

Test 3 consists of 50 questions drawn from the following:

Mercer County Community College, Computer Concepts, Test 3
Covers Chapters 2, 6, 8, and 9 for IST101, IST102, and IST103 (all sections)

1. A(n) _____ is the container in which you find the motherboard, hard drive, and CPU.
2. A(n) _____ is found in one of two states, off or on.
3. Based on the idea of an electrical switch, the _____ language consists of 0s and 1s that a computer understands.
4. _____ was put into use in 1945 and took up 1,800 square feet of floor space.
5. A(n) _____ is material that can transmit or prohibit the flow of electricity.
6. A(n) _____ is made up by layering semiconductor material.
7. The base 10 number system is also called:
 - A. binary notation.
 - B. hexadecimal notation.
 - C. decimal notation.
 - D. unary notation.
8. The base 2 number system is also called:
 - A. binary notation.
 - B. hexadecimal notation.
 - C. decimal notation.
 - D. unary notation.
9. The base 16 number system is also called:
 - A. binary notation.
 - B. hexadecimal notation.
 - C. decimal notation.
 - D. unary notation.
10. Using 8 bits, the _____ code can represent the 26 uppercase letters and the 26 lowercase letters in the English language and punctuation symbols as well as special characters.
11. The _____ connects all of the system's electric components: the CPU, memory, expansion slots, and electrical paths that connect these components.
12. All of the following are examples of processors EXCEPT:
 - A. Pentium.
 - B. Celeron.
 - C. Plutonium 3.
 - D. Itanium 2.
13. The PowerPC G5 processor was designed for the:
 - A. Xbox.
 - B. Apple computer.
 - C. Nintendo Wii.
 - D. Windows operating system.
14. _____ is measured in Hertz and refers to how quickly a processor can work.
15. Hyperthreading and multi-core technology differ:
 - A. in that hyperthreading requires that the resources of one chip are shared whereas multi-core has two or more chips and uses its own resources.
 - B. in that multi-core is slower and hyperthreading is hyper, or fast.

- C. in that hyperthreading technology uses a bigger chip whereas multi-core has multiple small chips.
- D. not at all, they are just different names for the same thing.

16. The multi-step process that a CPU follows for each instruction it encounters is called:

- A. the CPU cycle.
- B. the instruction cycle.
- C. the processor cycle.
- D. the machine cycle.

17. The following are steps in the CPU machine cycle EXCEPT:

- A. fetch.
- B. decode.
- C. generate.
- D. store.

18. A system clock is built into the:

- A. hard drive.
- B. motherboard.
- C. expansion card.
- D. bus.

19. The proper sequence of actions in a machine cycle is:

- A. fetch → decode → execute → store.
- B. fetch → execute → decode → store.
- C. decode → fetch → execute → store.
- D. execute → decode → store → fetch.

20. The _____ of the CPU manages the on/off switches inside the CPU.

21. In a CPU, the control unit works most like a:

- A. calculator.
- B. traffic cop, directing traffic.
- C. road block, stopping incoming traffic to the CPU.
- D. translator, converting the letters entered on the keyboard into binary code.

22. Clock speed is measured in:

- A. seconds.
- B. minutes.
- C. Hertz.
- D. bits per second (bps).

23. Cache memory is all of the following EXCEPT:

- A. located close to the CPU.
- B. very quick.
- C. categorized by levels 1, 2, and 3.
- D. easy to add to an existing computer system.

24. Which of the following types of memory is optional to most computers?

- A. Level 1 cache
- B. Level 2 cache
- C. Level 3 cache
- D. RAM

25. Which programming language is a string of 1s and 0s?

- A. Machine language
- B. Assembly language
- C. ADA
- D. C++

26. A specific set of commands understandable by the CPU is called the:

- A. instruction set.

