Midterm_Exam password: 2424 (Ch1- Ch9)

Due Oct 24 at 11:59pm **Points** 20.13 **Questions** 61
Available Oct 17 at 12am - Oct 24 at 11:59pm **Time Limit** 150 Minutes

Instructions

Once you have submitted an answer, you will not be able to change it later.

You will not be able to view the previous question.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	31 minutes	20.13 out of 20.13

ⓘ Correct answers are hidden.

Score for this quiz: **20.13** out of 20.13
Submitted Oct 24 at 2:04pm
This attempt took 31 minutes.

Question 1 — 0.33 / 0.33 pts

The components of an individual computer system consist of processing hardware, input devices, output devices, storage devices

- and operating system software
- application software and operating system software

and application programs

application software, file storage, and data processing

Correct

Question 2

0.33 / 0.33 pts

The _____ provides the physical mechanisms to input and output data, to manipulate and process data, and to electronically control the various input, output, and storage

computer software

network

data

computer hardware

Correct

Question 3

0.33 / 0.33 pts

Which of the following is *not* part of the conceptual view of a CPU?

- ALU
- Main memory
- Control Unit
- Interface Unit

Correct

Question 4

0.33 / 0.33 pts

The system architecture representation of the flow and processing of data within an organization is called_____

- application architecture
- flow control architecture
- three-tier architecture
- customer oriented architecture

Correct

Question 5

0.33 / 0.33 pts

The ____ acts as an interface between the operating system, device drivers, and applications and the devices that are attached via the USB host.

- (•) USB (universal serial bus) controller
- ( ) seek strategy
- ( ) I/O traffic controller
- ( ) search time

Correct

Question 6

0.33 / 0.33 pts

In a client-server architecture, the only limitations to running multiple applications on a single server are the potential slowdowns that may result from the load on the server computer and _____

- the traffic on the network to that server
- users who open many web browsers
- load on client computer
- traffic on the Internet

Correct

Question 7

0.33 / 0.33 pts

Data security is the ability of a system to_____

- handle a growing amount of work
- allow access to information when it is needed
- protect data against unauthorized access or modification.
- allow configuration, monitoring, and maintaining operation

Correct

Question 8

0.33 / 0.33 pts

In a client-server architecture, the only limitations to running multiple applications on a single server are the potential slowdowns that may result from the load on the server computer and_____

- (•) the traffic on the network to that server
- ( ) users who open many web browsers
- ( ) load on client computer
- ( ) traffic on the Internet

Correct

Question 9

0.33 / 0.33 pts

The protocol that makes communication between a Web server and a database application possible is called_____

- ( ) SQL
- (•) Common Gateway Interface
- ( ) Database Control Language

HTTP

Correct

Question 10

0.33 / 0.33 pts

How many binary digits does it take to represent the decimal number 2013?

8

16

2013

11

Correct

Question 11

0.33 / 0.33 pts

How many bytes does it take to store the binary equivalent of the decimal number 1945?

- (•) 2
- ( ) 1
- ( ) 10
- ( ) 4

Correct

Question 12

0.33 / 0.33 pts

Eight raised to the power zero is_____

- ( ) -8
- (•) 1
- ( ) 0
- ( ) 8

Correct

Question 13

0.33 / 0.33 pts

A single digit that can have only one of two values, 0 or 1, is a_____

- character
- bit
- signal
- blip

Correct

Question 14

0.33 / 0.33 pts

The number of different digits, including zero, that exist in the number system is the_____

- base
- range
- parameter
- field

Correct

Question 15

0.33 / 0.33 pts

Input from a device that represents a continuous range of data is known as_____

- metadata
- analog data
- discrete data
- various data

Correct

Question 16

0.33 / 0.33 pts

Information that describes or interprets the meaning of the data is known as_____

- EBCDIC

analog

metadata

ASCII

Correct

Question 17

0.33 / 0.33 pts

The term **distributed operating system** is used to describe a specific set of rules used to control the flow of messages through the network.

True

False

Correct

Question 18

0.33 / 0.33 pts

Image files that store each individual point within the image are_____

- glyphs
- bitmap images
- object images
- vector images

Question 19

0.33 / 0.33 pts

Operation of the LMC

The ADD instruction adds data from_____

- a mailbox to the in basket
- one mailbox to another mailbox
- the in basket to a mailbox
- a mailbox to the calculator

Question 20

0.33 / 0.33 pts

Operation of the LMC

A STORE command will leave the original data in the mailbox

- deleted
- overwritten
- corrupted
- unchanged

Question 21

0.33 / 0.33 pts

Representing Numerical Data

How do computers store all data and program instructions?

