

**Computer Science 1: 2017 Unit 1, An Overview, Part 1**

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**MULTIPLE CHOICE**D

1. The CPU is sometimes called the \_\_\_\_\_.

- a. abacus
- b. hard drive
- c. random access memory
- d. microprocessor

**Points:** 1 / 1A

2. RAM stands for \_\_\_\_\_.

- a. random access memory
- b. brain
- c. abacus
- d. microprocessor

**Points:** 1 / 1B

3. 8 bits =

- a. 1000 bytes
- b. 1 byte
- c. read only memory
- d. 1,000,000 bytes

**Points:** 1 / 1C

4. ROM stands for \_\_\_\_\_.

- a. 1000 bytes
- b. 1 byte
- c. read only memory
- d. 1,000,000 bytes

**Points:** 1 / 1A

5. 1 gigabyte is


- a.  $2^{10}$  bytes.
- b. 1,048,576 bytes.
- c. 1,073,741,824 bytes.
- d. 1024 bytes.

**Points:** 0 / 1A

6. What is the term used for 4 bits?


- a. nibble
- b. bit
- c. kibble
- d. byte

**Points:** 1 / 1

 B 7. The part of the computer; a single component, that does the actual computing is the \_\_\_\_\_.


- a. Monitor
- b. Central Processing Unit
- c. Keyboard
- d. RAM

**Points:** 1 / 1

 A 8. A \_\_\_\_\_ is simply a list of unambiguous instructions meant to be followed mechanically by a computer.


- a. program
- b. list
- c. case
- d. applet

**Points:** 1 / 1

 C 9. A computer is built to carry out instructions that are written in a low-level language called \_\_\_\_\_.


- a. simple language
- b. complex language
- c. machine language
- d. motherboard language

**Points:** 1 / 1

 A 10. When the CPU executes a program, that program is stored in the computer's \_\_\_\_\_ (also called the \_\_\_\_\_).

- a. main memory, RAM
- b. hard drive, disk
- c. motherboard, hard drive
- d. ROM, main memory

**Points:** 1 / 1

 B 11. The computer's main memory consists of a sequence of memory \_\_\_\_\_.

- a. values
- b. locations
- c. numbers
- d. programs

**Points:** 1 / 1


- Points:** 1 / 1

- Points:** 1 / 1

- Points:** 1 / 1


- Points:** 1 / 1

- Points:** 1 / 1

 B 17. A computer is a machine built of millions of tiny switches called \_\_\_\_\_, which have the property that they can be wired together in such a way that an output from one switch can turn another switch on or off.


- a. transistors
- b. bits
- c. circuits
- d. lights

**Points:** 0 / 1

 A 18. A binary number is made up of just two possible digits, \_\_\_\_\_ and \_\_\_\_\_.


- a. 0, 1
- b. 2, 4
- c. 0, 16
- d. 8, 32

**Points:** 1 / 1

 C 19. When a machine language instruction is loaded into the CPU, certain \_\_\_\_\_ are turned on or off in the pattern that encodes that particular instruction.

- a. buttons
- b. variables
- c. switches
- d. wired

**Points:** 1 / 1

 C 20. A computer system typically includes devices such as a \_\_\_\_\_ for storing programs and data files.


- a. printer
- b. closet
- c. hard drive
- d. monitor

**Points:** 1 / 1

 D 21. A computer system may include devices such as a \_\_\_\_\_ for user input.


- a. RAM
- b. printer
- c. hard drive
- d. mouse

**Points:** 1 / 1

 A 22. A computer system includes devices such as a \_\_\_\_\_ which can be used to display the computer's output.


- a. monitor
- b. keyboard
- c. hard drive
- d. network interface

**Points:** 1 / 1

 B 23. The CPU communicates with each device in a system, using a \_\_\_\_\_, which consists of software that the CPU executes when it has to deal with the device.


