

1. Feature of fetching the next instruction while current instruction is executing called _____.
a. Fetching b. Executing c. Pipelining d. Decoding
2. _____ flag of 8086 is used for BCD operations.
a. ZF b. TFC. IFd. AF
3. Which unit translates logical address into linear address?
a. Paging b. Instruction Decode c. Segmentation d. Control
4. 80386DX supports _____ simultaneously accessible
a. Paging b. Instruction Decode c. Segmentation d. Control
5. After reset 80386 starts execution of program from memory address
a. FFFF FFFF H b. FFFF 0000 H c. FFFF FFF0 H d. 0000 0000 H
6. _____ control register gives page directory base address
a. CR0 b. CR1 c. CR2 d. CR3
7. _____ control register gives page directory base address
a. CR0 b. CR1 c. CR2 d. CR3
8. In which mode 80386 DX maintains the compatibility of the object code with 8086 and 80286 ?
a. Real b. Protected c. Virtual 8086 d. Min mode
9. After every task switch , 80386 sets _____ bit.
a. T b. TF c. TS d. ET
10. Page size in 80386 is _____
a. 1 Kb b. 2 Kb c. 3 Kb d. 4Kb
11. In 8086 , the segment can start at any memory address which is divisible by _____.
a. 8 b. 16 c. 20 d. 24
12. _____ allows to use separates memory area for program , data , and stack.
a. Segmentation b. Pipelining c. Main memory d. MMU
13. For 8086 _____ bus is bidirectional and _____ bus is unidirectional

- a. Address, data b. data , address c. Control, data d. Address, control
14. The ALU of 8086 is _____ bits.
- a. 8 b. 6 c. 20 d. 24
15. The 8086 supports _____ flags.
- a. 5 b. 6 c. 8 d. 9
16. _____ flag is used to hold privilege level
- a. IOPL b. IPL c. IF d. NT
17. One common use of _____ register is to reference parameters that were passed to subroutine way of stack.
- a. SI b. DI c. SP d. BP
18. _____ architecture of 80386 allows simultaneous instruction fetching , decoding, and execution of an instruction .
- a. Pipelined b. Harvard c. Princeton d. Vonneumann
19. The 80386 takes _____ clocks for most instruction than 8086/8088.
- a. More b. 10 more c. Fewer d. 16 more
20. Register EAX,EBX,ECX,and EDX are _____ registers.
- a. Scratch pad b. Pointers c. Index d. New
21. Physical address space of 80386 is _____ and logical address space is _____.
- a. 4 GB, 64 TB b. 1MB, 64 MB c. 1 MB, 4GB d. 64 MB 1 GB
22. Length of double word is _____ and quad word is _____.
- a. 2 words, 4/3 words b. 2 words, 4 words
c. 4 bits, 4 words d. 64 bits , 80 bits
23. The value in _____ and _____ are normally used as offsets from current value of SS.
- a. ESP and EBP b. EIP and EBP c. ESI and EDI d. ESI and ESP
24. The flags which reflects the state of a particular program are known as _____ and flags which reflects status of machine are known as _____ flags .

- Which is first microprocessor?
 - 8008
 - 8085
 - 8086
 - 4004
- The 8086 microprocessor is designed by
 - Intel
 - Motorola
 - General instruments
 - Zilog
- Microprocessor IC contains
 - Memory
 - input/output ports
 - CPU
 - all above
- 8086 microprocessor is bit microprocessor.
 - 8
 - 16
 - 24
 - 32
- The 8086 microprocessor has bit data bus.
 - 8
 - 24
 - 16
 - 32
- The 8086 microprocessor has bit address bus.
 - 32
 - 20
 - 16
 - 8
- The 8086 microprocessor can access upto of memory.
 - 64 KB
 - 1 KB

