

## Multiple Choice Questions on 8086 Microprocessor

1. A microprocessor is a \_\_\_\_\_ chip integrating all the functions of a CPU of a computer.  
A. multiple                      B. single                      C. double                      D. triple

ANSWER: B

2. Microprocessor is a/an \_\_\_\_\_ circuit that functions as the CPU of the computer.  
A. electronic                      B. mechanic                      C. integrating                      D. processing

ANSWER: A

3. Microprocessor is the \_\_\_\_\_ of the computer and it performs all the computational tasks.  
A. main                      B. heart                      C. important                      D. simple

ANSWER: B

4. The purpose of the microprocessor is to control \_\_\_\_\_.  
A. memory                      B. switches                      C. processing                      D. tasks

ANSWER: A

5. The first digital electronic computer was built in the year \_\_\_\_\_.  
A. 1950                      B. 1960                      C. 1940                      D. 1930

ANSWER: C

6. In 1960's Texas Instruments invented \_\_\_\_\_.  
A. integrated circuits                      B. microprocessor                      C. vacuum tubes                      D. transistors

ANSWER: A

7. The Intel 8086 microprocessor is a \_\_\_\_\_ processor.  
A. 8 bit                      B. 16 bit                      C. 32 bit                      D. 4 bit

ANSWER: B

8. The microprocessor can read/write 16 bit data from or to \_\_\_\_\_.  
A. memory                      B. I/O device                      C. processor                      D. register

ANSWER: A

9. In 8086 microprocessor, the address bus is \_\_\_\_\_ bit wide.  
A. 12 bit                      B. 10 bit                      C. 16 bit                      D. 20 bit

ANSWER: D

10. The work of EU is \_\_\_\_\_.  
A. encoding                      B. decoding                      C. processing                      D. calculations

ANSWER: B

11. The 16 bit flag of 8086 microprocessor is responsible to indicate \_\_\_\_\_.  
A. the condition of result of ALU operation                      B. the condition of memory  
C. the result of addition                      D. the result of subtraction

ANSWER: A

12. The CF is known as \_\_\_\_\_.  
A. carry flag                      B. condition flag                      C. common flag                      D. single flag

ANSWER: A

13. The SF is called as \_\_\_\_\_.  
A. service flag                      B. sign flag                      C. single flag                      D. condition flag

ANSWER: B

14. The OF is called as \_\_\_\_\_.  
A. overflow flag                      B. overdue flag                      C. one flag                      D. over flag

ANSWER: A

15. The IF is called as \_\_\_\_\_  
 A. initial flag      B. indicate flag      C. interrupt flag      D. inter flag  
 ANSWER: C
16. The register AX is formed by grouping \_\_\_\_\_  
 A. AH & AL      B. BH & BL      C. CH & CL      D. DH & DL  
 ANSWER: A
17. The SP is indicated by \_\_\_\_\_  
 A. single pointer      B. stack pointer      C. source pointer      D. destination pointer  
 ANSWER: B
18. The BP is indicated by \_\_\_\_\_  
 A. base pointer      B. binary pointer      C. bit pointer      D. digital pointer  
 ANSWER: A
19. The SS is called as \_\_\_\_\_  
 A. single stack      B. stack segment      C. sequence stack      D. random stack  
 ANSWER: B
20. The index register are used to hold \_\_\_\_\_  
 A. memory register      B. offset address      C. segment memory      D. offset memory  
 ANSWER: A
21. The BIU contains FIFO register of size \_\_\_\_\_ bytes  
 A. 8      B. 6      C. 4      D. 12  
 ANSWER: B
22. The BIU prefetches the instruction from memory and store them in \_\_\_\_\_  
 A. queue      B. register      C. memory      D. stack  
 ANSWER: A
23. The 1 MB byte of memory can be divided into \_\_\_\_\_ segment  
 A. 1 Kbyte      B. 64 Kbyte      C. 33 Kbyte      D. 34 Kbyte  
 ANSWER: B
24. The DS is called as \_\_\_\_\_  
 A. data segment      B. digital segment      C. divide segment      D. decode segment  
 ANSWER: A
25. The CS register stores instruction \_\_\_\_\_ in code segment  
 A. stream      B. path      C. codes      D. stream line  
 ANSWER: C
26. The IP is \_\_\_\_\_ bits in length  
 A. 8 bits      B. 4 bits      C. 16 bits      D. 32 bits  
 ANSWER: C
27. The push source copies a word from source to \_\_\_\_\_  
 A. stack      B. memory      C. register      D. destination  
 ANSWER: A
28. LDs copies to consecutive words from memory to register and \_\_\_\_\_  
 A. ES      B. DS      C. SS      D. CS  
 ANSWER: B
29. INC destination increments the content of destination by \_\_\_\_\_  
 A. 1      B. 2      C. 30      D. 41  
 ANSWER: A

