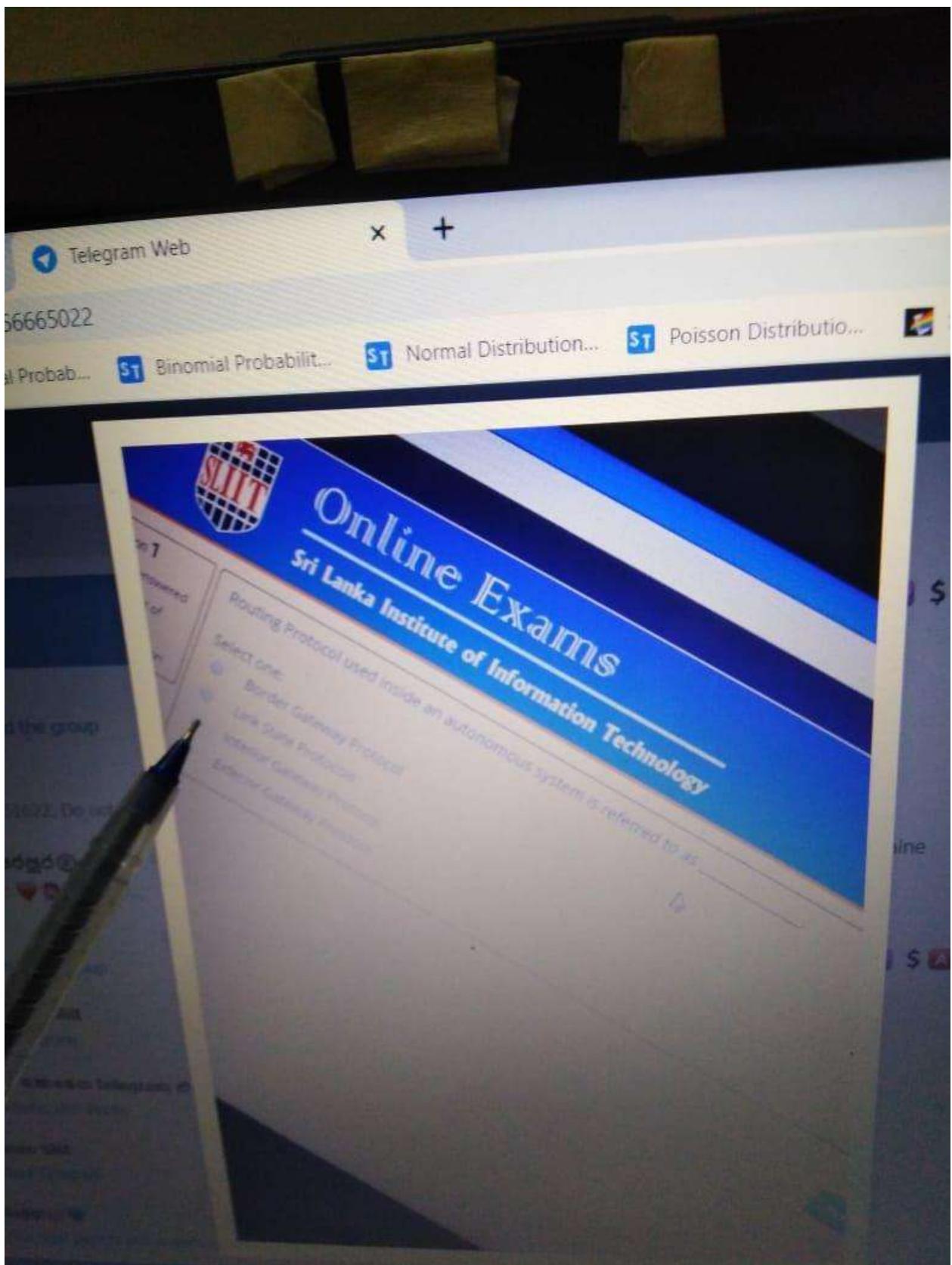
Which of the following VTP modes allow VLANs to be configured on a switch?