- (c) 4 GB (d) 1 MB
8. How many pins are present in 8086 microprocessor?
- (a) 20 pins (b) 30 pins
(c) 40 pins (d) 64 pins
9. The 8086 microprocessor can support pipelining.
- (a) 2 stage (b) 3 stage
(c) 4 stage (d) 5 stage
10. What are the operating modes of 8086?
- (a) minimum mode (b) maximum mode
(c) both (a) and (b) (d) none of above
11. What is the size of registers in 8086 microprocessor?
- (a) 16-bit (b) 8-bit
(c) 20-bit (d) 24-bit
12. Which data types are supported by 8086 microprocessor?
- (a) bit (b) byte
(c) word (d) all above
13. Which data types are supported by 8086 microprocessor?
- (a) double word (b) quad word
(c) ten bytes (d) all above
14. Why 8086 microprocessor is called as 16-bit microprocessor?
- (a) size of data bus is 16-bit
(b) size of registers is 16-bit
(c) size of ALU is 16-bit
(d) all above
15. The 8086 microprocessor IC contains
- (a) CPU (b) memory
(c) input/output ports (d) all above
16. What is the function of BIU?
- (a) Read data from memory or input port
(b) Write data to memory or output port
(c) Send address on address bus
(d) All above
17. What is size of segments of memory in 8086 microprocessor?
- (a) 1 KB (b) 64 KB
(c) 1 MB (d) variable
18. What is the function of segment registers?
- (a) To store the starting address of corresponding segment
(b) To store data required for arithmetic or logical operations
(c) To store address within the segment
(d) all above
19. What is the use of IP register?
- (a) To store the offset address of code segment
(b) To store the offset address of data segment

- (c) To store the offset address of stack segment
 - (d) To store the offset address of extra segment
20. What is the use of SI register?
- (a) To store the offset address of code segment
 - (b) To store the offset address of data segment
 - (c) To store the offset address of extra segment
 - (d) To store the offset address of stack segment
21. What is the use of DI register?
- (a) To store the offset address of code segment
 - (b) To store the offset address of data segment
 - (c) To store the offset address of extra segment
 - (d) Both (b) and (c)
22. What is the use of SP register?
- (a) To store the offset address of code segment
 - (b) To store the offset address of data segment
 - (c) To store the offset address of stack segment
 - (d) To store the offset address of extra segment
23. What is the use of BP register?
- (a) To store the offset address of stack segment
 - (b) To store the offset address of data segment
 - (c) To store the offset address of extra segment
 - (d) To store the offset address of code segment
24. What is the use of code segment (CS) register?
- (a) To store the starting address of code segment
 - (b) To store the starting address of data segment
 - (c) To store the starting address of extra segment
 - (d) To store the starting address of stack segment
25. What is the use of DS register?
- (a) To store the starting address of code segment
 - (b) To store the starting address of data segment
 - (c) To store the starting address of extra segment
 - (d) To store the starting address of stack segment
26. What is the use of ES register?
- (a) To store the starting address of code segment
 - (b) To store the starting address of data segment
 - (c) To store the starting address of extra segment
 - (d) To store the starting address of stack segment
27. What is the use of SS register?
- (a) To store the starting address of code segment
 - (b) To store the starting address of data segment
 - (c) To store the starting address of extra segment
 - (d) To store the starting address of stack segment
28. What is the size of CS, DS, ES and SS registers?

