

Tutorial 1

Part A: Multiple Choice Question (MCQ)

Q1 A computer processor only operates on binary data, that is, data composed of 1s and 0s.

A. True

B. False

Q2 Which of the following are computer components?

- | | |
|-----------------------|---------------|
| (I) Register | (III) Program |
| (II) Secondary Memory | (IV) Monitor |

A. I, II, III, and IV

C. II and IV

B. I and III

D. I, II and IV

Q3 A device that gives information to a computer known as _____.

A. Programming

C. Input

B. Algorithm

D. Instruction

Q4 Where is the location of operating systems (windows) stored in the computer?

A. ALU

C. Hard Drive

B. CPU

D. RAM

Q5 All of the following are components of the Von Neumann Model, EXCEPT:

A. Program instructions are executed randomly

C. Memory, ALU and Control Unit

B. Program is stored in memory during execution

D. Program instructions are executed sequentially

Q6 The brain of the computer is known as _____.

A. RAM

C. Motherboard

B. Processor

D. Power Supply

Part B: Structure/Explanation

- 1.1 What, in general terms, is the distinction between computer organization and computer architecture?
- 1.2 What, in general terms, is the distinction between computer structure and computer function?
- 1.3 What are the four main functions of a computer?
- 1.4 List and briefly define the main structural components of a computer.
- 1.5 List and briefly define the main structural components of a processor.
- 1.6 What is a stored program computer?
- 1.7 What are the four main components of any general-purpose computer?
- 1.8 List and explain the key characteristics of a computer family.
- 1.9 What is the key distinguishing feature of a microprocessor?
- 1.10 Briefly, explain six (6) types of computer classified by size and power.
- 1.11 Modern computer architecture was designed base on Von Neumann Model. Briefly explain, what are the three (3) characteristics of Von Newman Model.
- 1.12 In a complex computer system, divide and conquer approach/technique called virtual machine abstraction layers. Briefly, explain all seven (7) layers of virtual machine model.