- B. clock cycle.
 - C. program instructions.
 - D. instruction code.
27. Which programming language uses simplistic commands such as ADD, SUB, and MOVE?
- A. Machine language
 - B. Assembly language
 - C. ADA
 - D. C++
28. The _____ refers to the commands that a CPU knows how to complete.
29. In a 64-bit processor, the 64 refers to the _____ size.
30. The ALU part of the CPU:
- A. calculates and performs logical operations.
 - B. directs the flow of instructions.
 - C. stores information to the cache.
 - D. fetches the initial instruction.
31. _____ refers to the time it takes to locate instructions and make them available to the CPU.
32. The amount of bits that a bus can carry at one time is referred to as bus:
- A. height.
 - B. width.
 - C. depth.
 - D. measurement.
33. A _____ is a group of computers that work collaboratively on complex problems using specialized software.
34. The ability to work on more than one instruction during the four stages of processing is called:
- A. expanding.
 - B. stacking.
 - C. pipelining.
 - D. staging.
35. The use of multiple processors working together on one large problem is called:
- A. inline processing.
 - B. parallel processing.
 - C. group processing.
 - D. expansion processing.
36. The binary number system uses the numbers:
- A. 0 through 9.
 - B. 1 through 10.
 - C. 0 and 1.
 - D. 1 and 2.
37. The decimal number system uses the numbers:
- A. 0 through 9.
 - B. 1 through 10.
 - C. 0 and 1.
 - D. 1 and 2.
38. The hexadecimal number system uses the numbers:
- A. 0 through 9.
 - B. 1 through 10.
 - C. 0 through 9 and letters A–F.

D. 0 through 15.

- 39.** ALU stands for:
- A. Arithmetic Logic Unit.
 - B. Adding Logic and Usability.
 - C. Alter, Load, and Use.
 - D. Alternate Load Usage.
- 40.** The maximum number of CPUs that powerful mainframes can use is:
- A. 100.
 - B. 56.
 - C. 32.
 - D. 15.
- 41.** The current range of RAM in a computer is between 1 GB and:
- A. 75 GB.
 - B. 33 GB.
 - C. 15 GB.
 - D. 4 GB.
- 42.** A place on the system unit that allows the transfer of data between a variety of devices and the computer is a:
- A. port.
 - B. drive.
 - C. keyboard.
 - D. ROM.
- 43.** Which of the following is TRUE about USB ports?
- A. They are being phased out by parallel ports.
 - B. USB 2.0 is faster than FireWire.
 - C. They transfer information wirelessly.
 - D. They have speeds up to 480 megabits per second.
- 44.** The port most often used to connect a keyboard to a computer is a(n):
- A. WiFi port.
 - B. Ethernet port.
 - C. USB port.
 - D. FireWire port.
- 45.** To connect your computer to a network, the _____ port may be used.
- 46.** Modem ports:
- A. are only external to the computer.
 - B. are only internal to the computer.
 - C. can be either internal or external to the computer.
 - D. are neither external nor internal to the computer.
- 47.** If you want to connect a TV to your computer, you need to use the:
- A. video port.
 - B. S-video port.
 - C. DVI port.
 - D. sound port.
- 48.** If you want to connect a flat-panel monitor to your computer, you need to use the:
- A. video port.
 - B. S-video port.
 - C. DVI port.
 - D. Ethernet port.
- 49.** Sound cards allow you to connect a variety of devices to your computer, including all of the following EXCEPT:

- A. a speaker.
 - B. a microphone.
 - C. a joystick.
 - D. a TV.
- 50.** Which of the following statements is FALSE?
- A. Bluetooth is a wireless protocol for short-distance transmissions.
 - B. Different ports communicate at different speeds.
 - C. An Ethernet port is the same thing as a modem port.
 - D. You use a video port to attach your monitor to your computer.
- 51.** High-speed memory locations are:
- A. used by graphics programs to store images.
 - B. used by the CPU while processing information.
 - C. available for permanent storage.
 - D. nonvolatile.
- 52.** The cache and registers are inside the:
- A. RAM.
 - B. hard drive.
 - C. CPU.
 - D. ROM.
- 53.** What is a large, long-term storage area where data and programs can be stored?
- A. Cache
 - B. Registers
 - C. RAM
 - D. Hard drive
- 54.** Why don't the CPU registers make a good choice for working storage space?
- A. They are too slow.
 - B. They are too large.
 - C. They are too small.
 - D. They are erased when the power goes off.
- 55.** The advantage of a hard drive versus cache and registers is that:
- A. it holds more data.
 - B. it is volatile.
 - C. it is faster.
 - D. it is memory bound.
- 56.** When performing multiple tasks at once, you can avoid slowing down your computer by:
- A. increasing the size of the hard disk drive.
 - B. installing additional registers.
 - C. installing additional RAM.
 - D. adding an expansion card.
- 57.** To upgrade the CPU you:
- A. must replace the CPU chip.
 - B. need to swap small RAM chips for larger chips.
 - C. need to add cache.
 - D. You cannot upgrade a CPU.
- 58.** If you choose to replace the CPU, you must make sure the replacement is compatible with the:
- A. motherboard.
 - B. register.
 - C. cache.
 - D. hard drive.