- a. telephone
- b. device driver
- c. tin can
- d. email message

**Points:** 1 / 1

 A 24. A \_\_\_\_\_ is a set of wires that carry various sorts of information between the devices connected to those wires.


- a. bus
- b. car
- c. cable
- d. boat

**Points:** 1 / 1

 C 25. The CPU responds to an interrupt signal by \_\_\_\_\_.

- a. sending an electric shock to the keyboard
- b. sending a pop-up message to the user's computer screen
- c. putting aside whatever it is doing in order to respond to the interrupt
- d. ignoring it

**Points:** 1 / 1

 B 26. The instructions that do the processing necessary to respond to an interrupt is called an \_\_\_\_\_.


- a. program
- b. interrupt handler
- c. instruction manual
- d. automatic distracter

**Points:** 1 / 1

 C 27. Events happen "\_\_\_\_\_,", that is, at unpredictable times.


- a. predictably
- b. automatically
- c. asynchronously
- d. mechanically

**Points:** 1 / 1

 C 28. All modern computers use \_\_\_\_\_ to perform several tasks at once.


- a. multiprocessors
- b. memory
- c. multitasking
- d. tweeting

**Points:** 1 / 1

 A 29. Some computers can be used by several people at once since the CPU is so fast, it can quickly switch its attention from one user to another, this type of multitasking is called \_\_\_\_\_.


- a. timesharing
- b. networking
- c. an mmorpg
- d. facebooking

**Points:** 1 / 1

 A 30. The \_\_\_\_\_ is the basic, essential software without which a computer would not be able to function.


- a. operating system
- b. electrical system
- c. word processor
- d. web browser

**Points:** 1 / 1

 B 31. \_\_\_\_\_ consists of very simple instructions that can be executed directly by the CPU of a computer.


- a. Program language
- b. Machine language
- c. English
- d. Artificial intelligence

**Points:** 1 / 1

 A 32. Almost all programs are written in \_\_\_\_\_ programming languages.


- a. high-level
- b. complex
- c. easy
- d. low-level

**Points:** 1 / 1

 C 33. Some high-level programming languages include \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_.


- a. machine language, assembly, fortran
- b. English, Spanish, Russian
- c. Java, Pascal, C++
- d. Microsoft, Apple, Unix

**Points:** 1 / 1

 B 34. Translation is done by a program called a \_\_\_\_\_.


- a. assembler
- b. compiler
- c. translator
- d. text editor

**Points:** 1 / 1

 A 35. The designers of Java chose to use a combination of \_\_\_\_\_.


- a. computation and interpretation
- b. documentation and reiteration
- c. compilation and interpretation
- d. compilation and indiscretion

**Points:** 0 / 1

 A 36. The Java interpreter, a so-called "virtual" computer, is known as the \_\_\_\_\_, or JVM.


- a. Java Virtual Machine
- b. Virtual Reality System
- c. Java Programming Language
- d. Java Velocity Manager

**Points:** 1 / 1

 D 37. The Java programmers use the \_\_\_\_\_ which includes the Java compiler.

- a. Java Virtual Machine (JVM)
- b. Java Compiler Kit (JCK)
- c. Java Programming Language (JPL)
- d. Java Development Kit (JDK)

**Points:** 1 / 1

 B 38. A different Java bytecode interpreter is needed for each type of \_\_\_\_\_, but once a computer has a Java bytecode interpreter, it can run any Java bytecode \_\_\_\_\_.

- a. program, process
- b. computer, program
- c. student, problem
- d. country, marathon


**Points:** 1 / 1

 B 39. It is the combination of Java and Java bytecode that is \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

- a. good, bad, ugly
- b. platform-independent, secure, network-compatible
- c. platform-dependent, secure, network-incompatible
- d. redundant, insecure, obsolete


**Points:** 1 / 1



 D 40. The compiled bytecode programs can then be executed by a standard \_\_\_\_\_.


- a. web browser
- b. programmer
- c. JVM
- d. computer

**Points:** 0 / 1

 B 41. To work with data, you need to understand \_\_\_\_\_ and \_\_\_\_\_.


