Variant 5
Midterm Exam. CSS 312 Fall 2019

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VARIANT 5	
Q1	**Which address provides a unique host address for data communications at the internet layer?**
A	data-link address
B	logical address
C	Layer 2 address
D	physical address
Q2	**A web client is sending a request for a webpage to a web server. From the perspective of the client, what is the correct order of the protocol stack that is used to prepare the request for transmission?**
A	HTTP, IP, TCP, Ethernet
B	HTTP, TCP, IP, Ethernet
C	Ethernet, TCP, IP, HTTP
D	Ethernet, IP, TCP, HTTP
Q3	**Which protocol is responsible for controlling the size and rate of the HTTP messages exchanged between server and client?**
A	HTTP
B	ARP
C	TCP
D	DHCP
Q4	**A PC is downloading a large file from a server. The TCP window is 1000 bytes. The server is sending the file using 100-byte segments. How many segments will the server send before it requires an acknowledgment from the PC?**
A	1 segment
B	10 segments
C	100 segments
D	1000 segments
Q5	**What is a socket?**
A	the combination of the source and destination IP address and source and destination Ethernet address
B	the combination of a source IP address and port number or a destination IP address and port number

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C	the combination of the source and destination sequence and acknowledgment numbers
D	the combination of the source and destination sequence numbers and port numbers
Q6	**What type of information is included in the transport header?**
A	destination and source logical addresses
B	destination and source physical addresses
C	destination and source port numbers
D	encoded application data
Q7	**Multicast address begin with?**
A	FF0x
B	FFx
C	FBx
D	FFAx
Q8	**Which one is the shortest and correct abbrevation for FE80:0000:0000:0100:0000:0000:0000:0123?**
A	FE80::1:123
B	FE80:1::0123
C	FE80:0:0:0100:0:0:0:0123
D	FE80:0:0:100:0:0:0:123
Q9	**Which character(s) is used in IPv6 to describe zeros?**
A	::
B	.
C	~
D	:/,
Q10	**Logical parts' takes in place in which layer?**
A	Data-link
B	Physical
C	Network
D	Session
Q11	**Which one is not function of Network Layer?**
A	routing
B	congeestion control
C	inter-networking
D	none of the mentioned
Q12	**What first determines Network Layer?**

A	IPv4
B	IPv6
C	IPv4 and IPv6
D	IP phone
Q13	**This command help displaying an arp table in host devices**
A	show ip arp
B	show arp table
C	arp -d
D	arp -a
Q14	**This command displays number of runts and jumbos was received by a Cisco Ethernet switch?**
A	show ip interface brief
B	show running-config
C	show runts
D	show interfaces
Q15	**What will receiving device do if it received a jumbo frame?**
A	drops the frame
B	sends a source device to resend the frame
C	
D	device will be rebooted
Q16	**Name type of communication, where both receiver and sender can transmit data simultaneously**
A	Half duplex
B	Full duplex
C	Simplex
D	Half-full duplex
Q17	**What is type of frame field indicates source and destination node addresses on a media?**
A	Type
B	Control
C	Data
D	Addressing
Q18	**Definition of the bandwidth**
A	speed of the data in real time
B	capacity of the medium to flow control

C	capacity of the medium to carry a data
D	measure of the bits transferred in a media in specific time slot
Q19	**Select the mode of IOS that allows user to monitor and execute configurations**
A	Privileged Exec mode
B	User Exec mode
C	Global configuration mode
D	Rommon mode
Q20	**What is the function of login command when setting passwords for console?**
A	to enable password encryption
B	to check password syntaxis
C	request of the password before entering into a configuration using console connection
D	request of the password before entering into a configuration using remote connection
Q21	**Select the mode of IOS which referred as "read-only"**
A	Privileged Exec mode
B	User Exec mode
C	Global configuration mode
D	Rommon mode
Q22	**The process of placing one message format inside another message format**
A	Encoding
B	Encapsulation
C	Decapsulation
D	Sizing
Q23	**This layer of OSI model ensures that information sent by the application layer of one system will be readable by the application layer of another**
A	session
B	presentation
C	application
D	physical
Q24	**This type of network is designed to be accessible only by the organization's members, employees, or others with authorization**
	A. Intranet B.Internet C.LAN D. WAN
Q25	**How many bits must be borrowed from the host portion of an address to accommodate a router with five connected networks?**
	A. 1 B. 2 C. 3 D. 4