- (a) 16 bit
 - (b) 64 KB
 - (c) 20 bit
 - (d) 1 MB
29. What is the size of CS, DS, ES and SS segments?
- (a) 16 bit
 - (b) 64 KB
 - (c) 20 bit
 - (d) 1 MB
30. The content of CS, DS, ES or SS register is called as
- (a) offset address
 - (b) logical address
 - (c) linear address
 - (d) physical address
31. The content of IP, SP, BP, SI or DI register is called as
- (a) offset address
 - (b) logical address
 - (c) linear address
 - (d) physical address
32. What is the size of offset address?
- (a) 8 bit
 - (b) 16 bit
 - (c) 20 bit
 - (d) (b) or (c)
33. What is the size of logical address?
- (a) 8 bit
 - (b) 16 bit
 - (c) 20 bit
 - (d) 24 bit
34. What is the size of physical address?
- (a) 8 bit
 - (b) 16 bit
 - (c) 20 bit
 - (d) 24 bit
35. What is the size of instruction queue?
- (a) 16 bit
 - (b) 20 bit
 - (c) 6 byte
 - (d) 64 KB
36. Which principal is used in queue?
- (a) First in Last Out
 - (b) First in First Out
 - (c) Last in First Out
 - (d) None of above
37. Which block is not present in BIU?
- (a) Segment registers
 - (b) Queue
 - (c) IP
 - (d) Decoder
38. Which block is not present in EU?
- (a) ALU
 - (b) flag register
 - (c) Control unit
 - (d) IP
39. What is the use of AX register?
- (a) Input/Output operations
 - (b) In multiply and arithmetic instructions
 - (c) To store data
 - (d) All above
40. What is the use of BX register?
- (a) To store the offset address of data segment

- (b) To store immediate data
 - (c) To perform arithmetic or logical operation
 - (d) All above
41. What is the use of CX register?
- (a) Input/Output operations
 - (b) To store offset address of data segment
 - (c) To store counter value
 - (d) In multiply and arithmetic operations
42. What is the use of DX register?
- (a) Input/Output operations
 - (b) To store counter value
 - (c) To store offset address of data segment
 - (d) Both (a) and (c)
43. What is the size of flag register in 8086 microprocessor?
- (a) 8 bit
 - (b) 16 bit
 - (c) 20 bit
 - (d) 24 bit
44. How many status flags are present in 8086 microprocessor?
- (a) 3
 - (b) 6
 - (c) 9
 - (d) 16
45. How many control flags are present in 8086 microprocessor?
- (a) 3
 - (b) 6
 - (c) 9
 - (d) 16
46. How many unused flags are present in 8086 microprocessor?
- (a) 3
 - (b) 6
 - (c) 9
 - (d) 7
47. What is the use of decoding unit?
- (a) To find meaning of opcode
 - (b) To generate control signals
 - (c) Both (a) and (b)
 - (d) None of above
48. What is the use of timing and control unit?
- (a) To find meaning of opcode
 - (b) To generate control and timing signal
 - (c) To execute the instruction completely
 - (d) All of above
49. When carry flag is set?
- (a) If carry generated out of MSB
 - (b) If carry generated out of D7 bit in 8 bit addition
 - (c) If carry generated out of D15 bit in 16 bit addition
 - (d) All of above
50. When parity flag is set?
- (a) If result contains even number of 1's

- (b) If higher byte of result contains even number of 1's
 - (c) If lower byte of result contains even number of 1's
 - (d) If result contains odd number of 1's
51. When auxiliary flag is set?
- (a) If carry is generated out of MSB
 - (b) If carry is generated out of D7 bit
 - (c) If carry is generated out of D3 bit
 - (d) If carry is generated out of D15 bit
52. When overflow is set?
- (a) If carry is generated out of D6 bit in signed number operation
 - (b) If carry is generated out of D7 bit in signed number operation
 - (c) If carry is generated out of D14 bit in signed number operation
 - (d) (a) or (c)
53. What is the use of direction flag?
- (a) To auto increment SI and DI
 - (b) To auto decrement SI and DI
 - (c) To perform string operations
 - (d) All of above
54. What is the use of trap flag?
- (a) to debug the program
 - (b) to execute one instruction at a time
 - (c) to check registers or memory contents before complete execution
 - (d) all of above
55. What is the maximum value of segment registers?
- (a) FFFFH
 - (b) FFFF0H
 - (c) FF00H
 - (d) F000H
56. What is the maximum value of offset registers?
- (a) FFFFH
 - (b) FFF0H
 - (c) FF00H
 - (d) F000H
57. Why memory segments are of 64 KB size in 8086 microprocessor?
- (a) Size of offset register is 16 bit
 - (b) Size of segment register is 16 bit
 - (c) Size of all registers is 16 bit
 - (d) All of above
58. The total number of an non-overlapped segments are
- (a) unlimited
 - (b) 16
 - (c) 20
 - (d) cannot calculate
59. In 8086 microprocessor, at a time how many segments an be active?
- (a) 2
 - (b) 3
 - (c) 4
 - (d) 16
60. In 8086 microprocessor, who converts logical address to physical address?
- (a) BIU
 - (b) EU