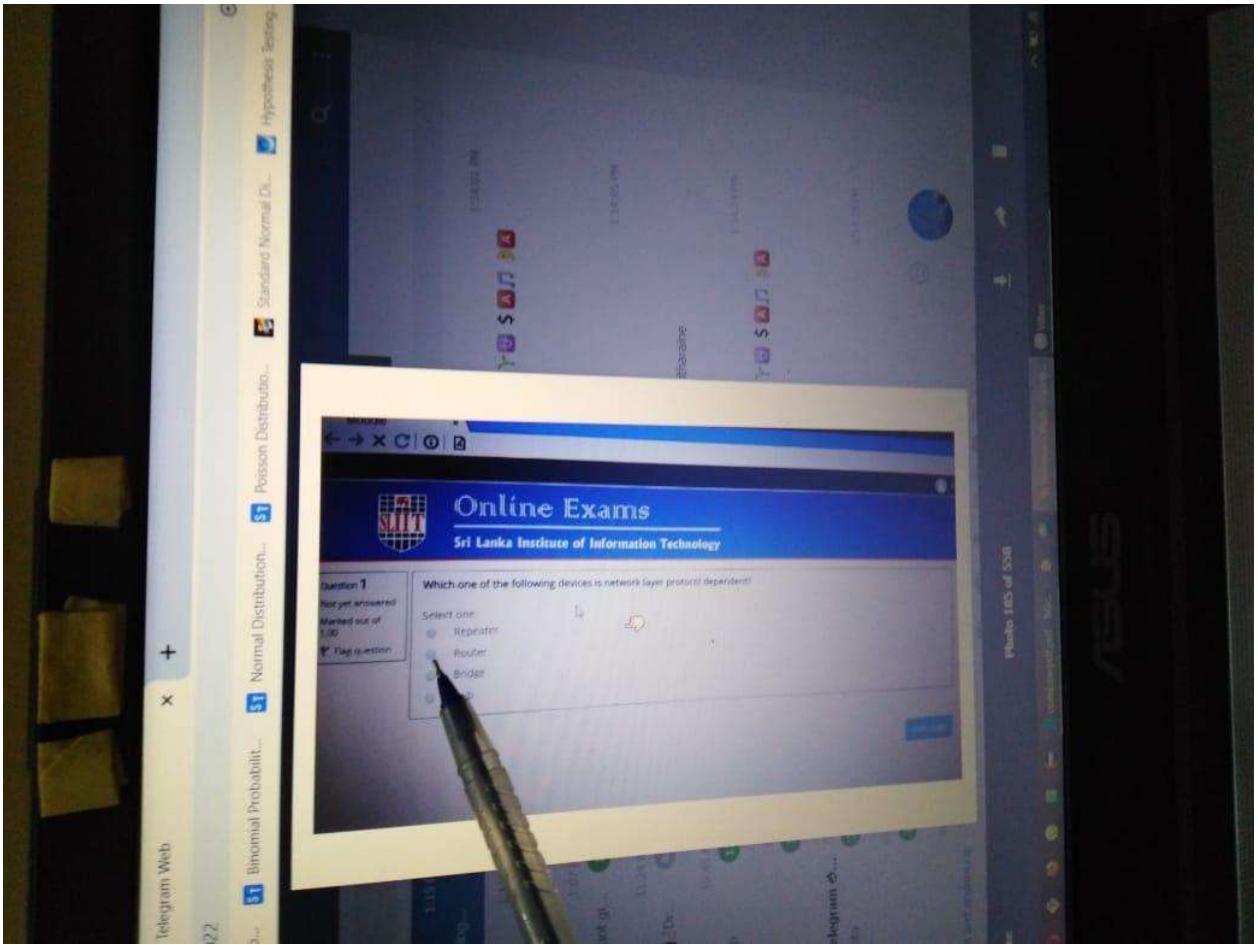
Select one or more:

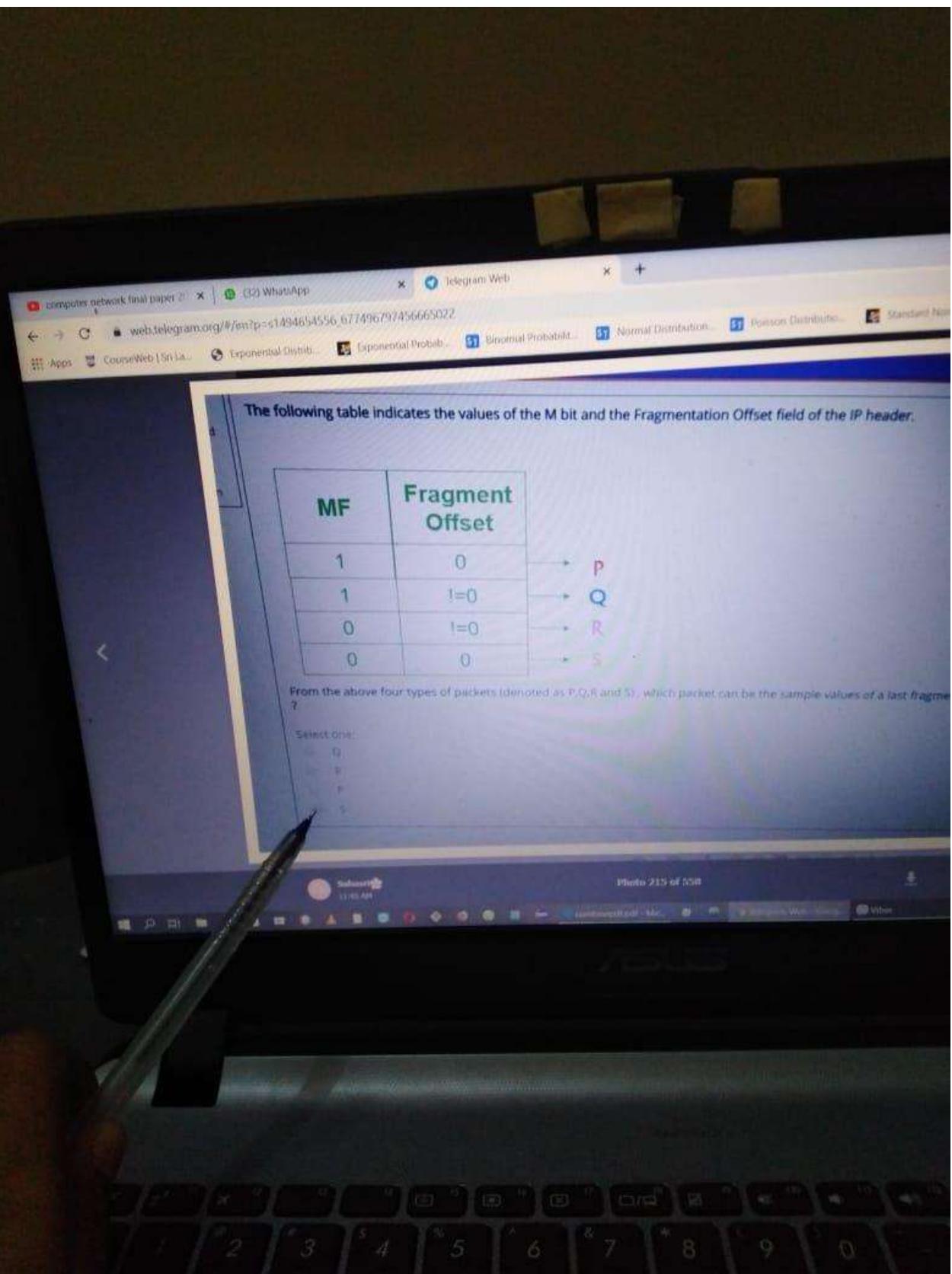
- Client
- Static
- Dynamic
- Transparent
- Server