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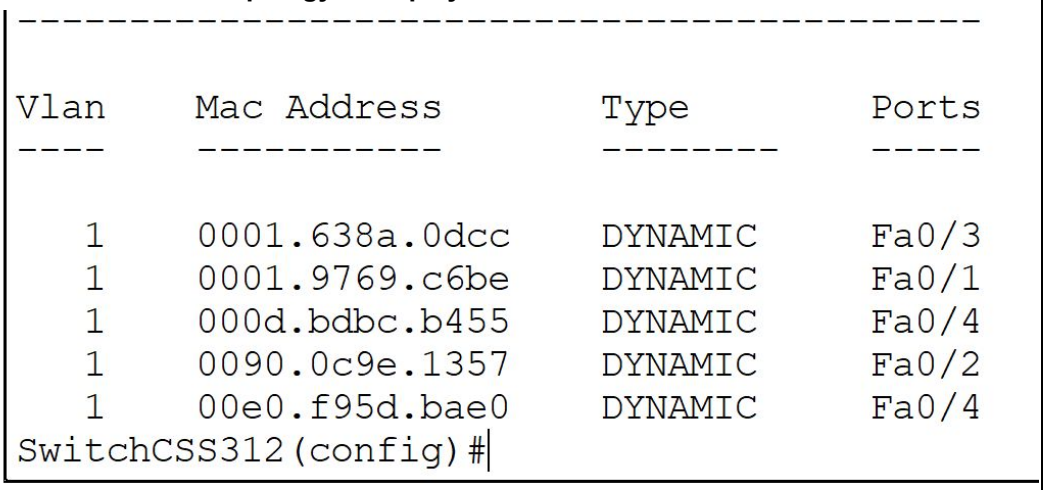
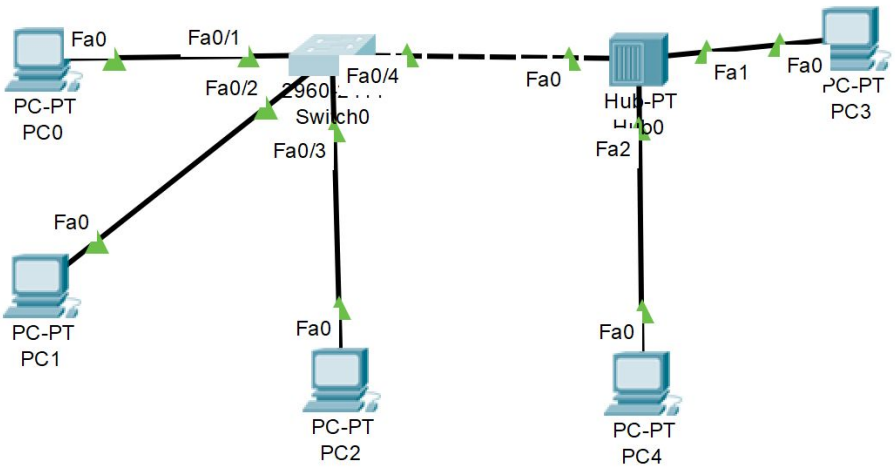
VARIANT 6	
Q1	**Which protocol is responsible for controlling the size and rate of the HTTP messages exchanged between server and client?**
A	HTTP
B	ARP
C	TCP
D	DHCP
Q2	**What type of communication will send a message to all devices on a local area network?**
A	broadcast
B	multicast
C	unicast
D	allcast
Q3	**What is an advantage for small organizations of adopting IMAP instead of POP?**
A	Messages are kept in the mail servers until they are manually deleted from the email client.
B	When the user connects to a POP server, copies of the messages are kept in the mail server for a short time, but IMAP keeps them for a long time.
C	IMAP sends and retrieves email, but POP only retrieves email.
D	POP only allows the client to store messages in a centralized way, while IMAP allows distributed storage.
Q4	**A PC is downloading a large file from a server. The TCP window is 1000 bytes. The server is sending the file using 100-byte segments. How many segments will the server send before it requires an acknowledgment from the PC?**
A	1 segment
B	10 segments
C	100 segments
D	1000 segments
Q5	**When is UDP preferred to TCP?**
A	when a client sends a segment to a server
B	when all the data must be fully received before any part of it is considered useful
C	when an application can tolerate some loss of data during transmission