- As binary numbers
- As ASCII characters
- As decimal numbers
- As algebraic equations

Question 22

0.33 / 0.33 pts

The term **protocol** is used to describe a specific set of rules used to control the flow of messages through the network.

- (•) True
- ( ) False

Question 23

0.33 / 0.33 pts

An 8-bit storage location can store any unsigned integer of value between 0 and

- ( ) 512
- ( ) 16
- (•) 255
- ( ) 7

Question 24

0.33 / 0.33 pts

What does BCD stand for?

- (•) Binary-Coded Decimal
- ( ) Binary Common Denominator
- ( ) Binary Character Data
- ( ) Binary Calculating Device

Question 25

0.33 / 0.33 pts

How many BCD digits can be stored in one byte?

- ( ) 7
- (•) 2
- ( ) 255

- 1

Question 26

0.33 / 0.33 pts

If we complement the value twice, it will

- return to its original value
- be twice as big
- reset the carry flag
- cause an overflow error

Question 27

0.33 / 0.33 pts

The ALU and CU together are known as the

- instruction set
- program counter

- (•) CPU
- ( ) Memory Management Unit

Question 28

0.33 / 0.33 pts

The 1-bit registers that are used to allow the computer to keep track of special conditions (like overflow or power failure) are often called

- ( ) I/O counters
- (•) flags
- ( ) the ALU
- ( ) loops

Question 29

0.33 / 0.33 pts

The mailboxes in the LMC model are the equivalent to a real computer's

- ports
- memory
- CPU
- control unit

Question 30

0.33 / 0.33 pts

The different ways of establishing memory addresses within an instruction are called

- addressing modes
- MAR codes
- MDR codes
- programmable modes

Question 31

0.33 / 0.33 pts

Chapter 8: CPU and Memory Design Enhancement and Implementation

CPU architecture is defined by the basic characteristics and major features of the CPU. “CPU architecture” is sometimes called_____

- (•) instruction set architecture
- ( ) CPU design and organization
- ( ) structural organization
- ( ) architecture design

Question 32

0.33 / 0.33 pts

Section 8.2 CPU Features and Enhancements

The _____ must be designed to assure that each step of the instruction cycle has time to complete before the results are required by the next step.

- ( ) ALU
- (•) clock cycle
- ( ) Control Unit

- instruction pointer

Question 33

0.33 / 0.33 pts

Overlapping instructions—so that more than one instruction is being worked on at a time—is known as the_____

- conveyor belt method
- accelerator method
- assembly line method
- pipelining method

Question 34

0.33 / 0.33 pts

Section 9.3 Interrupts: Which of the following **is not a function** of how interrupts are used?

- A means of allocating CPU time

- A completion signal
- A way of buffering large amounts of data
- An abnormal event indicator

Question 35

0.33 / 0.33 pts

Section 9.4 Direct Memory Access: Data from disks, and tapes, and flash memory are transferred only in _____.

- No answer text provided.
- chunks of data
- blocks of data
- bits

Question 36

0.33 / 0.33 pts

Internal interrupts caused by events related to problems or special conditions within the computer itself are sometimes called

- traps or exceptions
- exclusions
- exemptions
- special errors

Correct

Question 37

0.33 / 0.33 pts

Section 9.3 Interrupts

Instructions that are intended for use by an operating system program, but not by an application program, are called

- privileged instructions
- limited instructions
- prevalent instructions
- control instructions

Correct

Question 38

0.33 / 0.33 pts

Section 9.3 Interrupts

When an interrupt causes temporary suspension of the program in progress, all the pertinent information about the program being suspended, including the location of the last instruction executed, and the values of data in various registers are stored in an area of memory known as the

- memory dump block
- process control block
- program method block

Correrct

Question 39

0.33 / 0.33 pts

The work performed by an individual computer system within the IT system can be characterized by_____

- hardware and software
- input, processing, and output
- storage processing and output
- input, storage and output

Question 40

0.33 / 0.33 pts

As a matter of necessity, network interfaces must conform to standard agreements, known as _____ **,** for messages to be understood by both computers during a message exchange between a pair of computers.

- device controllers
- Ethernet standards
- I/O services
- protocols

Question 41

0.33 / 0.33 pts

Many of the internal OS services are provided by the _____ module, which contains the most important operating system processing functions.

- CPU
- kernel
- root
- central

Question 42

0.33 / 0.33 pts

When the computer is started, a bootstrap or IPL (Initial Program Load) begins testing the system. Where is this bootstrap program stored?