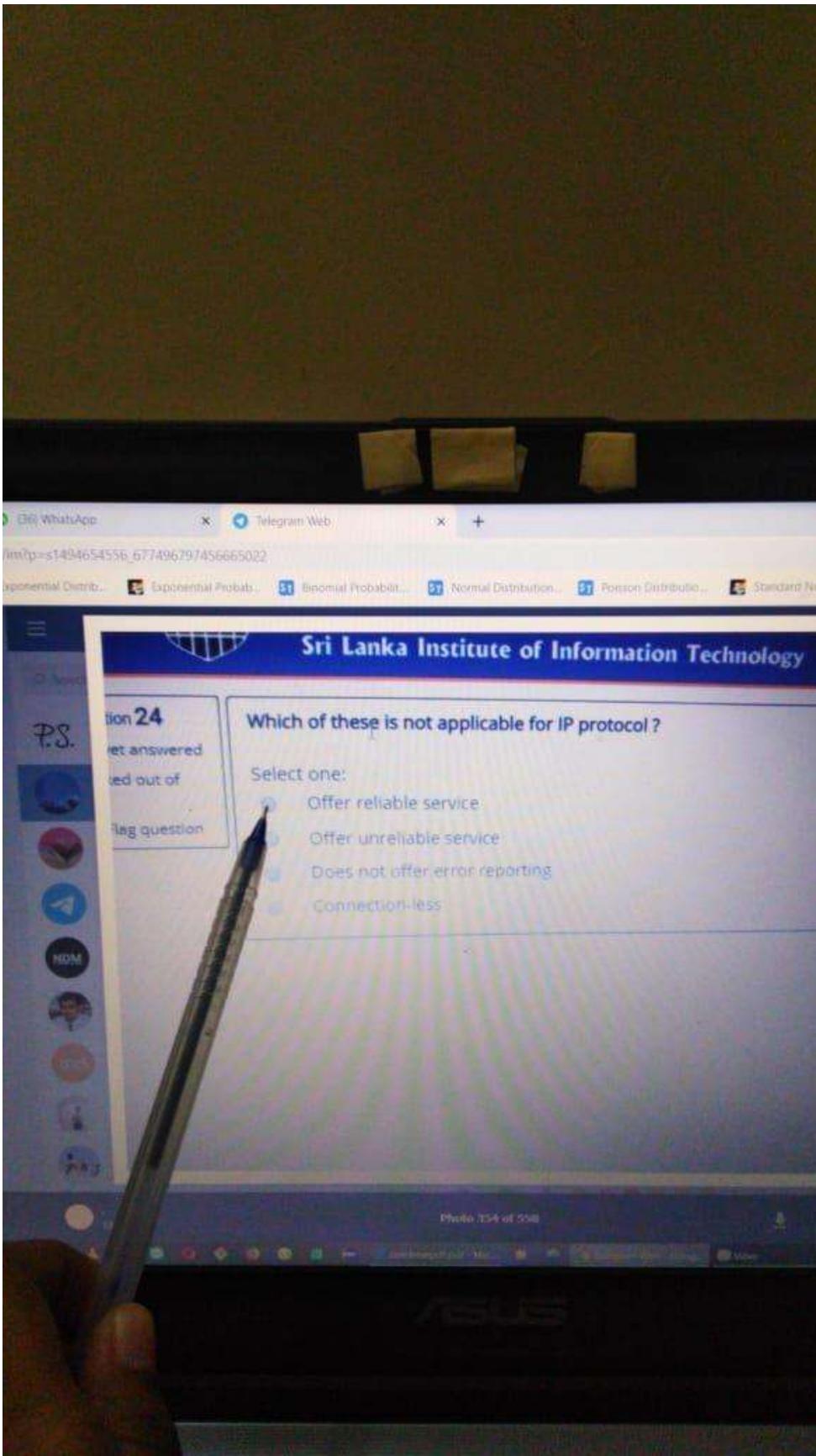
Photo 186 of 550











(34) WhatsApp X Telegram Web X +

g/#/im?p=s1494654556_677496797456665022

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

Lesson 7
You answered
Marked out of
1.00
View question

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

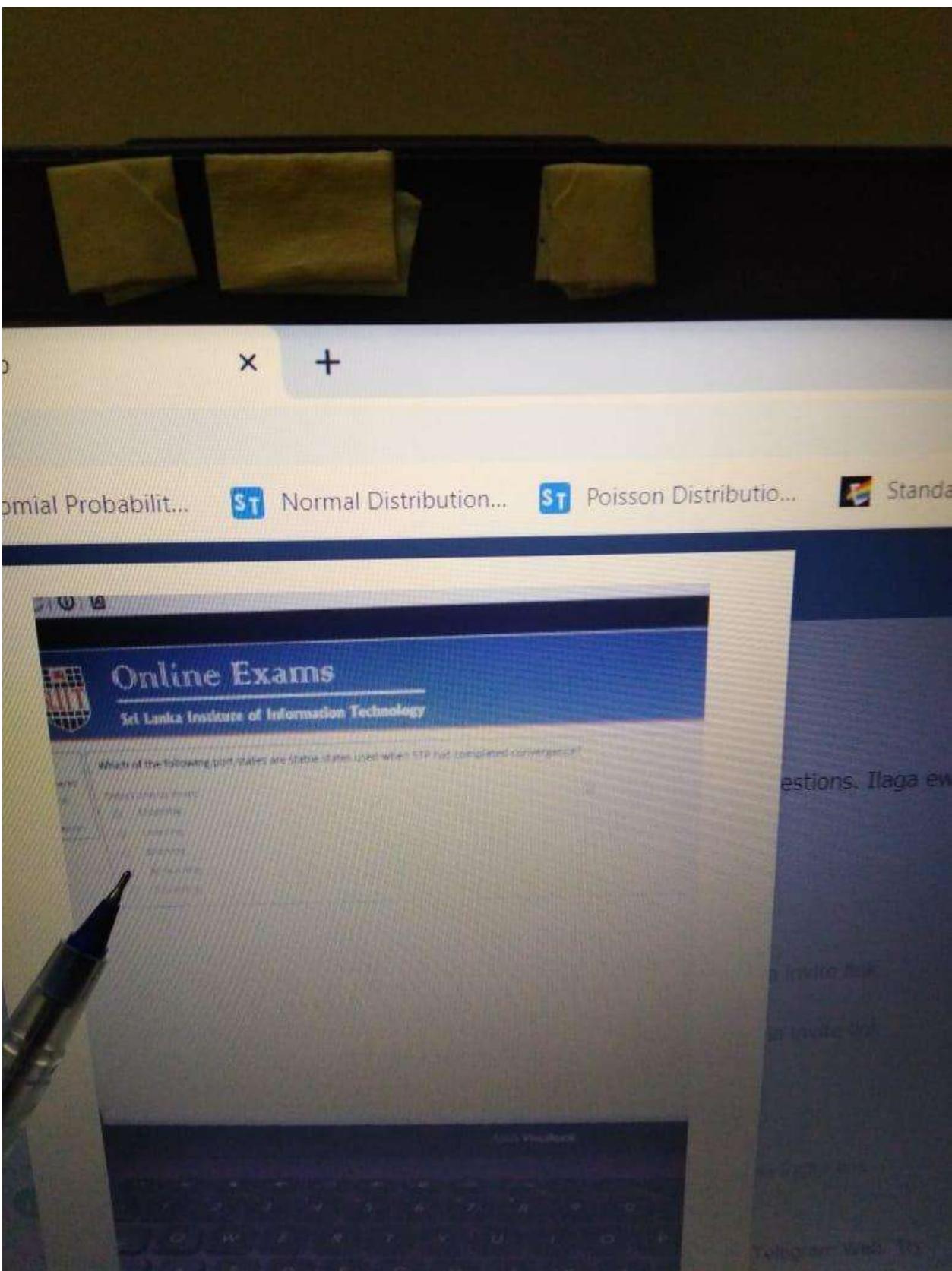
```
Router#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
      D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2
      * - candidate 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      10.10.20.0/22 [1/0] via 10.22.18.41
S*     10.0.0.0/16 [1/0] via 10.22.18.21
coutesif

Selected:
  10.22.18.1
  10.22.18.21
  10.10.10.21
  10.22.18.41
  10.10.20.21
```