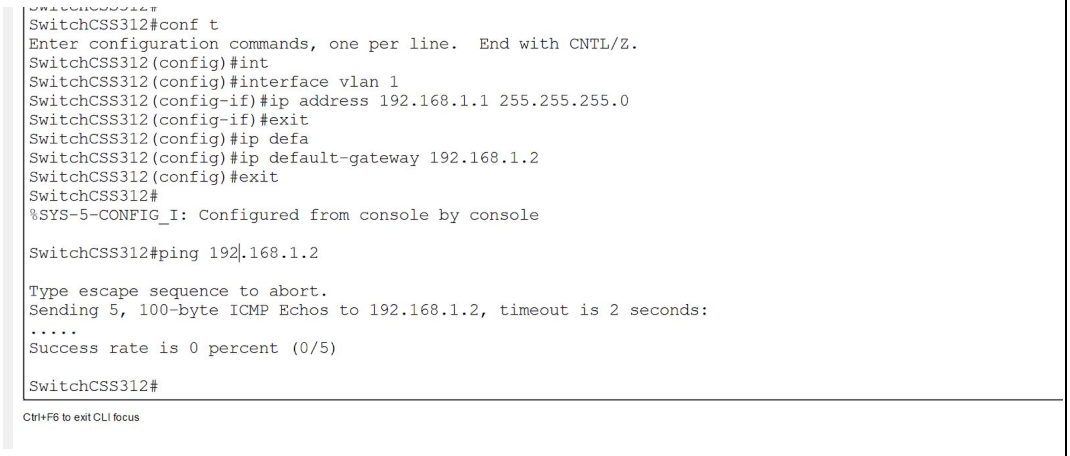
D	when segments must arrive in a very specific sequence to be processed successfully
Q6	**What type of information is included in the transport header?**
A	destination and source logical addresses
B	destination and source physical addresses
C	destination and source port numbers
D	encoded application data
Q7	**Multicast address begin with?**
A	FF0x
B	FFx
C	FBx
D	FFAx
Q8	**Which one is the shortest and correct abbreviation for FE80:0000:0000:0100:0000:0000:0000:0123?**
A	FE80::1:123
B	FE80:1::0123
C	FE80:0:0:0100:0:0:0:0123
D	FE80:0:0:100:0:0:0:123
Q9	**In 255.255.240.0, how many hosts there are?**
A	4094
B	1
C	2005
D	1421
Q10	**Logical parts' takes in place in which layer?**
A	Data-link
B	Physical
C	Network
D	Session
Q11	**Network layer concerns with?**
A	data
B	packets
C	segment
D	frames
Q12	**The Network Layer responsible for?**
A	packet forwarding

