

# *Introduction to Computer Science*

December 2012

## **Question 1**

If the hardware of a computer is analog to the body of a human being, which of the following is the best description of the software.

- (a) Language
- (b) Blood
- (c) Mind
- (d) Neuron

## **Question 2**

Information is a set of data that have been shaped into a form that is \_\_\_\_\_.

- (a) meaningless and useless to human being
- (b) meaningful and useful to human being
- (c) meaningless and useless to information systems
- (d) meaningful and useful to information systems

## **Question 3**

Data is a stream of \_\_\_\_\_ representing events occurring in organization.

- (a) raw fact
- (b) meaningful information
- (c) information
- (d) number

## **Question 4**

Which of the following items are part of information technologies ?

- (i) Digital camera
- (ii) Mobile phone
- (iii) Internet

**Answer :**

- (a) (i) & (ii)
- (b) (ii) & (iii)
- (c) (i) & (iii)
- (d) (i), (ii) and (iii)

## **Question 5**

Which of the following items are part of information technologies ?

- (i) Programming language
- (ii) Operating system
- (iii) Database

bf Answer :

- (a) (i) & (ii)
- (b) (ii) & (iii)
- (c) (i) & (iii)
- (d) (i), (ii) and (iii)

**Question 6**

Which of the following is the main purpose of database management system ?

- (a) Information visualization
- (b) Information processing
- (c) Information distribution
- (d) Information storage

**Question 7**

In terms of the speed of storage a byte of data, what should be the correct rank of the following storage devices?

- (a) Cache > Register > RAM > Hard disk
- (b) RAM > Cache > Register > Hard disk
- (c) Register > RAM > Cache > Hard disk
- (d) Register > Cache > RAM > Hard disk

**Question 8**

Which of the following statements about central processing system (CPU) is correct ?

- (a) Each computer can only have ONE CPU.
- (b) The CPU of a notebook computer is usually a RISC CPU.
- (c) The CPU of a desktop computer (PC) is usually a RISC CPU.
- (d) The CPU of a desktop computer (PC) is usually a CISC CPU.

**Question 9**

Which of the following are the five components of a computer system ?

- (a) Processing device, input device, output device, memory and communication device
- (b) ALU, register, cache, control unit and clock
- (c) Register, cache, main memory, RAM, ROM
- (d) None of the above

**Question 10**

The technique for a CPU operation in which multiple execution phases are performed in a single machine cycle is called \_\_\_\_\_.

- (a) pipelining
- (b) running
- (c) stopping
- (d) flowing

**Question 11**

To execute an instruction in CPU, which part is responsible for "instruction decode".

- (a) Register
- (b) Control unit
- (c) ALU
- (d) Cache

**Question 12**

\_\_\_\_\_ controls the computer hardware and act as an interface with applications programs.

- (a) Operating system
- (b) Communication system
- (c) Computer system
- (d) Database system

**Question 13**

What does MFLOP stand for ?

- (a)  $10^{-6}$  Floating point instruction per second
- (b)  $10^{-3}$  Floating point instruction per second
- (c)  $10^3$  Floating point instruction per second
- (d)  $10^6$  Floating point instruction per second

**Question 14**

Which of the following statement(s) about "Microcode" is(are) correct ?

- (i) It is a predefined, elementary circuits and logical operations that the processor performs when it executes an instruction.
- (ii) It is usually hardwired inside the CPU.
- (iii) It is located inside control unit.

**Answer :**

- (a) (i) only
- (b) (i) and (ii) only
- (c) (ii) and (iii) only
- (d) (i), (ii) and (iii)

**Question 15**

The law saying that transistors in a chip double in number every 18 months is called

- (a) John Moore Law
- (b) Moore's Law
- (c) John's Law
- (d) Transistor Law

**Question 16**

In terms of computational power, what is the correct ranking of the following computer systems ?

- (a) Handheld computer > Personal computer > Supercomputer
- (b) Personal computer > Handheld computer > Supercomputer
- (c) Supercomputer > Handheld computer > Personal computer
- (d) Supercomputer > Personal computer > Handheld computer

**Question 17**

Which of the following is NOT a system software ?

- (a) Window XP
- (b) MS Office
- (c) Linux
- (d) Unix

**Question 18**

Which of the following is NOT an application software ?

