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

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

Available Nov 7 at 12am - Nov 14 at 11:59pm   **Time Limit** None

Instructions

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

You cannot come back to the previous question.

Thank you!

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	30 minutes	8.75 out of 10 *

Some questions not yet graded

⊙ Correct answers are hidden.

Score for this quiz: **8.75** out of 10 *

Submitted Nov 13 at 4:18pm

This attempt took 30 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 _____

○ point signal line

◉ packet routing

○ the path of each packet

○ gateway connection

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 propagation delay.

- ○ network diameter delay time.

- ○ furthest node travel time.

- ○ network broadcast 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?

- ○ confidentiality

- ○ electronic signatures

- ○ CAPTCHAs

- ◉ 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:

Ans : 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 diameter delay time

- ○ network broadcast delay

- ○ furthest node travel time

- ◉ network propagation delay

Question 10   0.25 / 0.25 pts

Symmetric key cryptography requires

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

○ two different keys, both private.

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

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

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.

○ four

◉ three

○ two

○ five

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:

Ans:

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

60(60-1)/2

60*(59)/2

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

Question 13   0.25 / 0.25 pts

The channel architecture is more powerful and flexible, because_____

○ better performance alternative to the IDE bus

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

○ it data transfers between I/O and memory

○ it isolates and processes each operation independently

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

○ containers

○ envelopes

○ boxes

◉ packets

Incorrect   ## Question 15   0 / 0.25 pts

The purpose of a bus interface is_____

○ send signals on different lines in each bus

○ overwhelm the signals on the bus

○ provide the correct data transfer rate

◉ allowing each part of the system to be optimized separately

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

◉ Switched Ethernet

○ Star Ethernet

○ Ring 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.

○ connected networks

◉ backbone networks

○ link networks

○ extended 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.

○ session layer 5 (layer 5)

◉ media access control layer (layer 2)

○ physical layer (layer 1)

○ 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 traffic conditions at the time of packet arrival.

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

○ Each packet is routed from node to node independently.

Question 20   0.25 / 0.25 pts

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

○ I/O command

○ I/O processor

◉ I/O module

○ I/O channel

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.

● virtualization

◯ replicating

◯ clustering

◯ parallelization

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)

◯ adapter board

◯ circuit plane

◯ peripheral 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)

○ sub-bus.

○ component bus.

○ inner bus.

◉ lane

Question 24

0.25 / 0.25 pts

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

◉ keyboard/monitor

○ mouse/printer

○ modem/printer

○ monitor/printer

Question 25

0.25 / 0.25 pts

The advantage of clustering is _____

○ load-balancing

○ isochronous data transfer

○ commodity-off-the-shelf

○ grid

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

○ PCI-Express

○ Serial Attached SCSI (SAS

◉ USB (Universal Serial Bus)

Question 28   0.25 / 0.25 pts

_____describes the fundamental configuration, or layout, of a network

◉ network topology

○ full-duplex channels

○ simplex channel

○ communication channel

Question 29   0.25 / 0.25 pts

_____is a central connection device used to simplify wiring and maintenance

○ Ethernet

◉ hub

○ gateway

○ Local area network

Question 30   **0.25 / 0.25 pts**

The address for each node on an Ethernet is called a

_____

○ collision

○ data link layer

○ carrier sense multiple access

◉ 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

○ address resolution protocol

○ port

○ IP

◉ transport layer

Question 32   0.25 / 0.25 pts

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

◉ application

○ cable

○ physical

○ common transport

Question 33   0.25 / 0.25 pts

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

○ frequency

○ wavelength

◉ demodulator

○ filtering

Question 34   0.25 / 0.25 pts

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

○ memory-mapped I/O

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

◉

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

○ 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 _____

◉ the I/O devices themselves

○ interface abstraction

○ specification

○ interrupts

Question 36   **0.25 / 0.25 pts**

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

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

○ swapping systems copy all of the memory

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

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◉

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

Question 37   **0.25 / 0.25 pts**

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

○ CPU

○ smart card

○ touch screen

○ optical character recognition device

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 numbers

○ application address numbers

○ network node numbers

◉ port 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.

- ○ five

- ○ four

- ⦿ three

- ○ two

Quiz Score: **8.75** out of 10