B	data segmenting
C	data encryption
D	frames translation
Q13	**What will happen if transmitter doesn't know destination mac address?**
A	sender sends ARP request
B	sender encapsulates packet to an addressless frame
C	sender will not send frame
D	sender forwards frame to a destination using IP address
Q14	**What is ARP spoofing?**
A	sending secure ARP request
B	replying to ARP request with the wrong mac address
C	sending tracking algorithms for ARP request
D	Destination mac address identification
Q15	**Mac table and LAN topology is displayed. What will the switch do with a frame?**  Vlan Mac Address Type Ports ---- ----------- -------- ----- 1 0001.638a.0dcc DYNAMIC Fa0/3 1 0001.9769.c6be DYNAMIC Fa0/1 1 000d.bdbc.b455 DYNAMIC Fa0/4 1 0090.0c9e.1357 DYNAMIC Fa0/2 1 00e0.f95d.bae0 DYNAMIC Fa0/4 SwitchCSS312(config)#



Preamble	**Destination Mac**	**Source Mac**	Length time	Encapsulation data	End of frame
	000d.bdbc.b455	00e0.f95d.bae0			

A	Forwards unicast frame to Fa0/4
B	Forwards unicast frame to all ports except incoming one
C	Forwards broadcast frame
D	Drops the frame
Q16	**PC A sends a data to a remote host. What will be the destination mac address of the frame incoming from host PC A? (assume arp table is not empty)**
A	Mac address of default gateway
B	Mac address of destination device in a remote network
C	mac address of the switch interface
D	broadcast mac address
Q17	**Which sub-layer of 2nd OSI layer responsible for identification of Layer 3 networking protocol?**
A	LLC
B	MAC
C	DAC
D	DDL
Q18	**What network equipment use CSMA-CA (carrier sense multiple access (collision avoidance) method?**

A	Hub
B	Access point
C	Switch
D	Router
Q19	**Refer to a figure 1. Indicate the reason why ping did not work?** 
A	Default-gateway should be 192.168.1.1
B	The interface should be changed
C	No shutdown command is not set
D	All 5 packets dropped due to arp request
Q20	**What benefit does DHCP provide to a network?**
A	ip and domain name matching
B	routing to remote networks
C	secure remote connection
D	automatic Ip address provision
Q21	**Select the mode of IOS that allows user to monitor and execute configurations**
A	Privileged Exec mode
B	User Exec mode
C	Global configuration mode
D	Rommon mode
Q22	**Passwords can be used to restrict access to all or parts of the Cisco IOS. Select the modes and interfaces that can be protected with passwords.**
A	vty, console, privileged EXEC mode
B	vty, svi, console
C	vty, console, global configuration mode
D	vty, aux, line configuration

Q23	**This type of network is designed to be accessible only by the organization's members, employees, or others with authorization**
A	Intranet
B	Internet
C	LAN
D	WAN
Q24	**Peer to peer network**
A	both end devices work as servers
B	both end devices work as hosts
C	both end devices work as server and client simultaneously
D	none of the above
Q25	**This layer of OSI model ensures that information sent by the application layer of one system will be readable by the application layer of another**
A	session
B	presentation
C	application
D	physical