- a. data, instructions
- b. variables, types
- c. control structures, subroutines
- d. code, more code

**Points:** 1 / 1

 C 42. The programmer needs to keep in mind that a variable name refers to a kind of "\_\_\_\_\_" in memory that can hold data.


- a. hole
- b. void
- c. box
- d. gap

**Points:** 0 / 1

 D 43. In Java and in many other programming languages, a variable has a \_\_\_\_\_ that indicates what sort of data it can hold.


- a. size
- b. box
- c. value
- d. type

**Points:** 1 / 1

 B 44. \_\_\_\_\_ are special instructions that can change the flow of control.


- a. flow structures
- b. control structures
- c. rules
- d. traffic laws

**Points:** 1 / 1

 A 45. A subroutine name can then be used as a \_\_\_\_\_ for the whole set of instructions.


- a. summary
- b. substitute
- c. acronym
- d. abbreviation

**Points:** 0 / 1

 A 46. One of the most effective modern programming methodology is \_\_\_\_\_.


- a. object-oriented programming
- b. a computer
- c. pen and paper
- d. the binary system

**Points:** 1 / 1

 C 47. During the 1970s and into the 80s, the primary software engineering methodology was \_\_\_\_\_.


- a. ancient programming
- b. accidental programming
- c. structured programming
- d. impossible programming

**Points:** 1 / 1

 D 48. Top-down programming deals almost entirely with producing the \_\_\_\_\_ necessary to solve a problem.


- a. program
- b. flow charts
- c. Venn diagrams
- d. instructions

**Points:** 1 / 1


 A 49. As time went on, people realized that the design of the \_\_\_\_\_ for a program was at least as important as the design of subroutines and control structures.

- a. language
- b. data structures
- c. hardware
- d. classroom


**Points:** 0 / 1

-  A 50. Producing high-quality programs is \_\_\_\_\_, so programmers and the people who employ them are always eager to reuse past work.
- a. difficult and expensive                      c. fun and more fun  
b. cheap and easy                                d. nearly impossible


**Points:** 1 / 1

-  A 51. In \_\_\_\_\_, the approach is to start with problems that you already know how to solve, and work upwards towards a solution to the overall problem.
- a. bottom-up design                              c. top down design  
b. interior design                                d. physics


**Points:** 1 / 1

-  C 52. A \_\_\_\_\_ is a component of a larger system that interacts with the rest of the system in a simple, well-defined, straightforward manner.
- a. republican                                      c. mother board  
b. module                                         d. citizen

**Points:** 0 / 1

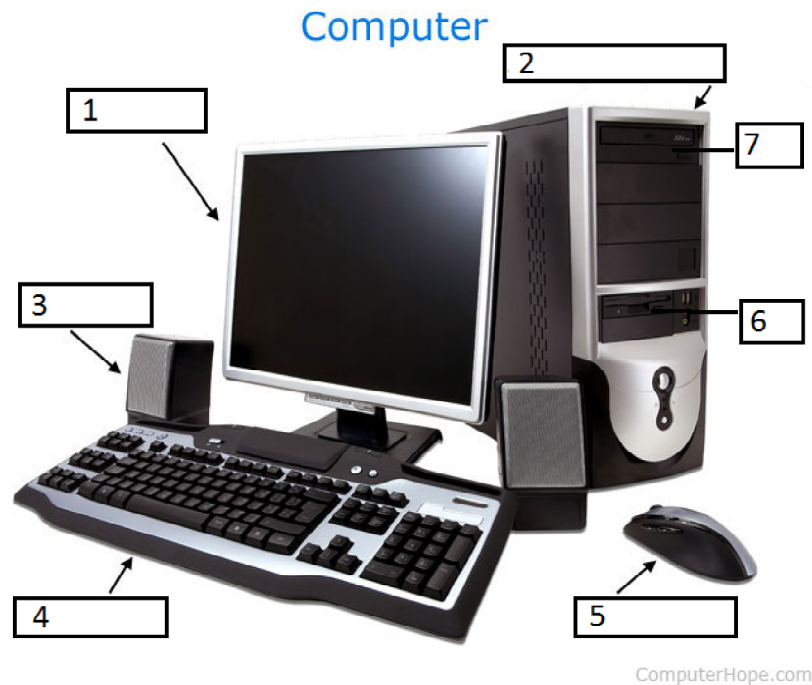
-  C 53. The central concept of object-oriented programming is the \_\_\_\_\_, which is a kind of self contained module containing data and subroutines.
- a. object    c. program  
b. applet    d. teacher

