Quiz 3_Ch 10-Ch 13 (password: 2626)

Due Nov 14 at 11:59pm   **Points** 10   **Questions** 40

Available Nov 10 at 12am - Nov 14 at 11:59pm 5 days   **Time Limit** 90 Minutes

Instructions

You will receive 0.25 points for each calculation question; **please enclose the detail calculation.**

You cannot come back to the previous question.

Thank you!

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	88 minutes	8.5 out of 10 *

* Some questions not yet graded

> ⊘ Correct answers are hidden.

Score for this quiz: **8.5** out of 10 *
Submitted Nov 14 at 9:32pm
This attempt took 88 minutes.

Question 1	0.25 / 0.25 pts

It is the responsibility of the processor to periodically check the status of the I/O module until it finds that the operation is complete.

◉ True

○ False

Question 2   0.25 / 0.25 pts

With isolated I/O there is a single address space for memory locations and I/O devices.

○ True

◉ False

Incorrect

Question 3   0 / 0.25 pts

The difference between virtual circuits and packet switching is _____

○ gateway connection

◉ the path of each packet

○ packet routing

○ point signal line

Question 4   0.25 / 0.25 pts

Which of the following is not part of the TCP/IP protocol suite?

○ ftp

○ http

◉ SMS

○ ssh

Question 5   0.25 / 0.25 pts

With a daisy chain the processor just picks the interrupt line with the highest priority.

○ True

◉ False

Question 6   0.25 / 0.25 pts

The amount of time that it takes for a packet to get from one end of the network to the other is called the

○ network broadcast delay.

○ network diameter delay time.

○ furthest node travel time.

◉ network propagation delay.

Question 7   0.25 / 0.25 pts

 Which of the following is a primary measure to keep the network and system resources intact and free from the results of intrusion?

○ CAPTCHAs

○ confidentiality

○ electronic signatures

◉ limiting physical access to network wiring and network equipment.

Question 8   Not yet graded / 0.25 pts

Please enclose the detail calculation:

A multiple hard disk is divided into 1100 sectors and 40,000 cylinders. There are six platter surfaces. Assume each block has 512 bytes. The disk is rotating at a rate of 4800 rpm. The disk has an average seek time of 12 msec. What is the total capacity of this disk?

Your Answer:

100*40000*6*512=135168000000 bytes.

Question 9   0.25 / 0.25 pts

The amount of time that it takes for a packet to get from one end of the network to the other is called the

○ network broadcast delay

○ furthest node travel time

○ network diameter delay time

◉ network propagation delay

Question 10   0.25 / 0.25 pts

Symmetric key cryptography requires

◉ the same key be used for both encryption and decryption.

○ two different keys, both private.

○ two different keys, one publicly available, and the other private

○ the same key be used, one publicly available, and the other private.

Question 11   0.25 / 0.25 pts

The upper _____ layers of the OSI model assume that a successful end-to-end connection is established and maintained at the transport layer. These layers are concerned with the flow of data and control between applications on the communicating nodes.

○ two

◉ three

○ five

○ four

Question 12   Not yet graded / 0.25 pts

 Please enclose the detail calculations:

How many connections are required for 60 nodes to be connected in a full mesh topology?

Your Answer:

No of connections = nodes(nodes-1)/2

so, 60(60-1)/2

60*(59)/2

1770 of connections are required for 60 nodes to be connected in a full mesh topology

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Incorrect

Question 13   0 / 0.25 pts

The channel architecture is more powerful and flexible, because_____

◉ it isolates and processes each operation independently

○ better performance alternative to the IDE bus

○ avoid conflicts between the CPU and I/O modules during transfers

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○ it data transfers between I/O and memory

Question 14   0.25 / 0.25 pts

 To solve the related problems of channel availability and maximum utilization, there must be a way to break long messages into smaller units. These units are called

- ○ envelopes

- ○ containers

- ● packets

- ○ boxes

Incorrect

Question 15   0 / 0.25 pts

The purpose of a bus interface is_____

- ○ overwhelm the signals on the bus

- ○ send signals on different lines in each bus

- ○ allowing each part of the system to be optimized separately

- ● provide the correct data transfer rate

Question 16   0.25 / 0.25 pts

Which Ethernet type is based logically on a star topology and when one node on the network wishes to communicate with another node, the switch sets up a direct connection between the two?

○ Mesh Ethernet

○ Ring Ethernet

◉ Switched Ethernet

○ Star Ethernet

Question 17   0.25 / 0.25 pts

**Which type of network is used to interconnect local area networks?
The primary motivation for this type of network is to improve overall
performance of a larger network by creating separate local area
networks for groups of users who communicate primarily with each
other.**

○ extended networks

○ connected networks

○ link networks

◉ backbone networks

Question 18   0.25 / 0.25 pts

**In a wireless network where the access points are connected by
radio, the mesh points operate at the _____ and are
essentially invisible to the upper layers of the network.**

◉ media access control layer (layer 2)

○ physical layer (layer 1)

○ session layer 5 (layer 5)

○ transport layer (layer 4)

Question 19   0.25 / 0.25 pts

Which of the following is not true about datagram switching?