Variant 7
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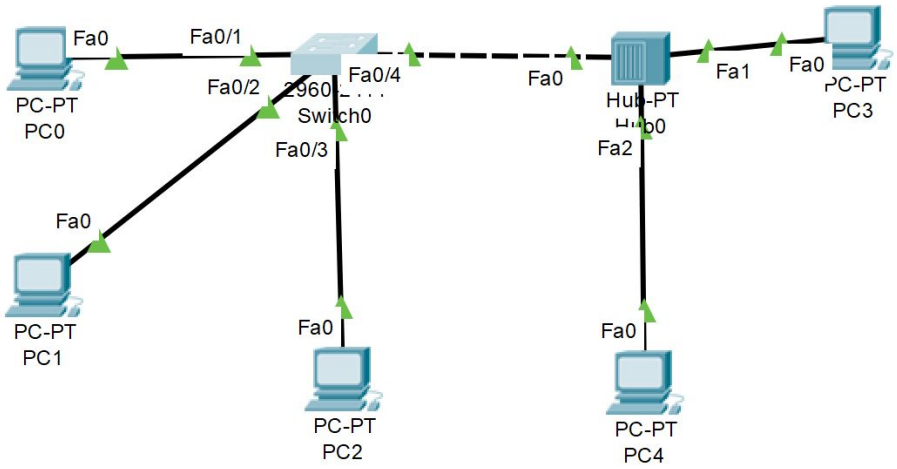
VARIANT 7	
Q1	**Which two definitions accurately describe the associated application layer protocol? (Choose two.)**
A	SMTP – transfers web pages from web servers to clients
B	Telnet – provides remote access to servers and networking devices
C	DNS – resolves Internet names to IP addresses
D	FTP – transfers email messages and attachments
Q2	**If the default gateway is configured incorrectly on the host, what is the impact on communications?**
A	The host is unable to communicate on the local network.
B	The host can communicate with other hosts on the local network, but is unable to communicate with hosts on remote networks
C	The host can communicate with other hosts on remote networks, but is unable to communicate with hosts on the local network.
D	There is no impact on communications
Q3	**A manufacturing company subscribes to certain hosted services from its ISP. The services that are required include hosted world wide web, file transfer, and e-mail. Which protocols represent these three key applications? (Choose three.)**
A	FTP
B	HTTP
C	DNS
D	SMTP
Q4	**Which two tasks are functions of the presentation layer? (Choose two.)**
A	compression
B	addressing
C	encryption
D	session control
Q5	**What is the complete range of TCP and UDP well-known ports?**
A	0 to 255
B	0 to 1023
C	256 – 1023
D	1024 – 49151

Q6	**Which two flags in the TCP header are used in a TCP three-way handshake to establish connectivity between two network devices? (Choose two.)**
A	ACK
B	FIN
C	RST
D	SYN
Q7	**Which three application layer protocols use TCP? (Choose three.)**
A	SMTP
B	FTP
C	DHCP
D	HTTP
Q8	**In IPv6 we did not use which type of address?**
A	Broadcast
B	Last useful
C	First useful
D	Multicast
Q9	**How many bits in IPv6?**
A	32
B	16
C	8
D	128
Q10	**What is the main equipment which are using on Layer 3?**
A	switch
B	router
C	hub
D	server
Q11	**Which layer of OSI model has IP implements?**
A	Transport
B	Network
C	Presentation
D	Session
Q12	**Which one is from lower layer?**
A	Network
B	Session

<table>
<tr><td>C</td><td>Application</td></tr>
<tr><td>D</td><td>Presentation</td></tr>
<tr><td>Q13</td><td>Mac table and LAN topology is displayed. What will the switch do with a frame?
<pre>
          Mac Address Table

Vlan   Mac Address   Type   Ports
----   -----------   --------   -----

SwitchCSS312#
</pre>


<table>
<tr><td>Preamble</td><td>Destination Mac</td><td>Source Mac</td><td>Length time</td><td>Encapsulation data</td><td>End of frame</td></tr>
<tr><td></td><td>000d.bdbc.b455</td><td>00e0.f95d.bae0</td><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>A</td><td>Forwards unicast frame to Fa0/4 and record source mac to mac table</td></tr>
<tr><td>B</td><td>Forwards unicast frame to all ports except incoming one and record source mac to mac table</td></tr>
<tr><td>C</td><td>Forwards broadcast frame to all ports except fa/4 and record source mac to mac table</td></tr>
<tr><td>D</td><td>Adds source mac to mac table and drops the frame</td></tr>
<tr><td>Q14</td><td>A field that used to detect errors in Ethernet frame known as</td></tr>
<tr><td>A</td><td>Frame check sequence</td></tr>
<tr><td>B</td><td>Manchester code</td></tr>
</table>

