

Variant 1
Midterm Exam. CSS 312 Fall 2019

2019

Student ID

date

VARIANT 1	
Q1	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
Q2	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
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	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
Q5	What happens if the first packet of a TFTP transfer is lost?
A	The client will wait indefinitely for the reply.
B	The TFTP application will retry the request if a reply is not received.
C	The next-hop router or the default gateway will provide a reply with an error code.
D	The transport layer will retry the query if a reply is not received.
Q6	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
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 character(s) is used in IPv6 to describe zeros?
A	::
B	.
C	~
D	:/,
Q8	In 255.255.240.0, how many hosts there are?
A	4094
B	1
C	2005
D	1421
Q9	Which IP version does not has a subnet mask?
A	ICMP
B	IPv4
C	IPv6
D	IPv12
Q10	What is the main equipment which are using on Layer 3?
A	switch
B	router
C	hub
D	server
Q11	Which one is from lower layer?
A	Network
B	Session
C	Application
D	Presentation
Q12	Network layer concerns with?
A	data
B	packets
C	segment

D	frames
Q13	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
Q14	A field that used to detect errors in Ethernet frame known as
A	Frame check sequence
B	Manchester code
C	preamble
D	EtherType field
Q15	What will Cisco switch do if mac table is empty and destination mac address of frame is ffff.ffff.ffff
A	drops the frame
B	create a route to forward frame to a default-gateway
C	forwards the frame to all ports and add source mac address to a mac table
D	forwards frame to a specific port and adds destination mac to a table
Q16	What is type of frame field indicates source and destination node addresses on a media?
A	Type
B	Control
C	Data
D	Addressing
Q17	PC A sends 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 the destination device in a remote network
C	Mac address of the switch interface
D	broadcast mac address
Q18	Select OSI layer that works with two sub-layers; LLC and MAC
A	Transport
B	Network
C	Data-Link
D	Physical

Q19	Which interface allows remote management of a Layer 2 switch?
A	the AUX interface
B	the console port interface
C	the switch virtual interface
D	the first Ethernet port interface
Q20	Short representation of command copy running-config startup-config
A	copy
B	write
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	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
Q23	Select none fundamental component of computer networks
A	Service
B	Media
C	Devices
D	IP address
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

Variant 2

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VARIANT 2	
Q1	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
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 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
Q4	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
Q5	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

Q6	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
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 character(s) is used in IPv6 to describe zeros?
A	::
B	.
C	~
D	:/,
Q8	In 255.255.240.0, how many hosts there are?
A	4094
B	1
C	2005
D	1421
Q9	In IPv6 we did not use which type of address?
A	Broadcast
B	Last useful
C	First useful
D	Multicast
Q10	What is the main equipment which are using on Layer 3?
A	switch
B	router
C	hub
D	server
Q11	Which one is not function of Network Layer?
A	routing
B	congestion control
C	inter-networking
D	none of the mentioned
Q12	Which layer of OSI model has IP implements?
A	Transport
B	Network

C	Presentation
D	Session
Q13	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
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 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	What network equipment use CSMA-CA (carrier sense multiple access (collision avoidance) method?
A	Hub
B	Access point
C	Switch
D	Router
Q18	Which sub-layer of 2nd OSI layer responsible for identification of Layer 3 networking protocol?
A	LLC
B	MAC
C	DAC
D	DDL

Q19	<p>Refer to a figure 1. Indicate the reason why ping did not work?</p> <pre> SwitchCSS312# SwitchCSS312#conf t Enter configuration commands, one per line. End with CNTL/Z. SwitchCSS312(config)#int SwitchCSS312(config)#interface vlan 1 SwitchCSS312(config-if)#ip address 192.168.1.1 255.255.255.0 SwitchCSS312(config-if)#exit SwitchCSS312(config)#ip defa SwitchCSS312(config)#ip default-gateway 192.168.1.2 SwitchCSS312(config)#exit SwitchCSS312# %SYS-5-CONFIG_I: Configured from console by console SwitchCSS312#ping 192.168.1.2 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds: Success rate is 0 percent (0/5) SwitchCSS312# Ctrl+F6 to exit CLI focus </pre>
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	Short representation of command copy running-config startup-config
	A. Copy B. write C. copy write D. save
Q21	Which remote management method is required to use when accessing Cisco 2960 switch?
	A. Stelnet B. SSHtelnet C. SecretTelnet D.SSH
Q22	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 addresses provision
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	The process of placing one message format inside another message format
A	Encoding
B	Encapsulation
C	Decapsulation
D	Sizing
Q25	Select none fundamental component of computer networks
	A. Service b. Media C. Devices D. IP address

