

Semester 1

Cisco I

Introduction to Networks

JEOPARDY

Chapter 4



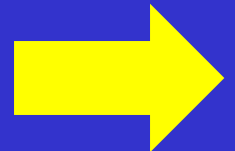
Physical Layer	Media	Data Link	Topologies	Frames	Potpourri
▶▶▶ Final Jeopardy ◀◀◀					
<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>300</u>	<u>300</u>	<u>300</u>	<u>300</u>	<u>300</u>	<u>300</u>
<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>

Physical Layer 100

This is how bits are represented with a pattern of voltage or no voltage

Question

A: What is 0 and 1 's ?

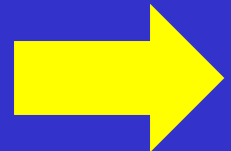


Physical Layer 200

This is type of signaling does require a clock signal and therefore start and atop flags are needed

Question

A: What is asynchronous ?

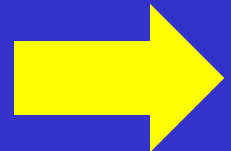


Physical Layer 300

This signaling uses an evenly spaced bit time and includes a clock signal.

Question

A: What is synchronous ?

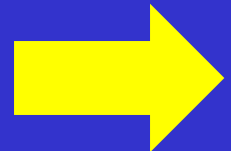


Physical Layer 400

This measure of bandwidth uses a million bits per second

Question

A: What is Mbps or Megabits per second ?



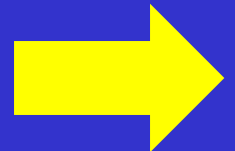
Physical Layer

500

This measurement is the result of
Throughput minus the overhead of non-
useable data traffic

Question

A: What is Goodput ?



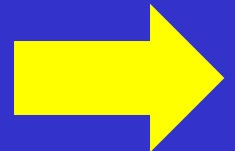
Media

100

These types of interference can distort and corrupt signals carried on copper wire caused by fluorescent or electrical motors

Question

A: What is EMI (Electromagnetic Interference) and RFI (Radio Frequency Interference) ?

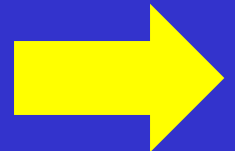


Media 200

This is done to limit crosstalk.

Question

A: What is twisting wire pairs?

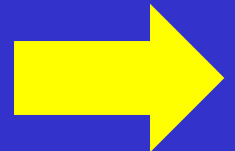


Media 300

This cable has 568A on one end and 568B on the other end.

Question

A: What is a crossover cable ?



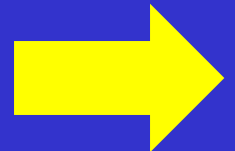
Media

400

Although more expensive, this media is used as backbone cabling because of its ability to carry signals long distances and immunity to electrical interference.

Question

A: What is fiber optic cable ?



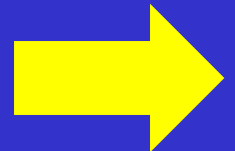
Media

500

This terminated multimode fiber cable uses the same type of connector at both ends

Question

A: What is SC-SC, LC-LC, ST-ST?

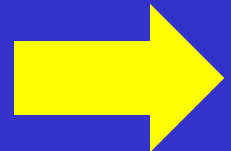


Data Link 100

This sublayer identifies what network layer protocol is used.

Question

A: What is LLC (Logical Link Control)?

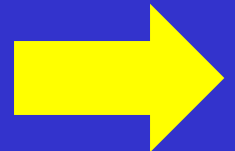


Data Link 200

These two sub-layers make up the data-link layer

Question

A: What are LLC (Logical Link Control) and MAC (Media Access Control) ?



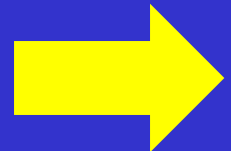
Data Link

300

This field is placed in the trailer of a frame and is used for error detection.

Question

A: What the FCS (Frame Check Sequence) ?

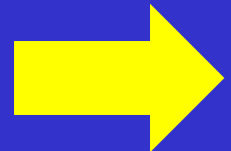


Data Link 400

This is used by the MAC layer to indicate the beginning and end limits of a frame.

Question

A: What are frame start and stop bits or indicators ?

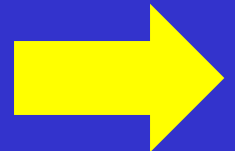


Data Link 500

This sub-layer allows for access to various network communication technologies

Question

A: What the MAC (Media Access Control) Layer ?

