

Computer Science Diagnostic

Answer these questions to the best of your ability. Do not worry about technical terms. Answer in your own words if necessary. If you're not sure, tell me what you think the answer is.

1) What is a computer? What can a computer do?

A computer is a programmable machine that stores, retrieves, and processes information.

2) List the peripherals you use when interacting with a computer. Describe their purpose.

Peripherals you use when interacting with a computer include monitor, mouse, keyboard, scanner, printer etc. The purpose of these peripherals is to input and output information in a computer.

- Mouse- Input device that controls the cursor in a computer.
- Keyboard- Input device that inputs characters in a computer
- Monitor- Output device that displays the data and information in a computer to the user.
- Printer- Output device that outputs texts and graphics from a computer to a piece of paper.
- Scanner- Input the information on a piece of paper into the computer as a file.

3) List as many components found in a desktop as possible. If possible, describe their function within a computer system.

Motherboard-Holds all the computer components as well as allows them to communicate with each other.

CPU- Stands for Central Processing Units. It interprets and executes instructions such as arithmetic, logic, control and I/O.

RAM- Stands for Random Access Memory. It stores the data and information that is currently being run on the computer.

CMOS Battery- Keeps the time running on the computer even when the computer is shut off,

Northbridge- Memory controller hub which handles communication between CPU and memory.

Southbridge- Controls all computers I/O functions such as USB's audio, etc.

4) In computing, what is a network? What are the benefits?

Network are number of computers that are linked together enabled to share computing resources.

The benefits network is that information can be accessed from any part of the world as long as it is a part of the network, as well as information's and resources can be easily share.

5) Describe the purpose of the following:

a. Modem

A modem modulates analog signals that come from the internet to digital signals so that the computer can understand it, it also modulates outgoing digital signals to analog signals that goes in the internet.

b. Router

A router is what routes or passes the internet connections to other devices so that they can have the access to internet.

6) What is the purpose of an Operating System?

The purpose of an Operating system is to manage all the software and hardware of the computer. For example, Windows, iOS. Linux etc.

7) What is an application (or application software)?

An application is a program that is a software program that runs on your computer. For example, Words, Chrome, games etc.

8) What is a program?

A program is a set of instructions given to perform

9) What is the purpose of a program?

The purpose of a program is to run the set of instructions and execute those instructions.

10) Have you ever written a program? If so, what programming language do you have experience with?

I have written a program in my grade 10 computer science class. I have experience with Python.