30. IMUL source is a signed \_\_\_\_\_  
 A. multiplication    B. addition    C. subtraction    D. division  
 ANSWER: A
31. \_\_\_\_\_ destination inverts each bit of destination  
 A. NOT    B. NOR    C. AND    D. OR  
 ANSWER: A
32. The JS is called as \_\_\_\_\_  
 A. jump the signed bit    B. jump single bit  
 C. jump simple bit    D. jump signal it  
 ANSWER: A
33. Instruction providing both segment base and offset address are called \_\_\_\_\_  
 A. below type    B. far type    C. low type    D. high type  
 ANSWER: B
34. The conditional branch instruction specify \_\_\_\_\_ for branching  
 A. conditions    B. instruction    C. address    D. memory  
 ANSWER: A
35. The microprocessor determines whether the specified condition exists or not by testing the \_\_\_\_\_  
 A. carry flag    B. conditional flag    C. common flag    D. sign flag  
 ANSWER: B
36. The LES copies to words from memory to register and \_\_\_\_\_  
 A. DS    B. CS    C. ES    D. DS  
 ANSWER: C
37. The \_\_\_\_\_ translates a byte from one code to another code  
 A. XLAT    B. XCHNG    C. POP    D. PUSH  
 ANSWER: A
38. The \_\_\_\_\_ contains an offset instead of actual address  
 A. SP    B. IP    C. ES    D. SS  
 ANSWER: B
39. The 8086 fetches instruction one after another from \_\_\_\_\_ of memory  
 A. code segment    B. IP    C. ES    D. SS  
 ANSWER: A
40. The BIU contains FIFO register of size 6 bytes called \_\_\_\_\_.  
 A. queue    B. stack    C. segment    D. register  
 ANSWER: A
41. The \_\_\_\_\_ is required to synchronize the internal operands in the processor CLK Signal  
 A. UR Signal    B. Vcc    C. AIE    D. Ground  
 ANSWER: A
42. The pin of minimum mode AD0-AD15 has \_\_\_\_\_ address  
 A. 16 bit    B. 20 bit    C. 32 bit    D. 4 bit  
 ANSWER: B
43. The pin of minimum mode AD0- AD15 has \_\_\_\_\_ data bus  
 A. 4 bit    B. 20 bit    C. 16 bit    D. 32 bit  
 ANSWER: C
44. The address bits are sent out on lines through \_\_\_\_\_

- A. A16-19                      B. A0-17                      C. D0-D17                      D. C0-C17

ANSWER: A

45. \_\_\_\_\_ is used to write into memory

- A. RD                      B. WR                      C. RD / WR                      D. CLK

ANSWER: B

46. The functions of Pins from 24 to 31 depend on the mode in which \_\_\_\_\_ is operating

- A. 8085                      B. 8086                      C. 80835                      D. 80845

ANSWER: B

47. The RD, WR, M/IO is the heart of control for a \_\_\_\_\_ mode

- A. minimum                      B. maximum                      C. compatibility mode                      D. control mode

ANSWER: A

48. In a minimum mode there is a \_\_\_\_\_ on the system bus

- A. single                      B. double                      C. multiple                      D. triple

ANSWER: A

49. If MN/MX is low the 8086 operates in \_\_\_\_\_ mode

- A. Minimum                      B. Maximum                      C. both (A) and (B)                      D. medium

ANSWER: B

50. In max mode, control bus signal So,S1 and S2 are sent out in \_\_\_\_\_ form

- A. decoded                      B. encoded                      C. shared                      D. unshared

