

Question Bank(Objective Type Questions)

1. In Microprocessor

- a. program is stored in memory and data is stored in the registers.
- b. program is stored in the registers and data is stored in memory.
- c. both program and data are stored in the memory.
- d. both program and data are stored in the registers.

2 .A Microprocessor contains.

- a. most of the control and arithmetic logic functions of a computer.
- b. most of the RAM .
- c. most of the ROM.
- d. peripheral drivers.

3. A PC in a micro-computer.

- a. counts the number of instructions executed in a run.
- b. counts the number of programs run after startying.
- c. counts the points to the next executable instruction
- d. points to the present instruction being executed.

4. An instruction cycle is made up of:

- a. one or more execute cycles
- b. one or more fetch cycles
- c. one opcode and one execute cycle

d. none of the above.

5. The number of minimum clock cycles in a machine cycle for 8085 are.

a. 1

b. 2

c. 3

d. 5

6. In a 8-bit microprocessor ,the fetch required to fetch a 8 bytes instruction will be:

a. 1

b. 2

c. 3

d. depends on computer design

7. The maximum integer which can be stored on an 8-bit accumulator is

a. 2kb

b. 200

c. 224

d. 255.

8. The address bus of intel 8085 is 16 bit wide and hence the memory which can be accessed by this address bus is :

a. 112

b. 4kb

c. 16kb

d.64 kb

9. A byte corresponds to

- (a) 4 bits
- (b) 8 bits
- (c) 16 bits
- (d) 32 bits

10. A gigabyte represents

- (a) 1 billion bytes
- (b) 1000 kilobytes
- (c) 230 bytes
- (d) 1024 bytes

11. A megabyte represents

- (a) 1 million bytes
- (b) 1000 kilobytes
- (c) 220 bytes
- (d) 1024 bytes

12. A Kb corresponds to

- (a) 1024 bits
- (b) 1000 bytes
- (c) 210 bytes
- (d) 210 bits

13. A superscalar processor has

- (a) multiple functional units
- (b) a high clock speed
- (c) a large amount of RAM
- (d) many I/O ports

14. A 32-bit processor has

- (a) 32 registers
- (b) 32 I/O devices
- (c) 32 Mb of RAM
- (d) a 32-bit bus or 32-bit registers

15. A 20-bit address bus allows access to a memory of capacity

- (a) 1 Mb
- (b) 2 Mb
- (c) 32Mb
- (d) 64 Mb

16. A 32-bit **address bus** allows access to a memory of capacity

- (a) 64 Mb
- (b) 16 Mb
- (c) 1 Gb
- (d) 4 Gb

17. Clock speed is measured in

- (a) bits per second
- (b) baud

(c) bytes

(d) Hertz

18. An FPU

(a) makes integer arithmetic faster

(b) makes pipelining more efficient

(c) increases RAM capacity

(d) makes some arithmetic calculations faster

19. Pipelining improves CPU performance due to

(a) reduced memory access time

(b) increased clock speed

(c) the introduction of parallelism

(d) additional functional units

20. The system bus is made up of

(a) data bus

(b) data bus and address bus

(c) data bus and control bus

(d) data bus, control bus and address bus

21. A machine cycle refers to

(a) fetching an instruction

(b) clock speed

(c) fetching, decoding and executing an instruction

(d) executing an instruction

22. A Pentium processor comprises

- (a) more than 1 million transistors
- (b) more than 3 million transistors
- (c) 500,000 transistors
- (d) 900,000 transistors

23. Which of the following is **NOT** a type of processor

- (a) PowerPC 601
- (b) Motorola 8086
- (c) Motorola 68000
- (d) Intel Pentium

24. An RS-232 interface is

- (a) a parallel interface
- (b) a serial interface
- (c) printer interface
- (d) a modem interface

25. Multiprogramming refers to

- (a) having several programs in RAM at the same time
- (b) multitasking
- (c) writing programs in multiple languages
- (d) none of the previous