C	preamble
D	EtherType field
Q15	**What will receiving device do if it received a jumbo frame?**
A	drops the frame
B	sends a source device to resend the frame
C	
D	device will be rebooted
Q16	**What type of fiber used in a long haul communication?**
A	SM
B	MM
C	MMgrid
D	none of the above
Q17	**Select OSI layer that works with two sub-layers; LLC and MAC**
A	Transport
B	Network
C	Data-Link
D	Physical
Q18	**When automatic medium-dependent interface crossover (auto-MDIX) is enabled on an interface means...**
A	the interface automatically detects the required cable connection type (straight through or crossover)
B	the LED of interface will light on with red color when wrong type of connection type was performed
C	the LED will blink on interface when wrong type of connection type was performed
D	the interface will automatically find Mac addresses and forwards to correct host
Q19	**Passwords can be used to restrict access to all or parts of the Cisco IOS. Select the modes and interfaces that can be protected with passwords.**
A	vty, console, privileged EXEC mode
B	vty, svi, console
C	vty, console, global configuration mode
D	vty, aux, line configuration
Q20	**What command can be used on a Windows PC to see the IP configuration of that computer?**
A	show ip interface brief
B	ipconfig

C	ping
D	show interfaces
Q21	**What is the function of login command when setting passwords for console?**
A	to enable password encryption
B	to check password syntaxis
C	request of the password before entering into a configuration using console connection
D	request of the password before entering into a configuration using remote connection
Q22	**Short representation of command copy running-config startup-config**
A	copy
B	write
C	copy write
D	save
Q23	**This utility determine whether a specific IP address is accessible, by sending a packet to the specified address and waiting for a reply**
A	ping
B	traceping
C	arp
D	DHCP
Q24	**Select an intermediate device**
A	Hub
B	Fiber
C	IOS software complex
D	console cable
Q25	**Which device is known as internetworking device?**
A	Router
B	Switch
C	Computer
D	Hub

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VARIANT 8	
Q1	**Which two tasks are functions of the presentation layer? (Choose two.)**
A	compression
B	addressing
C	encryption
D	session control
Q2	**Which address provides a unique host address for data communications at the internet layer?**
A	data-link address
B	logical address
C	Layer 2 address
D	physical address
Q3	**A web client is sending a request for a webpage to a web server. From the perspective of the client, what is the correct order of the protocol stack that is used to prepare the request for transmission?**
A	HTTP, IP, TCP, Ethernet
B	HTTP, TCP, IP, Ethernet
C	Ethernet, TCP, IP, HTTP
D	Ethernet, IP, TCP, HTTP
Q4	**When would it be more efficient to use SMB to transfer files instead of FTP?**
A	When a peer-to-peer application is required
B	When the host devices on the network use the Windows operating system
C	When downloading large numbers of files from the same server
D	When uploading the same file to multiple remote servers
Q5	**What type of information is included in the transport header?**
A	destination and source logical addresses
B	destination and source physical addresses
C	destination and source port numbers
D	encoded application data
Q6	**What is a socket?**
A	the combination of the source and destination IP address and source and destination

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	Ethernet address
B	the combination of a source IP address and port number or a destination IP address and port number
C	the combination of the source and destination sequence and acknowledgment numbers
D	the combination of the source and destination sequence numbers and port numbers
Q7	**Which two characteristics are associated with UDP sessions? (Choose two.)**
A	Destination devices receive traffic with minimal delay
B	Transmitted data segments are tracked
C	Destination devices reassemble messages and pass them to an application.
D	Received data is unacknowledged
Q8	**In 255.255.240.0, how many hosts there are?**
A	4094
B	1
C	2005
D	1421
Q9	**Multicast address begin with?**
A	FF0x
B	FFx
C	FBx
D	FFAx
Q10	**Which IP version does not has a subnet mask?**
A	ICMP
B	IPv4
C	IPv6
D	IPv12
Q11	**The Network Layer responsible for?**
A	packet forwarding
B	data segmenting
C	data encryption
D	frames translation
Q12	**Which one is not function of Network Layer?**
A	routing
B	congestion control
C	inter-networking

