Assignment 1

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. Due on 2019-02-13, 23:59 IST.

1) Which of the following statements are false?  
1 point

- ( ) a. The ENIAC computer was built using vacuum tubes.
- ( ) b. Harvard Mark1 computer was built using mechanical relays.
- ( ) c. The first Mechanical Calculator was invented by B. Pascal.
- ( ) d. None of these

No, the answer is incorrect.
Score: 0

Accepted Answers:
- d. None of these

2) Which statement is true concerning Moore's Law?  
1 point

- ( ) a. The speed of an integrated circuit doubles every 18 months.
- ( ) b. The packing density of an integrated circuit increases exponentially with time.
- ( ) c. The number of transistors in an integrated circuits doubles every 18 months.
- ( ) d. The power dissipation in an integrated circuits doubles every 18 months.

No, the answer is incorrect.
Score: 0

Accepted Answers:
- b. The packing density of an integrated circuit increases exponentially with time.
- c. The number of transistors in an integrated circuits doubles every 18 months.

3) Which of the following statements is/are true?  
1 point

- ( ) a. Central Processing Unit (CPU) consists of Control Unit and Arithmetic Logic Unit (ALU).
- ( ) b. There are broadly two types of memory, primary memory and secondary memory.
- ( ) c. All calculations happen inside the control unit.

No, the answer is incorrect.
Score: 0

Accepted Answers:
- a. Central Processing Unit (CPU) consists of Control Unit and Arithmetic Logic Unit (ALU).
- b. There are broadly two types of memory, primary memory and secondary memory.
4) Which of the following contains circuitry to carry out operations such as addition, subtraction, multiplication, shifting, etc. in a computer?  
   a. Arithmetic and Logic Unit 
   b. Memory Unit 
   c. Control Unit 
   d. Input/output Unit 
   No, the answer is incorrect. 
   Score: 0 
   Accepted Answers: 
   a. Arithmetic and Logic Unit 

5) Which of the following statement is/are false? 
   a. The processor has direct access to both primary memory and secondary memory. 
   b. Primary memory stores the active instructions and data for the program being executed on the processor. 
   c. Secondary memory is used as a backup memory. 
   d. Memory system is implemented as a single-level memory. 
   No, the answer is incorrect. 
   Score: 0 
   Accepted Answers: 
   a. The processor has direct access to both primary memory and secondary memory. 
   d. Memory system is implemented as a single-level memory. 

6) The task of the Program Counter (PC) is to 
   a. Point to the next instruction to be executed. 
   b. Count the total number of instructions in a program. 
   c. Point to the current instruction that is being executed. 
   d. None of the above. 
   No, the answer is incorrect. 
   Score: 0 
   Accepted Answers: 
   a. Point to the next instruction to be executed. 

7) Two registers are initialized as R1 = 15, and R2 = 13. The instruction SUB R1, R2 is in memory location 2000H. If the size of an instruction is 4 bytes, then after the execution of the instruction the value of PC and R1 will be: 
   a. PC= 2004H; R1= -2. 
   b. PC= 2000H; R1= 2. 
   c. PC= 2004H; R1= -2. 
   d. PC= 2004H; R1= 2. 
   No, the answer is incorrect. 
   Score: 0 
   Accepted Answers: 
   d. PC= 2004H; R1= 2. 

8) Choose the wrong one from the statements given below: 
   a. Instructions and data are stored in primary memory during execution.
9. A byte-addressable computer has 4 Gigabytes of memory. Each word in this computer is 64 bits. How many bits are needed to address any single word in a memory?

- a. 27 bits
- b. 32 bits
- c. 64 bits
- d. None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:
- d. None of these

10. Which of the following statements is false?

- a. In von-Neumann architecture, the instructions and data are stored in the same memory module.
- b. In Harvard architecture, the instructions and data are stored in separate memory module.
- c. In Harvard architecture, the instructions and data are stored in the same memory module.
- d. In Harvard architecture instructions and data accesses can be done in parallel.

No, the answer is incorrect.  
Score: 0

Accepted Answers:
- c. In Harvard architecture, the instructions and data are stored in the same memory module.