- 59.** You can keep adding more RAM as long as:
- A. you have more empty slots.
 - B. the slots can take a larger capacity RAM chip than what is in there.
 - C. you have more empty slots, or the filled slots can take a larger capacity RAM chip.
 - D. you add more interface cards to create more slots.
- 60.** What is a high-speed, large area of working storage space that can be used while running programs?
- A. Cache
 - B. Registers
 - C. RAM
 - D. Hard drive
- 61.** Hard disk drives can be found in all of the following EXCEPT:
- A. computers.
 - B. iPods.
 - C. digital cameras.
 - D. memory cards.
- 62.** Nonvolatile storage:
- A. is erased whenever the power goes off.
 - B. is remembered even when the power goes off.
 - C. refers to the kind of memory used in older computers.
 - D. is quick to program and slow to decay.
- 63.** Why must the hard drive case remain sealed shut?
- A. Because any change in the balance of the arms and motor will destroy its balance.
 - B. So that you can only eject the disk when it is finished.
 - C. To avoid contact with contaminants that can destroy data.
 - D. Because it is soldered together and does not have a seam to open.
- 64.** Hard drives can increase their performance by:
- A. spinning faster.
 - B. decreasing the number of platters.
 - C. caching data.
 - D. allowing read/write heads to directly touch platters.
- 65.** How is information written in the computer?
- A. in a ring
 - B. in binary code
 - C. in platters
 - D. in optical language
- 66.** All of the following are true about read/write heads EXCEPT:
- A. they touch the platters when writing data.
 - B. they can reach every possible bit of data.
 - C. they spin on a cushion of air.
 - D. they are moved by the actuators.
- 67.** Formatting a disk:
- A. marks it into sections called tracks and sectors.
 - B. fills the disk with data from the inside to the outside.
 - C. compresses files to make disk access more efficient.
 - D. puts broken pieces of files together.
- 68.** When the computer locates the block of data it is looking for on the hard drive, it:
- A. stops the spinning of the drive and goes into sleep mode.
 - B. sends the data from the drive to the bus.
 - C. formats the data.
 - D. moves it to a better location on the disk.
- 69.** What sends a signal to the hard drive when data is requested?
- A. the DC spindle motor

- B. the actuator
- C. the bus
- D. the controller

70. Which of the following statements regarding fragmentation is FALSE?
- A. Fragmentation happens only on older hard drives.
 - B. Fragmentation means that pieces of each file are spread throughout the disk.
 - C. Fragmentation is the result of deleting and saving files.
 - D. Fragmentation can result in slowing down the computer.
71. Which port is used to connect a laptop to a television?
- A. parallel
 - B. serial
 - C. S-video
 - D. VGA
72. Which of the following is NOT true?
- A. Tablets are smaller and lighter than laptops.
 - B. Tablets use FireWire or USB ports to connect to external devices.
 - C. Laptops often offer USB ports.
 - D. Many new laptops include a fixed floppy drive.
73. A place on the laptop where different devices may be swapped in and out is called a(n):
- A. open port.
 - B. variable access point.
 - C. modular bay.
 - D. expansion port.
74. _____ allows information entered with a pen to be converted into typed text.
75. If you're editing digital videos, which kind of port is good to have for downloading the video?
- A. FireWire
 - B. S-video
 - C. Microphone
 - D. Tele-vid
76. If you don't have all the built-in connectors you would like in a laptop, you can add:
- A. fixed docks.
 - B. fixed bays.
 - C. expansion cards.
 - D. ports.
77. A(n) _____ port allows a printer to be connected directly to a laptop.
78. Fixed bays are used for:
- A. swapping devices in a PC.
 - B. permanent DVD drives.
 - C. Tablet PCs.
 - D. faster transfer of data.
79. A touch-sensitive monitor, a pen for on-screen writing, and handwriting recognition software are features of a(n):
- A. laptop PC.
 - B. desktop PC.
 - C. PDA.
 - D. tablet PC.
80. What is used for faster transfer of data?
- A. Serial port
 - B. Modular bay
 - C. FireWire
 - D. Ethernet