Variant 3
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VARIANT 3	
Q1	What type of communication will send a message to all devices on a local area network?
A	broadcast
B	multicast
C	unicast
D	allcast
Q2	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.
Q3	Which two tasks are functions of the presentation layer? (Choose two.)
A	compression
B	addressing
C	encryption
D	session control
Q4	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
Q5	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
Q6	What does a client do when it has UDP datagrams to send?

A	It just sends the datagrams
B	It queries the server to see if it is ready to receive data.
C	It sends a simplified three-way handshake to the server.
D	It sends to the server a segment with the SYN flag set to synchronize the conversation.
Q7	Which three application layer protocols use TCP? (Choose three.)
A	SMTP
B	FTP
C	DHCP
D	HTTP
Q8	IPv4 displayed as bits?
A	32
B	128
C	16
D	64
Q9	How many bits in IPv6?
A	32
B	16
C	8
D	128
Q10	The Network Layer responsible for?
A	packet forwarding
B	data segmenting
C	data encryption
D	frames translation
Q11	What first determines Network Layer?
A	IPv4
B	IPv6
C	IPv4 and IPv6
D	IP phone
Q12	Sequencing for MTU' is about which layer?
A	Network
B	Transport
C	Application
D	Data-link

Q13	What will Cisco switch do if mac table is empty and destination mac address of frame is ffff.ffff.ffff
A	drops the frame
B	create a route to forward frame to a default-gateway
C	forwards the frame to all ports and add source mac address to a mac table
D	forwards frame to a specific port and adds destination mac to a table
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	A field that used to detect errors in Ethernet frame known as
A	Frame check sequence
B	Manchester code
C	preamble
D	EtherType field
Q16	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
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	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
Q19	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 addresses provision
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	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
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	Which device is known as internetworking device?
A	Router
B	Switch
C	Computer
D	Hub
Q24	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
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 4

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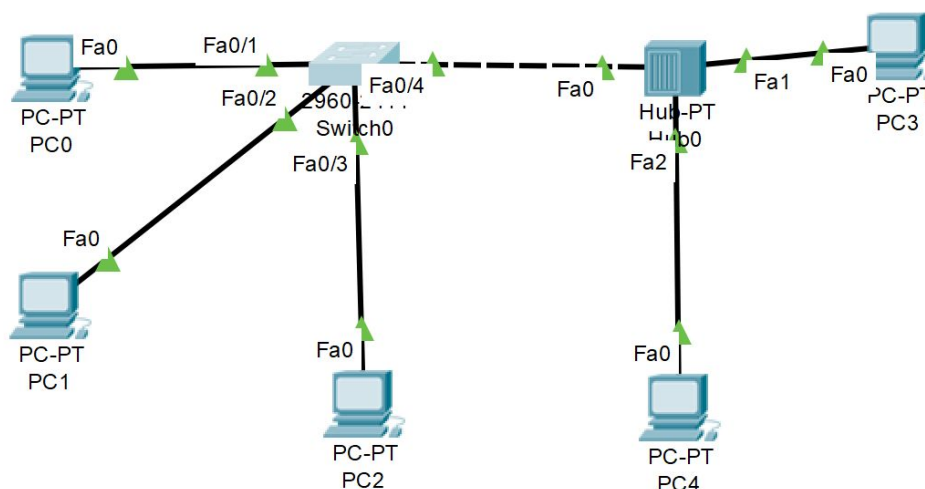
date