26. Multitasking refers to

- (a) having several programs in RAM at the same time

- (b) the ability to run 2 or more programs concurrently
- (c) writing programs in multiple languages
- (d) none of the previous

27. Multiprogramming is a prerequisite for

- (a) multitasking
- (b) an operating system
- (c) to run more than one program at the same time
- (d) none of the above

28. Multiprocessing is

- (a) same as multitasking
- (b) same as multiprogramming
- (c) multiuser
- (d) involves using more than one processor at the same time

29. A compiler is

- (a) a fast interpreter
- (b) slower than an interpreter
- (c) converts a program to machine code
- (d) none of the previous

30. An interpreter is

- (a) faster than a compiler
- (b) translates and executes programs statement by statement
- (c) converts a program to machine code

(d) none of the previous

31. Which of the following is **not** part of the processor

(a) the ALU

(b) the CU

(c) the registers

(d) the system bus

32. Pipelining improves CPU performance due to

(a) reduced memory access time

(b) increased clock speed

(c) the introduction of parallelism

(d) additional functional units

33. The Pentium processor is

(a) 16-bit

(b) 32-bit

(c) 64 bit

(d) 8-bit

34. The IBM/Motorola PowerPC 601 processor is

(a) 16-bit

(b) 32-bit

(c) 64 bit

(d) 8-bit

35. An assembly language instruction

- (a) always has a label
- (b) always takes at least 1 operand
- (c) always has an operation field
- (d) always modifies the status register

36. An arithmetic instruction always modifies the

- (a) stack pointer
- (b) status register
- (c) program counter
- (d) an index register

37. A conditional jump instruction

- (a) always cause a transfer of control
- (b) always involves the use of the status register
- (c) always modifies the program counter
- (d) always involves testing the Zero flag

38. An interrupt instruction

- (a) causes an unconditional transfer of control
- (b) causes a conditional transfer of control
- (c) modifies the status register
- (d) is an I/O instruction

39. A data movement instruction will

- (a) modify the status register
- (b) modify the stack pointer
- (c) modify the program counter
- (d) transfer data from one location to another

40. The memory address register is used to store

- (a) data to be transferred to memory
- (b) data that has been transferred from memory
- (c) the address of a memory location
- (d) an instruction that has been transferred from memory.

41. The memory data register is used to store

- (a) data to be transferred to or from memory
- (b) data to be transferred to the stack
- (c) the address of a memory location
- (d) an instruction that has been transferred from memory

42. The instruction register stores

- (a) an instruction that has been decoded
- (b) an instruction that has been fetched from memory
- (c) an instruction that has been executed
- (d) the address of the next instruction to be executed

43. The program counter

- (a) stores the address of the instruction that is currently being executed

- (b) stores the next instruction to be executed
- (c) stores the address of the next instruction to be executed
- (d) stores the instruction that is being currently executed.

44. The stack pointer stores

- (a) the address of the stack in memory
- (b) address of the last item pushed on the stack
- (c) the address of the next free stack location
- (d) the address of the last item popped from the stack

45. Memory mapped I/O involves

- (a) transferring information between memory locations
- (b) transferring information between registers and memory
- (c) transferring information between the CPU and I/O devices in the same way as between the CPU and memory
- (d) transferring information between I/O devices and memory

46. A hardware interrupt is

- (a) also called an internal interrupt
- (b) also called an external interrupt
- (c) an I/O interrupt
- (d) a clock interrupt

47. An assembly language program is typically

- (a) non-portable

- (b) shorter than an equivalent HLL program
- (c) harder to read than a machine code program
- (d) slower to execute than a compiled HLL program

48. Programs are written in assembly language because they

- (a) run faster than HLL programs
- (b) are portable
- (c) easier to write than machine code programs
- (d) they allow the programmer access to registers or instructions that are not usually provided by a HLL

49. An assembly language program is translated to machine code by

- (a) an assembler
- (b) a compiler
- (c) an interpreter
- (d) a linker

50. An assembly language directive is

- (a) the same as an instruction
- (b) used to define space for variables
- (c) used to start a program
- (d) to give commands to an assembler