Kevaldas Arora 11:06 AM Photo 267 of 500





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



Kontrolen Abgabekasse
CE 030 000

Photo 289 of 358

ASUS

satsApp X Telegram Web X +

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 Arayaratne
SLIIT AM

Photo 2/29 of 500

54556_677496797456665022

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

Online Exams

Sri Lanka Institute of Information Technology

Question 9
Not yet answered
Marked out of 4.00
Reg question

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

The diagram illustrates a three-way handshake between a Client and a Server. It shows four messages: 1. Client sends SYN (ISN: L) to Server. 2. Server responds with SYN, ACK (ISN: N) to Client. 3. Client sends ACK (ISN: M) to Server. 4. Server sends ACK (ISN: N) to Client. The sequence numbers are labeled as ISN_L, SYN, ISN_M, SYN, ACK, AN_N, ACK, and AN_N.

A photograph of three yellow fabric panels hanging vertically against a dark background.

X Telegram Web X +

797456665022

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

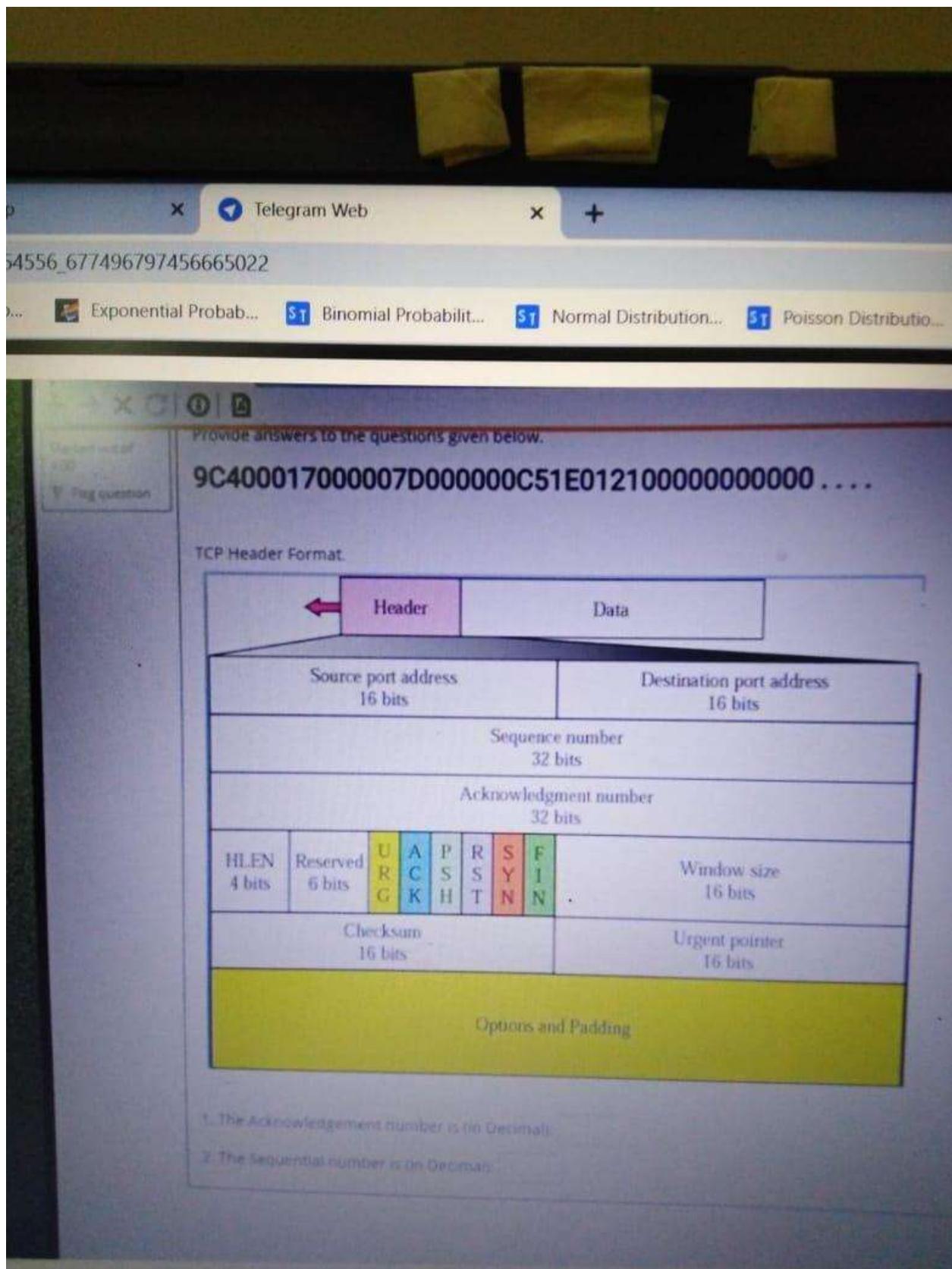

Sri Lanka Institute of Information Technology

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





WhatsApp Telegram Web

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

org/#/im?p=s1494654556_677496797456665022

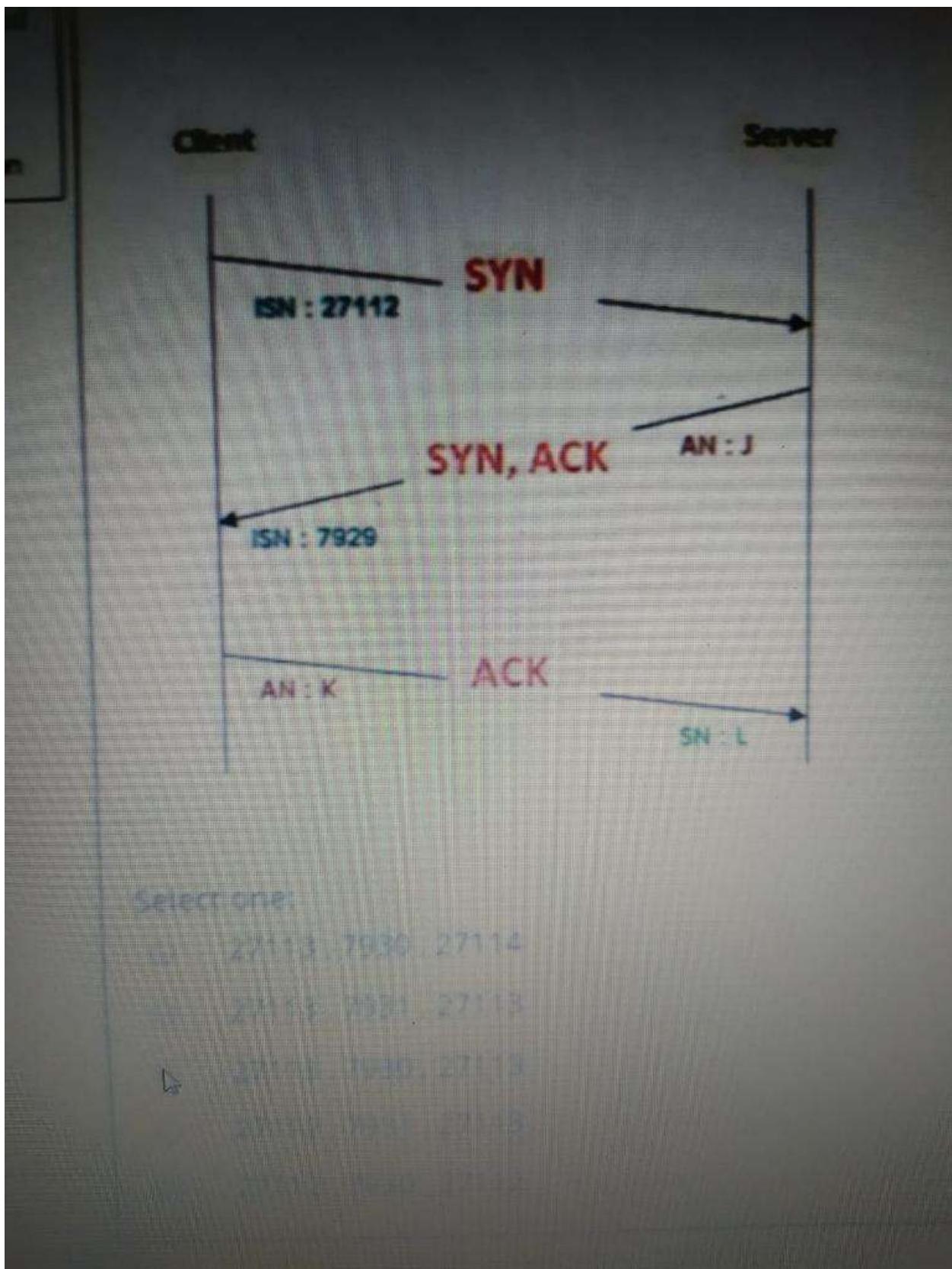
Sri Lanka Institute of Information Technology

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

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 Exams

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

Ask me a question
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
o - ODR, * - candidate default

Gateway of last resort is 10.22.18.1 to network 0.0.0.0

10.0.0.0/8 is variably subnetted, 4 subnets, 4 masks
C 10.22.18.1/24 is directly connected, FastEthernet0/0
S 10.0.0.0/8 [1/0] via 10.22.18.21
S 10.10.0.0/16 [1/0] via 10.22.18.31
S 10.10.10.0/24 [1/0] via 10.22.18.41
S 10.10.10.10/32 [1/0] via 10.22.18.51
S* 0.0.0.0/0 [1/0] via 10.22.18.1

router1#

Select one:

- 10.22.16.31
- 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 following options could be used?