- 81.** What is the binary representation of the number 7?
A. 1110
B. 1101
C. 0111
D. 0101
- 82.** What number is represented with the binary code 0110?
A. 6
B. 7
C. 8
D. 9
- 83.** An 8-bit binary digit can be interpreted by the computer as all of the following EXCEPT:
A. a character.
B. a number.
C. a letter.
D. an entire file
- 84.** When all three colors are set to zero:
A. the light for each color is turned on.
B. the color is black.
C. the decimal and hexadecimal values are different.
D. the color is white.
- 85.** What happens when you dump the 10^2 bucket 10 times?
A. the decimal number is 1,000
B. the example cannot display the results
C. the bucket is empty
D. it stops after nine times
- 86.** What base 16 number results if you dump the 16^0 bucket 10 times?
A. 00A
B. 010
C. 016
D. 009
- 87.** Without dumping the bucket, what do you think the results will be if you dump the 16^1 bucket 10 times?
A. 100
B. 0A0
C. A00
D. 090
- 88.** What binary number is equal to hexadecimal 8F?
A. 00800F
B. 10001111
C. 1001100
D. 143
- 89.** When all three colors are set to zero:
A. the light for each color is turned off.
B. the color is black.
C. the decimal and hexadecimal values are the same.
D. All of the above
- 90.** Which of the following is TRUE when using RGB numbers?
A. the higher the number, the lower the level of brightness
B. the higher the number, the higher the level of brightness
C. the higher the number, the lower the level of contrast
D. the higher the number, the higher the level of contrast

- 91.** Advocates for protecting personal privacy use all of these arguments EXCEPT:
- A. If the government is collecting information by watching citizens, it might misuse the data.
 - B. If I'm not doing anything wrong, then you have no reason to watch me.
 - C. Requiring national ID cards is reminiscent of Soviet regimes.
 - D. Projects like a national ID system are worth the cost of implementation.
- 92.** Which of the following is NOT an ethical philosophy?
- A. Dynamic ethics
 - B. Situational ethics
 - C. Judeo-Christian ethics
 - D. Moral relativism
- 93.** Which of the following is NOT a criteria used in "fair use" decisions?
- A. The purpose of the "fair use" of the work
 - B. How much of the copyrighted material is being used
 - C. The creator of the "fair use" material
 - D. The effect of the "fair use" of the material
- 94.** If a country requires Internet service providers to block objectionable foreign Web sites, this raises issues regarding:
- A. intellectual property.
 - B. fair use.
 - C. personal privacy.
 - D. censorship.
- 95.** If electronic toll pass records are used as evidence in a divorce case, this would raise questions regarding:
- A. social justice.
 - B. personal privacy.
 - C. fair use.
 - D. free speech.
- 96.** If an individual created a set of songs that imitated the style and lyrics of songs from Disney's "Lion King," this would be an issue dealing with:
- A. personal privacy.
 - B. social justice.
 - C. copyright.
 - D. censorship.
- 97.** All of the following are arguments to ban online gambling EXCEPT:
- A. Internet gambling is too easy for minors to get involved with.
 - B. Internet gambling may lead to a gambling addiction.
 - C. Prohibiting online gambling would send it underground.
 - D. Internet gambling makes it hard to ensure that the operations are "honest."
- 98.** Which of the following statements is FALSE?
- A. Technology often moves faster than the rules required to govern it.
 - B. Intellectual property is protected through copyright laws.
 - C. The policy of "fair use" allows copyrighted music to be reproduced for a profit without the permission of the creator.
 - D. Original music, writing, and art are considered intellectual property.
- 99.** Divide 1010 by 10 = _____
- 100.** Divide FFFF by A = _____