

1. The _____ format is usually used to store data.

- a) BCD
- b) Decimal
- c) Hexadecimal
- d) Octal

2. A source program is usually in _____

- a) Assembly language
- b) Machine level language
- c) High-level language
- d) Natural language

3. Which memory device is generally made of semi-conductors?

- a) RAM
- b) Hard-disk
- c) Floppy disk
- d) Cd disk

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

- a) Cache
- b) Heaps
- c) Accumulators
- d) Stacks

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

- a) Accumulators
- b) Registers
- c) Heap
- d) Stack

6. The control unit controls other units by generating ____

- a) Control signals
- b) Timing signals
- c) Transfer signals
- d) Command Signals

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

a) Input

b) Data

c) Information

d) Stored Values

9. _____ bus structure is usually used to connect I/O devices.

- a) Single bus
- b) Multiple bus
- c) Star bus
- d) Rambus

10. The I/O interface required to connect the I/O device to the bus consists of _____

- a) Address decoder and registers
- b) Control circuits
- c) Address decoder, registers and Control circuits
- d) Only Control circuits

11. To reduce the memory access time we generally make use of _____

- a) Heaps
- b) Higher capacity RAM's
- c) SDRAM's
- d) Cache's

12. _____ is generally used to increase the apparent size of physical memory.

- a) Secondary memory
- b) Virtual memory
- c) Hard-disk
- d) Disks

15. The time delay between two successive initiation of memory operation _____

- a) Memory access time
- b) Memory search time
- c) Memory cycle time
- d) Instruction delay

16. The decoded instruction is stored in _____

- a) IR
- b) PC
- c) Registers
- d) MDR

17. The instruction -> Add LOCA, R0 does _____

- a) Adds the value of LOCA to R0 and stores in the temp register
- b) Adds the value of R0 to the address of LOCA
- c) Adds the values of both LOCA and R0 and stores it in R0
- d) Adds the value of LOCA with a value in accumulator and stores it in R0

18. Which registers can interact with the secondary storage?

- a) MAR
- b) PC
- c) IR
- d) R0

19. During the execution of a program which gets initialized first?

- a) MDR
- b) IR
- c) PC
- d) MAR

20. Which of the register/s of the processor is/are connected to Memory Bus?

- a) PC
- b) MAR
- c) IR
- d) Both PC and MAR

21. The internal Components of the processor are connected by _____

- a) Processor intra-connectivity circuitry
- b) Processor bus
- c) Memory bus
- d) Rambus

22. The registers, ALU and the interconnection between them are collectively called as _____

- a) process route
- b) information trail
- c) information path
- d) data path

23. ANSI stands for _____

- a) American National Standards Institute
- b) American National Standard Interface
- c) American Network Standard Interfacing
- d) American Network Security Interrupt

24. The main advantage of multiple bus organisation over single bus is _____

- a) Reduction in the number of cycles for execution
- b) Increase in size of the registers
- c) Better Connectivity
- d) None of the mentioned

25. During the execution of the instructions, a copy of the instructions is placed in the _____

- a) Register
- b) RAM
- c) System heap
- d) Cache

26. A processor performing fetch or decoding of different instruction during the execution of another instruction is called _____

- a) Super-scaling
- b) Pipe-lining
- c) Parallel Computation
- d) None of the mentioned

27. 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

28. The ultimate goal of a compiler is to _____

- a) Reduce the clock cycles for a programming task
- b) Reduce the size of the object code
- c) Be versatile
- d) Be able to detect even the smallest of errors

29. When Performing a looping operation, the instruction gets stored in the _____

- a) Registers
- b) Cache
- c) System Heap
- d) System stack

30. The average number of steps taken to execute the set of instructions can be made to be less than one by following _____

- a) ISA
- b) Pipe-lining
- c) Super-scaling
- d) Sequential

31. CISC stands for _____

- a) Complete Instruction Sequential Compilation
- b) Computer Integrated Sequential Compiler
- c) Complex Instruction Set Computer
- d) Complex Instruction Sequential Compilation

32. 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

33. In case of, Zero-address instruction method the operands are stored in _____

- a) Registers
- b) Accumulators
- c) Push down stack
- d) Cache

34. 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

35. The addressing mode which makes use of in-direction pointers is _____

- a) Indirect addressing mode
- b) Index addressing mode
- c) Relative addressing mode
- d) Offset addressing mode

36. 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) $EA = 5 + [R1]$

37. 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

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

- a) Immediate
- b) Direct
- c) Definite
- d) Relative

39. 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) $5*([R1] +[R2])$

40. ____ addressing mode is most suitable to change the normal sequence of execution of instructions.

- a) Relative
- b) Indirect
- c) Index with Offset
- d) Immediate

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

- a) Sign-magnitude
- b) 1's compliment
- c) 2's compliment
- d) 1's & 2's compliment

42. Which representation is most efficient to perform arithmetic operations on the numbers?

- a) Sign-magnitude
- b) 1's compliment
- c) 2'S compliment
- d) None of the mentioned

43. Which method of representation has two representations for '0'?

- a) Sign-magnitude
- b) 1's compliment
- c) 2's compliment
- d) None of the mentioned

44. When we perform subtraction on -7 and 1 the answer in 2's compliment form is _____

- a) 1010
- b) 1110
- c) 0110
- d) 1000

45. When we perform subtraction on -7 and -5 the answer in 2's compliment form is _____

- a) 11110
- b) 1110
- c) 1010
- d) 0010

46. The processor keeps track of the results of its operations using a flag called _____

- a) Conditional code flags
- b) Test output flags
- c) Type flags
- d) None of the mentioned

47. The register used to store the flags is called as _____

- a) Flag register
- b) Status register
- c) Test register
- d) Log register

48. The Flag 'V' is set to 1 indicates that,

- a) The operation is valid
- b) The operation is validated
- c) The operation as resulted in an overflow
- d) None of the mentioned

49. The most efficient method followed by computers to multiply two unsigned numbers is _____

- a) Booth algorithm
- b) Bit pair recording of multipliers
- c) Restoring algorithm
- d) Non-restoring algorithm

50. When 1101 is used to divide 100010010 the remainder is _____

a) 101

b) 11

c) 0

d) 1