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 line 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 different ACL statements to reflect changes in the ACL

2B

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

Address of the device is

Linka Institute of Information Technology

429 MEMBERS

MEMBER	NAME	STATUS
NS	Nimal	online
SS	Senith sula	offline
DD	Dush Dassanayake	online
GS	Gawesha Sathyam	offline



Online Exams

Sri Lanka Institute of Information Technology

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:

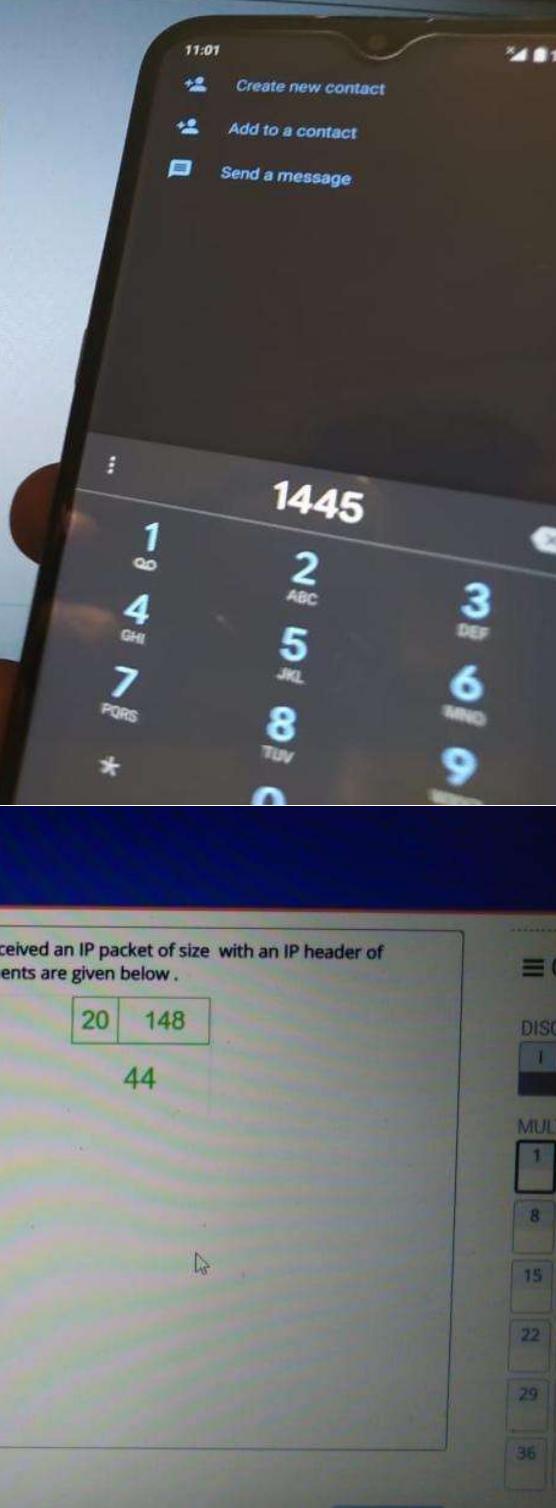
- 192.168.20.159
- 192.168.20.255
- 192.168.20.190
- 192.168.20.254
- 192.168.20.158
- 192.168.20.191

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 S Y I G K H T N N	Window size 16 bits
			Urgent pointer 16 bits
Checksum 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

DISC
1
MULTI
1
8
15
22
29
36



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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 p

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 (purple) containing a 16-bit Source port address and a 16-bit Destination port address. Below this is a 'Data' field (white). The header is divided into several fields: Sequence number (32 bits), Acknowledgment number (32 bits), HLEN (4 bits), Reserved (6 bits), and a control bit section. The control bit section contains the following bits: U (blue), A (cyan), P (light blue), R (red), S (orange), S (orange), Y (green), I (light green), F (yellow), R (red), C (cyan), S (orange), S (orange), Y (green), I (light green), G (yellow), K (cyan), H (light blue), T (red), N (orange), N (orange). To the right of the control bits is a 'Window size' field (16 bits). Below the header is a 'Checksum' field (16 bits) and an 'Urgent pointer' field (16 bits). The bottom part of the header is labeled 'Options and Padding' (yellow).

1. The Acknowledgement number is (in Decimal):

DISCLAIMER

MULTIPLE CHOICE

STRUCTURED QUEST

FEEDBACK

Finish attempt ...

Time left 1:48:02

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 (purple) containing a 16-bit Source port address and a 16-bit Destination port address. Below this is a 'Data' field (white). The header is divided into several fields: Sequence number (32 bits), Acknowledgment number (32 bits), HLEN (4 bits), Reserved (6 bits), and a control bit section. The control bit section contains the following bits: U (blue), A (cyan), P (light blue), R (red), S (orange), S (orange), Y (green), I (light green), F (yellow), R (red), C (cyan), S (orange), S (orange), Y (green), I (light green), G (yellow), K (cyan), H (light blue), T (red), N (orange), N (orange). To the right of the control bits is a 'Window size' field (16 bits). Below the header is a 'Checksum' field (16 bits) and an 'Urgent pointer' field (16 bits). The bottom part of the header is labeled 'Options and Padding' (yellow).