- (a) Access
- (b) Excel
- (c) Internet Explorer (IE)
- (d) Window XP

**Question 19**

Which of the following is usually NOT a function of an operating system ?

- (a) Manage file
- (b) Provide user interface
- (c) Manage database
- (d) Manage system memory

**Question 20**

Which of the following source(s) can let us get an application software ?

- (i) In-house development
- (ii) Commercial off-the-shell software
- (iii) Customized package

**Answer :**

- (a) (i) only
- (b) (i) and (ii) only
- (c) All of them
- (d) None of them

### Question 21

Programming language is \_\_\_\_\_ used to write both systems and application software.

- (a) a communication scheme
- (b) a coding scheme
- (c) a Visual Basic interface
- (d) a .NET interface

### Question 22

Which of the following statement about interpreter and compiler is correct ?

- (a) They are systems software that converts a programmer's source code into its equivalent in machine language.
- (b) A compiler is a language translator that translates *one program statement at a time* into machine code.
- (c) An interpreter is a language translator that converts a complete program into machine language to produce a program that the computer can process in its entirety.
- (d) Compiler is part of an interpreter.

### Question 23

A \_\_\_\_\_ is a group of programs that manipulate the database and provide an interface between the database and the user of the database or other application programs.

- (a) Data
- (b) Database
- (c) Database management system (DBMS)
- (d) Active server page (ASP)

### Question 24

Which of the following factor is NOT a drawback of the traditional approach for data management ?

- (a) Duplication of data in separate files.

- (b) The degree to which the data in any one file is accurate.
- (c) A situation in which program and data organized for one application are incompatible with programs and data organized differently for another application.
- (d) The data model for the data to be organized is very large and complicated.

### Question 25

A distributed database is a database in which the actual data may be distributed across several smaller databases connected via \_\_\_\_\_.

- (a) input/output devices
- (b) memory devices
- (c) telecommunications devices
- (d) handheld computers

### Question 26

Which of the following is the best description of telecommunication medium ?

- (a) The message (data and information) sending from one machine to another.
- (b) Anything that carries an electronic signal from one machine to another.
- (c) Telecommunication medium ONLY refers to cable wire connecting one machine to another.
- (d) The software supporting the message sending from one machine to another.

### Question 27

Which of the type(s) of signal can be found in the Internet ?

- (i) Digital signal
- (ii) Analog signal

**Answer :**

- (a) (i) only
- (b) (ii) only
- (c) (i) and (ii)
- (d) None of them

**Question 28**

Modem is a telecommunication device. What is the full name of "Modem" ?

- (a) Model & Demodel
- (b) Modernizer & Demodernizer
- (c) Modulator & Demodulator
- (d) Modeminization System

**Question 29**

Which of the following is(are) the purpose(s) of computer network ?

- (i) Used to share hardware, programs, and databases across the organization.
- (ii) Fosters teamwork, innovative ideas, and new business strategies.
- (iii) Used to automatically make decision on critical issue.

**Answer :**

- (a) (i) only
- (b) (i) and (ii) only
- (c) (ii) and (iii) only
- (d) (i) and (ii) and (iii)

**Question 30**

Which of the following item(s) is(are) telecommunication media ?

- (i) Co-axial cable
  - (ii) Microwave
  - (iii) Light
- (a) (i) and (ii) only
  - (b) (ii) and (iii) only
  - (c) (i) and (iii) only
  - (d) (i), (ii) and (iii)

**Question 31**

Telecommunication devices relay signals between \_\_\_\_\_.

- (a) computer systems and computer systems
- (b) computer systems and telecommunication media
- (c) telecommunication media and television systems
- (d) telecommunication media and telecommunication media

**Question 32**

Which of the following statement about client/server connection is correct ?

- (a) Client/server connection is a physical connection technique.
- (b) Client/server connection is a logical connection technique.
- (c) Client/server connection is used in database application only.
- (d) Client/server connection is used in local area network only.

**Question 33**

To send a data from one computer to another computer via Internet, we need

- (a) to know the IP address only.
- (b) to know the Port number only.
- (c) to know the IP address and Port number.
- (d) to know the email address only.

**Question**

While a computer has just power on, where does the CPU search for the first instruction to execute?

- (a) Harddisk
- (b) RAM
- (c) BIOS
- (d) CD