ANSWER: B

51. The \_\_\_\_\_ bus controller device decodes the signals to produce the control bus signal

- A. internal                      B. data                      C. external                      D. address

ANSWER: C

52. A \_\_\_\_\_ Instruction at the end of interrupt service program takes the execution back to the interrupted program

- A. forward                      B. return                      C. data                      D. line

ANSWER: B

53. The main concerns of the \_\_\_\_\_ are to define a flexible set of commands

- A. memory interface                      B. peripheral interface  
C. both (A) and (B)                      D. control interface

ANSWER: A

54. Primary function of memory interfacing is that the \_\_\_\_\_ should be able to read from and write into register

- A. multiprocessor                      B. microprocessor                      C. dual Processor                      D. coprocessor

ANSWER: B

55. To perform any operations, the Mp should identify the \_\_\_\_\_

- A. register                      B. memory                      C. interface                      D. system

ANSWER: A

56. The Microprocessor places \_\_\_\_\_ address on the address bus

- A. 4 bit                      B. 8 bit                      C. 16 bit                      D. 32 bit

ANSWER: C

57. The Microprocessor places 16 bit address on the add lines from that address by \_\_\_\_\_ register should be selected

- A. address                      B. one                      C. two                      D. three

ANSWER: B

58. The \_\_\_\_\_ of the memory chip will identify and select the register for the EPROM  
A. internal decoder B. external decoder C. address decoder D. data decoder

ANSWER: A

59. Microprocessor provides signal like \_\_\_\_ to indicate the read operatio

A. LOW B. MCMW C. MCMR D. MCMWR

ANSWER: C

60. To interface memory with the microprocessor, connect register the lines of the address bus must be added to address lines of the \_\_\_\_\_ chip.

A. single B. memory C. multiple D. triple

ANSWER: B

61. The remaining address line of \_\_\_\_\_ bus is decoded to generate chip select signal

A. data B. address C. control bus D. both (a) and (b)

ANSWER: B

62. \_\_\_\_\_ signal is generated by combining RD and WR signals with IO/M

A. control B. memory C. register D. system

ANSWER: A

63. Memory is an integral part of a \_\_\_\_\_ system

A. supercomputer B. microcomputer  
C. mini computer D. mainframe computer

ANSWER: B

64. \_\_\_\_\_ has certain signal requirements write into and read from its registers

A. memory B. register C. both (a) and (b) D. control

ANSWER: A

65. An \_\_\_\_\_ is used to fetch one address

A. internal decoder B. external decoder C. encoder D. register

ANSWER: A

66. The primary function of the \_\_\_\_\_ is to accept data from I/P devices

A. multiprocessor B. microprocessor C. peripherals D. interfaces

ANSWER: B

67. \_\_\_\_\_ signal prevent the microprocessor from reading the same data more than one

A. pipelining B. handshaking C. controlling D. signaling

ANSWER: B

68. Bits in IRR interrupt are \_\_\_\_\_

A. reset B. set C. stop D. start

ANSWER: B

69. \_\_\_\_\_ generate interrupt signal to microprocessor and receive acknowledge

A. priority resolver B. control logic  
C. interrupt request register D. interrupt register

ANSWER: B

70. The \_\_\_\_\_ pin is used to select direct command word

A. A0 B. D7-D6 C. A12 D. AD7-AD6

ANSWER: A

71. The \_\_\_\_\_ is used to connect more microprocessor

A. peripheral device B. cascade C. I/O devices D. control unit

ANSWER: B

72. CS connect the output of \_\_\_\_\_  
A. encoder                      B. decoder                      C. slave program                      D. buffer

ANSWER: B

73. In which year, 8086 was introduced?  
A. 1978                      B. 1979                      C. 1977                      D. 1981

ANSWER: A

74. Expansion for HMOS technology \_\_\_\_\_  
A. high level mode oxygen semiconductor  
B. high level metal oxygen semiconductor  
C. high performance medium oxide semiconductor  
D. high performance metal oxide semiconductor

ANSWER: D

75. 8086 and 8088 contains \_\_\_\_\_ transistors  
A. 29000                      B. 24000                      C. 34000                      D. 54000