1. The Acknowledgement number is (in Decimal):

2. The Sequential number is (in Decimal):

DISCLAIMER

MULTIPLE CHOICE

STRUCTURED QUEST

FEEDBACK

Finish attempt ...

Time left 1:47:48

ture reference

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.



Online Exams

Sri Lanka Institute of Information Technology

tion 5
er answered
ed out of
ng 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
VLAN030
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 24506 (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.Mbr Type
-----, -----
Fa1/1 Desg FWD 4 128.1 p2p
Fa1/2 Desg FWD 4 128.2 p2p
Fa5/1 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**

1	2
3	4

MULTIPLE CHOICE

5	6
7	8

9	10
11	12

13	14
15	16

17	18
19	20

21	22
23	24

25	26
27	28

STRUCTURE

29	30
31	32

FEEDBACK

33	34
35	36

37	38
39	40

41	42
43	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



wered
of
stion

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



tion 7
et answered
ed out of
eg 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

Online Exams

Sri Lanka Institute of Information Technology

RTA#

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 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
- 210.29.144.7



ONLINE EXAMINATIONS

Sri Lanka Institute of Information Technology

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

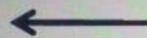
Not yet answered

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									

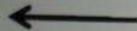
Select one:

- 25
- 19
- 65
- 41

None of the Above

Question 11Not 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

 Quiz navigation

DISCLAIMER

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
44		

FEEDBACK

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

Moodle

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.

9C400017000007D000000C51E0121000000000000 . . .

TCP Header Format.

The diagram illustrates the structure of a TCP header. It starts with a 'Header' field (purple) containing the Source port address (16 bits), Destination port address (16 bits), Sequence number (32 bits), Acknowledgment number (32 bits), HLEN (4 bits), Reserved (6 bits), and flags (U, A, P, R, S, F). Below the flags are the Window size (16 bits), Checksum (16 bits), and Urgent pointer (16 bits). The remaining space is labeled 'Options and Padding' (yellow).

Section 14
Not yet answered
Marked out of 0.0
 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

```
Pinging 192.168.1.0
Pinging 192.168.1.0 with 32 bytes of data:
Request timed out.
Reply from 192.168.1.0: bytes=32 time=0ms TTL=255
Reply from 192.168.1.0: bytes=32 time=0ms TTL=255
Reply from 192.168.1.0: bytes=32 time=0ms TTL=255

Ping statistics for 192.168.1.0:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

Pinging 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 : 192.168.1.0
- 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

DISCLAIMER

MULTIPLE

STRUCTURE

FEEDBACK

Finish after

Time left: 1:28

Online Exams

Sri Lanka Institute of Information Technology

Question 12

yet answered

1 out of 1 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

Next page

DISCLAIMER

MULTIPLE CH

1	2	3
8	9	11
15	16	17
22	23	24
29	30	31
36	37	38

Online Exams

Sri Lanka Institute of Information Technology

Question 13

answered

1 out of 1 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



Online Exams

Sri Lanka Institute of Information Technology

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

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



Online Exams

Sri Lanka Institute of Information Technology

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



Sri Lanka Institute of Information Technology

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
1
8
15
22
29
36
STRU
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 A P R S F R C S 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 size of the options field in Bytes (in Decimal) ?



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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.

20	176
----	-----

20	176
----	-----

20	148
----	-----

Fragment
Offset

0

22

44



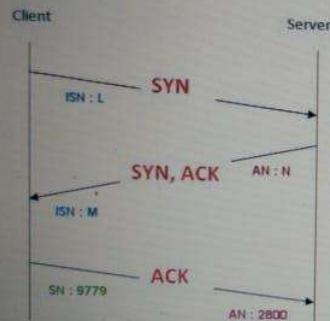
What is the last byte number of the data field of the second fragment?

Select one:

- 195
- 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



Sri Lanka Institute of Information Technology

Question 11

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 the sample values of an intermediate fragment?

Select one:

- Q
- R
- S
- P

SLIIT #19013138

Online Exams

Sri Lanka Institute of Information Technology

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 results

DISCLAIMER

MULTIPLE CHOICE

1	2
8	9
15	16
22	23
29	30
36	37
41	42
43	

STRUCTURED

SLIIT

Sri Lanka Institute of Information Technology

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

DIS
i
MUL
QUE
1
6
11



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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

[]

Next page

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

 Online Exams
Sri Lanka Institute of Information Technology

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?

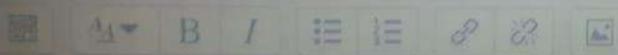
Select one:

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

[Next page](#) 



- 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)



Question 32

Not yet answered

Marked out of
100

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



Online Exams

Sri Lanka Institute of Information Technology

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



Online Exams

Sri Lanka Institute of Information Technology

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

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 would provide?

Select one:

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