- RAM
- hard drive
- ROM
- virtual memory

Question 43

0.33 / 0.33 pts

Section 1.4 Storage devices communicate with a computer using protocols. One such protocol is:

- serial encoded messages (SEM)
- PATA
- hard-disk parallel communications protocol (HDPC)
- (•) SATA

Question 44

0.33 / 0.33 pts

The alphanumeric code that has codes for the characters of nearly every character-based alphabet of the world is

- Ordinal
- (•) Unicode
- EBCDIC
- ASCII

Question 45

0.33 / 0.33 pts

The nature of display technology makes it much more convenient and cost effective for regular printers and display screens to display and print all images as

- equations
- pseudocode
- bitmaps
- palettes

Question 46

0.33 / 0.33 pts

Section 4.3 The individual elements that form a bitmap image are called

- grid bits
- palettes
- resolution
- pixels

Question 47

0.33 / 0.33 pts

Which of the following is not a common function of an I/O disk controller?

- The I/O disk controller provides a buffer where the data from memory can be held until it can be transferred to the disk.
- The I/O disk controller has interrupt capability, which it uses to notify the CPU when the transfer is complete.
- The I/O disk controller manages main memory during the transfer.
- The I/O disk controller recognizes messages addressed to it and accepts commands from the CPU.

Question 48

0.33 / 0.33 pts

Interrupts that can never be temporarily disabled by program instructions are called_____

- non-transferable.
- nonmaskable.
- invariable.

- unchangeable.

Question 49

0.33 / 0.33 pts

The computer provides a CARRY FLAG that is used to correct for carries and borrows that occur when large number must be separated into parts to perform additions and subtractions.

- (•) True
- ( ) False

Question 50

0.33 / 0.33 pts

The sources and destinations of data for an instruction, whether implicit or explicit , are known as SATURATION

- ( ) True
- (•) False

Question 51

0.33 / 0.33 pts

Section 5

Suppose you are writing a program that needs to represent a maximum 50,000 whole things (i.e. integer data type).

Would be better: to use a long integer (64 bits)

- True
- False

Question 52

0.33 / 0.33 pts

In the von Neumann architecture, memory is addressed

- by location number
- by contents of the memory location
- by the value stored
- by instructions only

Question 53

0.33 / 0.33 pts

Eight raised to the power zero is_____

- (•) 1
- ( ) 0
- ( ) -8
- ( ) 8

Question 54

0.33 / 0.33 pts

The main memory, often known as primary storage, working storage, or RAM (for random access memory), holds_____

- ( ) program instructions, data, and instructions for booting the computer
- (•) program instructions and data
- ( ) program instructions
- ( ) data

Question 55

0.33 / 0.33 pts

The COFFEE BREAK(HALT) instruction_____.

- ( ) empties the out basket

clears all mailboxes

pauses the program

ignores the address portion of the instruction

Question 56

0.33 / 0.33 pts

The register that will hold the data value that is being transferred between the CPU and a particular memory location is called the_____

MDR

MAR

ALU

PC

Question 57

0.33 / 0.33 pts

Simultaneous thread multiprocessing (STM)is also known as _____

superthreading

- hyperthreading
- expert threading
- concurrent threading

Question 58

0.33 / 0.33 pts

In Symmetrical Multiprocessing (SMP)each CPU has_____

- identical access to the operating system, I/O and memory
- identical access to memory
- identicalaccess to the I/O and memory
- identical access to the operating system, and to all system resources, including memory

Question 59

0.33 / 0.33 pts

The incompatibilities in speed between the various devices and the CPU make I/O synchronization difficult, especially if there are multiple devices attempting to do I/O at the same time. To handle these problems data is usually stored_____

- on the disk drive
- inexternal storage
- in a buffer
- on the network

Question 60

0.33 / 0.33 pts

Four pieces of data must be provided to the I/O controller for a particular I/O device to initiate the DMA transfer. Which of the following is not required?

- The starting location of the block of data in memory
- The location of the data on the I/O device
- The length of time required to transfer the data
- The size of the block to be transferred

Question 61

0.33 / 0.33 pts

Which of the following is not one of the three primary conditions for direct memory access to take place?

There must be a means to avoid conflict between the CPU and the I/O controller

There must be a method to connect together the I/O interface and memory.

The I/O controller associated with the particular device must be capable of reading and writing to memory

The I/O device must have an internal buffer

Quiz Score: **20.13** out of 20.13