

Course name: Networks I
 Course Code: CNE 304
 Lecturer: Dr. Ahmed ElShafee

Exam number: Answer
 Exam Date: Nov/2016
 Time Allowed: 60 minutes

Name: _____

ID: _____

Total
25

Part 1: Essay questions

1.1. Compare between the following three different types of cable that used in LAN (UTP, STP, Fiber) considering the following attributes mentioned in the following table (3)

Cable type	UTP	Coaxial	Fiber
Data speed	10/100	10	100/1000/10000
Segment length (around)	100m	200-500 m	Kms
Number of wires	4-8	1	2
Type of carried signal (physical presentation)	Electrical	Electrical	light
Signal speed	Close to speed of light	Close to speed of light	Speed of light

1.3. Internet is the network of all networks discuss? (2)

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..... as all networks are connected to the internet through special interface equipment
..... called router
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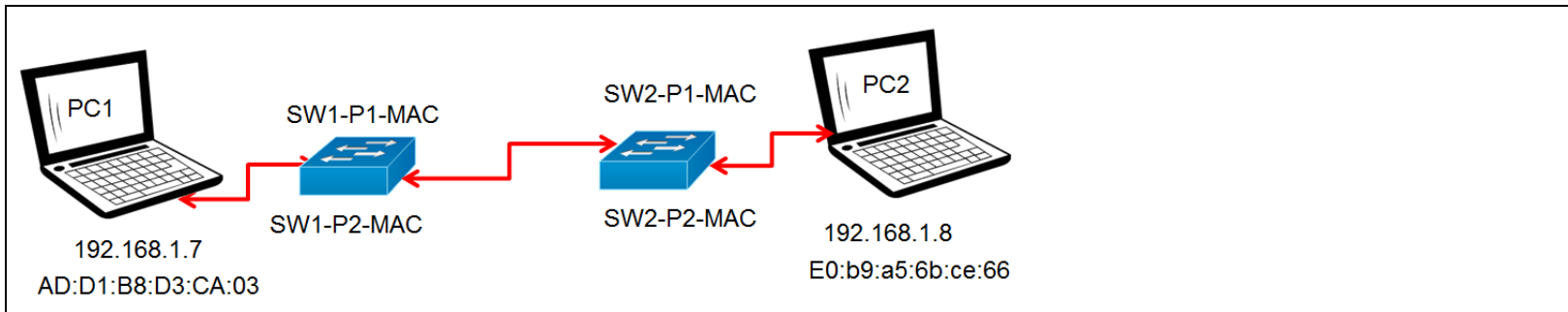
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3)



Consider pc2 is sending a reply packet to pc1 through switch1, and switch2 respectively
Fill the address fields in the following packets (3)

From pc2 to sw2

Source device	PC2	Destination device	SW2
	IP	MAC	data
Source Address	192.168.1.8	E0:b9:a5:6b:ce:66	
Destination Address	192.168.1.7	AD:D1:B8:D3:CA:03	



From sw2 to sw1

Source device	sw2	Destination device	sw1
	IP	MAC	data
Source Address	192.168.1.8	E0:b9:a5:6b:ce:66	
Destination Address	192.168.1.7	AD:D1:B8:D3:CA:03	



From sw1 to pc1

Source device	sw1	Destination device	pc1
	IP	MAC	data
Source Address	192.168.1.8	E0:b9:a5:6b:ce:66	
Destination Address	192.168.1.7	AD:D1:B8:D3:CA:03	



Part 2: MCQ (15)

#	A	B	C	D	E	F	G	Grade
1				●		●		D and F
2	●						●	A and G
3			●					C
4	●							A
5						●		F
6			●		●			C and E
7		●						B
8		●						B
9	●							A
10				●				D
11	●	●		●				A, b, d
12			●					c
13							●	g
14			●					C
15	●	●						A, b
16		●						b
17			●					c

#	Q	Ans
1	Which of the following protocols are examples of TCP/IP transport layer protocols? a. Ethernet b. HTTP c. IP d. UDP e. SMTP f. TCP g. PPP	D and F
2	Which of the following protocols are examples of TCP/IP network interface layer protocols? a. Ethernet b. HTTP c. IP d. UDP e. SMTP f. TCP g. PPP	A and G
3	Which OSI layer defines the functions of logical network-wide addressing and routing? a. Layer 1 b. Layer 2 c. Layer 3 d. Layer 4 e. Layer 5 f. Layer 6 g. Layer 7	C
4	Which OSI layer defines the standards for cabling and connectors? a. Layer 1 b. Layer 2 c. Layer 3 d. Layer 4 e. Layer 5 f. Layer 6 g. Layer 7	A



5	Which OSI layer defines the standards for data formats and encryption? a. Layer 1 b. Layer 2 c. Layer 3 d. Layer 4 e. Layer 5 f. Layer 6 g. Layer 7	F
6	Which of the following terms are not valid terms for the names of the seven OSI layers? a. Application b. Data link c. Transmission d. Presentation e. Internetwork f. Session	C a n d E
7	The process of HTTP asking TCP to send some data and make sure that it is received correctly is an example of what? a. Same-layer interaction b. Adjacent-layer interaction c. The OSI model d. All of the above e. None of the above	B
8	The process of TCP on one computer marking a segment as segment 1, and the receiving computer then acknowledging the receipt of segment 1, is an example of what? a. Data encapsulation b. Same-layer interaction c. Adjacent-layer interaction d. The OSI model e. None of the above	B
9	The process of a web server adding a TCP header to a web page, followed by adding a TCP header, then an IP header, and then data link header and trailer is an example of what? a. Data encapsulation b. Same-layer interaction c. The OSI model d. All of the above e. None of the above	A



10	Which of the following terms is used specifically to identify the entity that is created when encapsulating data inside data-link headers and trailers? a. Data b. Chunk c. Segment d. Frame e. packet f. None—there is no encapsulation by the data link layer	D
11	common communication media for Ethernet network (3) a. Twisted pair cables b. Free space c. Fiber cables d. Coaxial cables	A, b, d
12	Define peer to peer network (1) A. Network has no access to the internet b. Another name for local area network c. Network has no servers d. Network has no wireless users e. Network has no router f. Two local area networks connected together using wide area network technology g. Network has server and work stations	c
13	Client Server Network (1) A. Network has no access to the internet b. Another name for local area network c. Network has no servers d. Network has no wireless users e. Network has no router f. Two local area networks connected together using wide area network technology g. Network has server and work stations	g
14	Network operating systems are a. a special service back that installed on desktop operating systems. b. same as desktop operating system but supports multiple network interfaces c. can operates on both desktop PCs and server PCs d. a software installed on switches and router to manage the network	C
15	A PC is considered to be a part of WAN is a. if PC is connected to LAN which in turn is connected to the internet b. if PC is directly connected to the internet d. if PC is connected to a distant network through WAN technology e. if PC connected to a network using wireless area network technologies	A, b



16	In star topology a. all PCs physically and logically connected using bus topology b. all PCs are connected logically as bus but physically are star c. all PCs are connected logically as star but physically as bus d. all PC are connected logically as tree but physically as star e. d. all PC are connected logically as star but physically as bus	b
17	OSI stands for a. open source internet b. open source interconnection c. open systems interconnection d. open systems internet	c