D	none of the mentioned
Q13	**What first determines Network Layer?**
A	IPv4
B	IPv6
C	IPv4 and IPv6
D	IP phone
Q14	**Which switching method uses the CRC value in a frame**
A	Store and forward
B	Cut through
C	Fast forward
D	Fragment free
Q15	**What is ARP spoofing?**
A	sending secure ARP request
B	replying to ARP request with the wrong mac address
C	sending tracking algorithms for ARP request
D	Destination mac address identification
Q16	**This command help displaying an arp table in host devices**
A	show ip arp
B	show arp table
C	arp -d
D	arp -a
Q17	**Crossover UTP cable**
A	has both ends connected in A standard
B	has both ends connected in B standard
C	has both ends connected in different from each other standards
D	used RJ11 connector type
Q18	**PC A sends a data to a remote host. What will be the destination mac address of the frame incoming from host PC A? (assume arp table is not empty)**
A	Mac address of default gateway
B	Mac address of destination device in a remote network
C	mac address of the switch interface
D	broadcast mac address
Q19	**What is type of frame field indicates source and destination node addresses on a media?**
A	Type

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C	Data
D	Addressing
Q20	**Short representation of command copy running-config startup-config**
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C	copy write
D	save
Q21	**Select the mode of IOS that allows user to monitor and execute configurations**
A	Privileged Exec mode
B	User Exec mode
C	Global configuration mode
D	Rommon mode
Q22	**Select the mode of IOS which referred as "read-only"**
A	Privileged Exec mode
B	User Exec mode
C	Global configuration mode
D	Rommon mode
Q23	**Formal description of a set of rules and conventions that govern how devices on a network exchange information**
A	algorithms
B	protocols
C	standards
D	models
Q24	**This layer of OSI model ensures that information sent by the application layer of one system will be readable by the application layer of another**
A	session
B	presentation
C	application
D	physical
Q25	**This type of network is designed to be accessible only by the organization's members, employees, or others with authorization**
	A. Intranet B. Internet C. LAN D. WAN

Answers

Var5	Correct answers	6 var	Correct answers	7 var	Correct Answers	8 var	correct answers
Q1	**B**	**Q1**	C	**Q1**	B, C	**Q1**	A, C
Q2	**B**	**Q2**	A	**Q2**	B	**Q2**	B
Q3	**C**	**Q3**	A	**Q3**	A, B, D	**Q3**	B
Q4	**B**	**Q4**	B	**Q4**	A, C	**Q4**	C
Q5	**B**	**Q5**	C	**Q5**	B	**Q5**	C
Q6	**C**	**Q6**	C	**Q6**	A, D	**Q6**	B
Q7	A	**Q7**	A	**Q7**	A, B, D	**Q7**	A, D
Q8	D	**Q8**	D	**Q8**	A	**Q8**	A
Q9	A	**Q9**	A	**Q9**	D	**Q9**	A
Q10	C	**Q10**	C	**Q10**	B	**Q10**	C
Q11	D	**Q11**	B	**Q11**	B	**Q11**	A
Q12	C	**Q12**	A	**Q12**	A	**Q12**	D
Q13	D	**Q13**	A	**Q13**	B	**Q13**	C
Q14	D	**Q14**	B	**Q14**	A	**Q14**	A
Q15	A	**Q15**	D	**Q15**	A	**Q15**	B
Q16	B	**Q16**	A	**Q16**	A	**Q16**	D
Q17	D	**Q17**	A	**Q17**	C	**Q17**	C
Q18	C	**Q18**	B	**Q18**	A	**Q18**	A
Q19	A	**Q19**	C	**Q19**	A	**Q19**	D
Q20	C	**Q20**	D	**Q20**	B	**Q20**	B
Q21	B	**Q21**	A	**Q21**	C	**Q21**	A
Q22	B	**Q22**	A	**Q22**	B	**Q22**	B
Q23	B	**Q23**	A	**Q23**	A	**Q23**	C
Q24	A	**Q24**	C	**Q24**	A	**Q24**	B
Q25	C	**Q25**	B	**Q25**	A	**Q25**	A