◉ TCP/IP rarely uses datagram switching.

○ A routing decision can be based on shortest path to next node.

○ Each packet is routed from node to node independently.

○
A routing decision can be based on traffic conditions at the time of packet arrival.

Question 20   0.25 / 0.25 pts

The _____ contains logic for performing a communication function between the peripheral and the bus.

○ I/O processor

○ I/O command

○ I/O channel

◉ I/O module

Question 21   0.25 / 0.25 pts

A technique called _____ is where an individual computer system is used to simulate multiple computers, all sharing the same CPU and I/O facilities.

○ clustering

○ replicating

○ parallelization

◉ virtualization

Question 22   0.25 / 0.25 pts

In most computer systems, the CPU, memory, and other major components are mounted to wiring on a printed circuit board known as a(n)

○ circuit plane

○ peripheral board

○ adapter board

◉ motherboard

Question 23   0.25 / 0.25 pts

The PCI-Express is made up of a bundle of thirty-two serial, bidirectional point-to-point buses. Each bidirectional bus is called a(n)

○ inner bus.

◉ lane

○ sub-bus.

○ component bus.

Question 24   0.25 / 0.25 pts

The most common means of computer/user interaction is a _____.

○ monitor/printer

○ modem/printer

○ mouse/printer

◉ keyboard/monitor

Question 25   0.25 / 0.25 pts

The advantage of clustering is _____

○ grid

◉ load-balancing

○ commodity-off-the-shelf

○ isochronous data transfer

Incorrect

Question 26   0 / 0.25 pts

 The _____ layer is the key to the operation of Thunderbolt and what makes it attractive as a high-speed peripheral I/O technology.

◉ common transport

○ application

○ physical

○ cable

Question 27   0.25 / 0.25 pts

The primary external bus for connecting peripheral devices to a computer is _____

○ SATA

○ Serial Attached SCSI (SAS

◉ USB (Universal Serial Bus)

○ PCI-Express

Question 28   0.25 / 0.25 pts

_____describes the fundamental configuration, or layout, of a network

○ simplex channel

○ communication channel

○ full-duplex channels

◉ network topology

Question 29   0.25 / 0.25 pts

_____is a central connection device used to simplify wiring and maintenance

○ Ethernet

○ Local area network

◉ hub

○ gateway

Question 30   0.25 / 0.25 pts

The address for each node on an Ethernet is called a

_____

- ○ carrier sense multiple access

- ○ data link layer

- ○ collision

- ◉ MAC address

Question 31   0.25 / 0.25 pts

The purpose of the _____ is to take message from network applications and provide services that support reliable end-to-end communications

- ○ port

- ○ address resolution protocol

- ○ IP

- ◉ transport layer

Question 32   0.25 / 0.25 pts

The _____ contains I/O protocols that are mapped on to the transport layer.

○ physical

○ cable

◉ application

○ common transport

Question 33   0.25 / 0.25 pts

To restore the original waveform that was used to modulate the carrier , we use _____

○ frequency

○ filtering

◉ demodulator

○ wavelength

Question 34   0.25 / 0.25 pts

The main disadvantage of an I/O bus (and buses in general)_____

◉ the bus has fixed bandwidth that must be shared by all other devices

○ memory-mapped I/O

○ the processor spending much of its time indle waiting for each bus

○ iterrupts

Question 35   0.25 / 0.25 pts

I /O system can be divided into two major components: the technologies used to interface the I/O devices to the rest of the system and

_____

○ interface abstraction

◉ the I/O devices themselves

○ interrupts

○ specification

Question 36   0.25 / 0.25 pts

How does the virtual memory system prevent programs from accessing each other's data?

○ swapping systems copy all of the memory

○ reduces the amount of time spent copying data of of the hard disk

◉
memory from one program cannot target the physical address another program's data

○ every write to the main memory had to be sent to the disk

Question 37

0.25 / 0.25 pts

Device which is consists of a sensing mechanism integrated within the display screen called_____

○ smart card

○ optical character recognition device

◉ touch screen

○ CPU

Question 38

0.25 / 0.25 pts

To identify the network application requesting service, the transport protocol identifies the application that created the message and the application that is to receive the message with _____

○ application address numbers

◉ port numbers

○ network node numbers

○ application numbers

Question 39

0.25 / 0.25 pts

The network connection between nodes is not accessible from outside the cluster

◉ True

○ False

Question 40   **0.25 / 0.25 pts**

The upper _____ layers of the OSI model assume that a successful end-to-end connection is established and maintained at the transport layer. These layers are concerned with the flow of data and control between applications on the communicating nodes.

○ four

◉ three

○ five

○ two

Quiz Score: **8.5** out of 10