VARIANT 4	
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	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
Q3	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
Q4	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
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
C	the combination of the source and destination sequence and acknowledgment numbers

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D	the combination of the source and destination sequence numbers and port numbers
Q6	What happens if the first packet of a TFTP transfer is lost?
A	The client will wait indefinitely for the reply.
B	The TFTP application will retry the request if a reply is not received.
C	The next-hop router or the default gateway will provide a reply with an error code.
D	The transport layer will retry the query if a reply is not received.
Q7	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
Q8	In IPv6 we did not use which type of address?
A	Broadcast
B	Last useful
C	First useful
D	Multicast
Q9	Which character(s) is used in IPv6 to describe zeros?
A	::
B	.
C	~
D	:/,
Q10	Which set of characters used in IPv6?
A	A-F
B	0-9
C	0-9 and A-F
D	0-9 and A-H
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

C	Application
D	Presentation
Q13	Network layer concerns with?
A	data
B	packets
C	segment
D	frames
Q14	This command help displaying an arp table in host devices
A	show ip arp
B	show arp table
C	arp -d
D	arp -a
Q15	Which switching method uses the CRC value in a frame
A	Store and forward
B	Cut through
C	Fast forward
D	Fragment free
Q16	<p>Mac table and LAN topology is displayed. What will the switch do with a frame?</p> <pre> Mac Address Table ----- Vlan Mac Address Type Ports ---- - SwitchCSS312# </pre>



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 and record source mac to mac table
B	Forwards unicast frame to all ports except incoming one and record source mac to mac table
C	Forwards broadcast frame to all ports except fa/4 and record source mac to mac table
D	Adds source mac to mac table and drops the frame
Q17	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
Q18	What type of fiber used in a long haul communication?
	A. SM B. MM C. MMgrid D. none of the mentioned
Q19	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 the destination device in a remote network
C	mac address of the switch interface
D	broadcast mac address
Q20	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
Q21	Which remote management method is required to use when accessing Cisco 2960 switch?
A	Stelnet
B	SSHtelnet
C	SecretTelnet
D	SSH
Q22	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
Q23	Name type of attack that slows down (crashes) the performance of the equipment or program
A	Firewall
B	VPN
C	Phishing
D	Denial of Service
Q24	Select none fundamental component of computer networks
A	Service
B	Media
C	Devices
D	IP address
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

1 var	Correct answers	2 var	Correct answers	3 var	Correct Answers	4 var	Correct answers
Q1	C	Q1	A, B, D	Q1	A	Q1	C
Q2	B, C	Q2	B	Q2	A	Q2	C
Q3	A, B, D	Q3	B	Q3	A, C	Q3	B, C
Q4	C	Q4	C	Q4	C	Q4	B
Q5	B	Q5	A, D	Q5	A, D	Q5	B
Q6	B	Q6	B	Q6	A	Q6	B
Q7	A	Q7	A	Q7	A, B, D	Q7	C
Q8	A	Q8	A	Q8	A	Q8	A
Q9	C	Q9	A	Q9	D	Q9	A
Q10	B	Q10	B	Q10	A	Q10	C
Q11	A	Q11	D	Q11	C	Q11	B
Q12	B	Q12	B	Q12	A	Q12	A
Q13	D	Q13	D	Q13	C	Q13	B
Q14	A	Q14	A	Q14	B	Q14	D
Q15	C	Q15	A	Q15	A	Q15	A
Q16	D	Q16	A	Q16	C	Q16	B
Q17	A	Q17	B	Q17	C	Q17	A
Q18	C	Q18	A	Q18	B	Q18	A
Q19	C	Q19	C	Q19	D	Q19	A
Q20	B	Q20	B	Q20	C	Q20	B
Q21	A	Q21	D	Q21	B	Q21	D
Q22	C	Q22	D	Q22	B	Q22	A
Q23	D	Q23	A	Q23	A	Q23	D
Q24	A	Q24	B	Q24	C	Q24	D
Q25	C	Q25	D	Q25	B	Q25	A