**Points:** 0 / 1

-  B 54. Objects that contain the same type of data and that respond to the same messages in the same way belong to the same \_\_\_\_\_.
- a. family    c. program  
b. class     d. group

**Points:** 1 / 1

## MATCHING



- |                 |                 |
|-----------------|-----------------|
| a. monitor      | e. floppy drive |
| b. printer      | f. mouse        |
| c. keyboard     | g. speaker      |
| d. CD-ROM drive | h. CPU          |

☒ C 55. Identify number 4 on the computer hardware diagram.

**Points:** 1 / 1

☒ F 56. Identify number 5 on the computer hardware diagram.

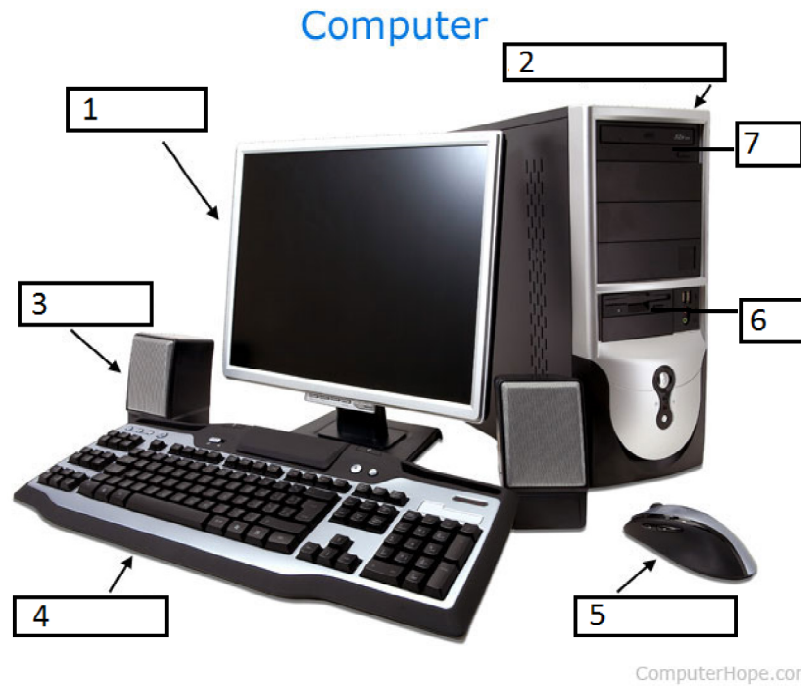
**Points:** 1 / 1

☒ E 57. Identify number 6 on the computer hardware diagram.

**Points:** 1 / 1

☒ D 58. Identify number 7 on the computer hardware diagram.

**Points:** 1 / 1



- a. input  
b. output  
c. both input and output  
d. process

☒ B 59. What does item 1 do for the computer and user.

**Points:** 1 / 1

☒ D 60. What does item 2 do for the computer and user.

**Points:** 1 / 1

☒ B 61. What does item 3 do for the computer and user.

**Points:** 1 / 1

☒ A 62. What does item 4 do for the computer and user.

**Points:** 1 / 1

☒ A 63. What does item 5 do for the computer and user.

**Points:** 1 / 1

☒ A 64. What does item 7 do for the computer and user.

**Points:** 0 / 1