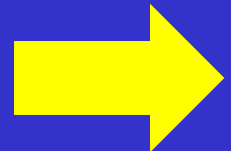


Topologies 100

This topology connects devices to a central point

Question

A: What is a Star Hub-and-Spoke topology?



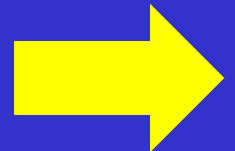
Topologies

200

This topology is found in a FDDI (Fiber Distributed Data Interface) network.

Question

A: What is Ring topology ?



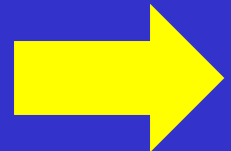
Topologies

300

CSMA/CD is used in this type of topology.

Question

A: What is contention-based, Bus topology ?



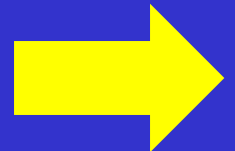
Topologies

400

The “mechanism” to access the network is known as this topology type.

Question

A: What is Logical topology ?



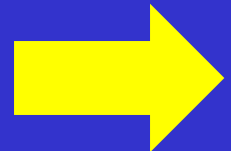
Topologies

500

This topology defines how the end devices are interconnected.

Question

A: What is the Physical topology ?

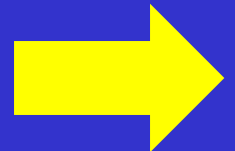


Frames 100

This physical address is used in an Ethernet frame for the source and destination.

Question

A: What is MAC address ?

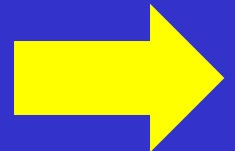


Frames 200

This wireless standard operates at 2.4 GHz and 5.5 GHz simultaneously

Question

A: What is 802.11ac ?



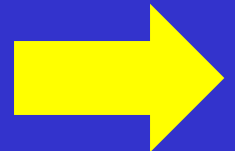
Frames

300

Consideration should be given to these areas when designing wireless networks.

Question

A: What is Coverage area, Interference, and Security ?

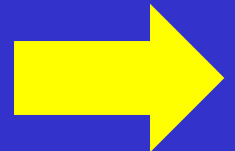


Frames 400

This method is used by Wireless frames to access the media.

Question

A: What is CSMA/CA (Carrier Sense Multiple Access / Collision Avoidance) ?

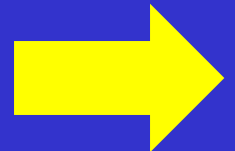


Frames 500

This type of frame requires only 1 byte for each physical address

Question

A: What is PPP ?

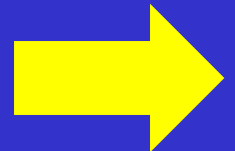


Potpourri 100

This type of cable would be used to connect a PC directly to a Router.

Question

A: What is a crossover cable ?

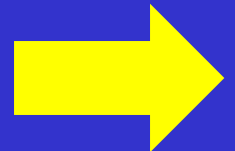


Potpourri 200

Fiber optic cables always operate in this duplex.

Question

A: What is Full Duplex ?

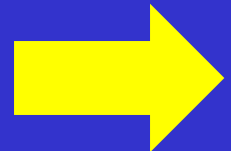


Potpourri 300

This type of cable is used to make an out of band console connection to a device

Question

A: What is a rollover cable ?

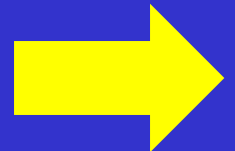


Potpourri 400

This type of poorly terminated cable has untwisted wires that cause this.

Question

A: What is crosstalk ?



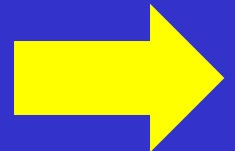
Potpourri

500

56000 Kb/s = _____ MB/s

Question

A: What is 7 MB/s ?



Final Jeopardy

This is the main purpose of the Data-Link layer

Question

A: What is allowing multiple physical connection types and framing techniques without influencing the Network Layer. Preparing Network Layer Packet for placement onto the physical media that transport the data?

100	100	100	100	100	100
200	200	200	200	200	200
300	300	300	300	300	300
400	400	400	400	400	400
500	500	500	500	500	500