ANSWER: A

76. ALE stands for \_\_\_\_\_  
A. address latch enable                      B. address level enable  
C. address leak enable                      D. address leak extension

ANSWER: A

77. What is DEN?  
A. direct enable                      B. data entered                      C. data enable                      D. data encoding

ANSWER: C

78. In 8086, Example for Non maskable interrupts are \_\_\_\_\_.  
A. TRAP                      B. RST6.5                      C. INTR                      D. RST6.6

ANSWER: A

79. In 8086 the overflow flag is set when \_\_\_\_\_.  
A. the sum is more than 16 bits.  
B. signed numbers go out of their range after an arithmetic operation.  
C. carry and sign flags are set.  
D. subtraction

ANSWER: B

80. In 8086 microprocessor the following has the highest priority among all type interrupts?  
A. NMI                      B. DIV 0                      C. TYPE 255                      D. OVER FLOW

ANSWER: A

81. In 8086 microprocessor one of the following statements is not true?  
A. coprocessor is interfaced in max mode.                      B. coprocessor is interfaced in min mode.  
C. I/O can be interfaced in max / min mode.                      D. supports pipelining

ANSWER: B

82. Address line for TRAP is?  
A. 0023H                      B. 0024H                      C. 0033H                      D. 0099H

ANSWER: B

83. Access time is faster for \_\_\_\_\_.  
A. ROM                      B. SRAM                      C. DRAM                      D. ERAM

ANSWER: B

84. The First Microprocessor was\_\_\_\_\_.  
A. Intel 4004            B. 8080            C. 8085            D. 4008

ANSWER: A

85. Status register is also called as \_\_\_\_\_.  
A. accumulator            B. stack            C. counter            D. flags

ANSWER: D

86. Which of the following is not a basic element within the microprocessor?  
A. Microcontroller            B. Arithmetic logic unit (ALU)  
C. Register array            D. Control unit

Ans.: A

87. Which method bypasses the CPU for certain types of data transfer?  
A. Software interrupts            B. Interrupt-driven I/O  
C. Polled I/O            D. Direct memory access (DMA)

Ans.: D

88. Which bus is bidirectional?  
A. Address bus            B. Control bus  
C. Data bus            D. None of the above

Ans.: C

89. The first microprocessor had a(n)\_\_\_\_\_.  
A. 1 – bit data bus            B. 2 – bit data bus  
C. 4 – bit data bus            D. 8 – bit data bus

Ans.: C

90. Which microprocessor has multiplexed data and address lines?  
A. 8086            B. 80286            C. 80386            D. Pentium

Ans.: A

91. Which is not an operand?  
A. Variable            B. Register            C. Memory location            D. Assembler

Ans.: D

92. Which is not part of the execution unit (EU)?  
A. Arithmetic logic unit (ALU)            B. Clock  
C. General registers            D. Flags

Ans.: B

93. A 20-bit address bus can locate \_\_\_\_\_.  
A. 1,048,576 locations            B. 2,097,152 locations  
C. 4,194,304 locations            D. 8,388,608 locations

Ans.: A

94. Which of the following is not an arithmetic instruction?  
A. INC (increment)            B. CMP (compare)  
C. DEC (decrement)            D. ROL (rotate left)

Ans.: D

95. During a read operation the CPU fetches \_\_\_\_\_.

- A. a program instruction
- B. another address
- C. data itself
- D. all of the above

Ans.: D

96. Which of the following is not an 8086/8088 general-purpose register?

- A. Code segment (CS)
- B. Data segment (DS)
- C. Stack segment (SS)
- D. Address segment (AS)

Ans.: D

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

- A. 1 MB
- B. 2 MB
- C. 4 MB
- D. 8 MB

Ans.: A

98. Which microprocessor accepts the program written for 8086 without any changes?

- A. 8085
- B. 8086
- C. 8087
- D. 8088

Ans.: D

99. Which group of instructions do not affect the flags?

- A. Arithmetic operations
- B. Logic operations
- C. Data transfer operations
- D. Branch operations

Ans.: C

100. The result of MOV AL, 65 is to store

- A. store 0100 0010 in AL
- B. store 42H in AL
- C. store 40H in AL
- D. store 0100 0001 in AL

Ans.: D