



Department of Computer Science and Engineering

CS8491-COMPUTER ARCHITECTURE

Unit I - MCQ Bank

1. A source program is usually in _____

- A. Assembly language
- B. Machine level language
- C. High-level language**
- D. Natural language

ANSWER: (C).

2. Which memory device is generally made of semiconductors?

- A. RAM**
- B. Hard-disk
- C. Floppy disk
- D. Cd disk

ANSWER: (A).

3. The ALU makes use of _____ to store the intermediate results.

- A. Accumulators**
- B. Registers
- C. Heap
- D. Stack

ANSWER: (A).

4. An optimizing Compiler does _____

- A. Better compilation of the given piece of code
- B. Takes advantage of the type of processor and reduces its process time**
- C. Does better memory management
- D. None of the mentioned

ANSWER: (B).

5. SPEC stands for _____
- A. Standard Performance Evaluation Code
 - B. System Processing Enhancing Code
 - C. System Performance Evaluation Corporation**
 - D. Standard Processing Enhancement Corporation
- ANSWER: (C).
6. If the instruction, Add R1, R2, R3 is executed in a system that is pipe-lined, then the value of S is (Where S is a term of the Basic performance equation)?
- A. 3
 - B. ~2
 - C. ~1**
 - D. 6
- ANSWER: (C).
7. The instruction, Add #45,R1 does _____
- A. Adds the value of 45 to the address of R1 and stores 45 in that address
 - B. Adds 45 to the value of R1 and stores it in R1**
 - C. Finds the memory location 45 and adds that content to that of R1
 - D. None of the mentioned
- ANSWER: (B).
8. In the case of, Zero-address instruction method the operands are stored in _____
- A. Registers
 - B. Accumulators
 - C. Push down stack**
 - D. Cache
- ANSWER: (C).
9. Add #45, when this instruction is executed the following happen/s _____
- A. The processor raises an error and requests for one more operand
 - B. The value stored in memory location 45 is retrieved and one more operand is requested**
 - C. The value 45 gets added to the value on the stack and is pushed onto the stack
 - D. None of the mentioned
- ANSWER: (B).

10. In the following indexed addressing mode instruction, $MOV\ 5(R1)$, LOC the effective address is

- _____
- A. $EA = 5+R1$
 - B. $EA = R1$
 - C. $EA = [R1]$
 - D. $EA = 5+[R1]$**

ANSWER: (D).

11. The addressing mode/s, which uses the PC instead of a general purpose register is _____

- A. Indexed with offset
- B. Relative**
- C. Direct
- D. Both Indexed with offset and direct

ANSWER: (B).

12. When we use auto increment or auto decrements, which of the following is/are true?

- 1) In both, the address is used to retrieve the operand and then the address gets altered
- 2) In auto increment, the operand is retrieved first and then the address altered
- 3) Both of them can be used on general purpose registers as well as memory locations

- A. 1, 2, 3
- B. 2
- C. 1, 3
- D. 2, 3**

ANSWER: (D).

13. The addressing mode, where you directly specify the operand value is _____

- A. Immediate**
- B. Direct
- C. Definite
- D. Relative

ANSWER: (A).

14. The effective address of the following instruction is $MUL\ 5(R1,R2)$.

- A. $5+R1+R2$
- B. $5+(R1*R2)$

C. $5+[R1]+[R2]$

D. $5*([R1]+[R2])$

ANSWER: (C).

15. _____ addressing mode is most suitable to change the normal sequence of execution of instructions.

A. Relative

B. Indirect

C. Index with Offset

D. Immediate

ANSWER: (A).

16. The small extremely fast, RAM's are called as _____

A. Cache

B. Heaps

C. Accumulators

D. Stacks

ANSWER: (A).

17. The control unit controls other units by generating _____

A. Control signals

B. Timing signals

C. Transfer signals

D. Command Signals

ANSWER: (B).

18. _____ addressing mode is most suitable to change the normal sequence of execution of instructions.

A. Relative

B. Indirect

C. Index with Offset

D. Immediate

ANSWER: (A).

19. Which method/s of representation of numbers occupies a large amount of memory than others?

A. Sign-magnitude

- B. 1's complement
- C. 2's complement
- D. 1's & 2's compliment

ANSWER: (A).

20. The ___ format is usually used to store data.

- A. BCD**
- B. Decimal
- C. Hexadecimal
- D. Octal

ANSWER: (A).

21. The 8-bit encoding format used to store data in a computer is _____

- A. ASCII
- B. EBCDIC**
- C. ANCI
- D. USCII

ANSWER: (B).

22. _____ are numbers and encoded characters, generally used as operands.

- A. Input
- B. Data**
- C. Information
- D. Stored Values

ANSWER: (B).

23. Which registers can interact with the secondary storage?

- A. MAR**
- B. PC
- C. IR
- D. R0

ANSWER: (A).

24. An optimizing Compiler does_____

- A. Better compilation of the given piece of code
- B. Takes advantage of the type of processor and reduces its process time**

- C. Does better memory management
- D. None of the mentioned

ANSWER: (B).

25. Two processors A and B have clock frequencies of 700 Mhz and 900 Mhz respectively. Suppose A can execute an instruction with an average of 3 steps and B can execute with an average of 5 steps. For the execution of the same instruction which processor is faster?

- A. A**
- B. B
- C. Both take the same time
- D. Insufficient information

ANSWER: (A).