- (c) Both (a) and (b) (d) None of (a) and (b)
61. Which registers are used to generate physical address from logical address?
 (a) Segment registers (b) Offset register
 (c) Both (a) and (b) (d) General purpose register
62. If DS = 3000H, CS = 4000H and IP = 7A23H, then physical address is
 (a) 47A34H (b) 47A23H
 (c) AA230H (d) BA230H
63. If DS = 2000H, IP = 2000H and DI = 3000H, then physical address is
 (a) 22000H (b) 40000H
 (c) 50000H (d) 23000H
64. If ES = 5000H, IP = 2000H, SI = 1111H, DI = 2A32H, then physical address is
 (a) 52A32H (b) 52000H
 (c) 51111H (d) 61110H
65. How many pins are present in 8086 microprocessor?
 (a) 40 (b) 28
 (c) 18 (d) 24
66. What is the duty cycle of clock in 8086 microprocessor?
 (a) 50% (b) 25%
 (c) 33% (d) 100%
67. What is the use of S5 signal?
 (a) Always low
 (b) Represents status of interrupt flag (IF)
 (c) Reserved for further use
 (d) Indicates which segment is presently being used
68. If S4 = 1 and S3 = 1, then which segment is used?
 (a) Data segment (b) Code segment
 (c) Stack segment (d) Extra segment
69. If $\overline{\text{BHE}} = 0$ and A0 = 0, then data is accessed?
 (a) whole word
 (b) upper byte from/to odd address
 (c) lower byte from/to even address
 (d) none
70. Ready signal is used to synchronisation of 8086 microprocessor and
 (a) memory (b) input/output devices
 (c) 8087 math coprocessor (d) both (a) and (b)
71. $\overline{\text{TEST}}$ pin is used to synchronize the 8086 microprocessor and
 (a) memory (b) input/output devices
 (c) 8087 math coprocessor (d) both (a) and (b)
72. If S2 = 0, S1 = 1 and S0 = 0, then it indicates that
 (a) read input/output port (b) code access
 (c) write input/output port (d) write to memory

73. If QS1 = 1 and QS0 = 0 then, it indicates that
- (a) no operation
 - (b) first byte of opcode from queue
 - (c) empty queue
 - (d) subsequent byte from queue
74. After reset
- (a) SP = FFFFH
 - (b) IP = 0000H
 - (c) CS = FFFFH
 - (d) all above
75. For how many clock cycles logic 1 must be provided on reset pin?
- (a) 1
 - (b) 2
 - (c) 3
 - (d) 4
76. BIU stands for
- (a) Bus interface unit
 - (b) Base interface unit
 - (c) A and B
 - (d) None of these
77. EU stands for
- (a) Execution unit
 - (b) Execute unit
 - (c) Exchange unit
 - (d) None of these
78. Which is the part of architecture of 8086?
- (a) The bus interface unit
 - (b) The execution unit
 - (c) Both (a) and (b)
 - (d) None of these
79. Which are the four categories of registers?
- (a) General-purpose register
 - (b) Pointer or index registers
 - (c) Segment registers
 - (d) Other register
 - (e) All of these
80. The four index register can be used for
- (a) Arithmetic operation
 - (b) Multiplication operation
 - (c) Subtraction operation
 - (d) All of these
81. IP Stand for
- (a) Instruction pointer
 - (b) Instruction purpose
 - (c) Instruction paints
 - (d) None of these
82. CS Stand for
- (a) Code segment
 - (b) Coot segment
 - (c) Cost segment
 - (d) Counter segment
83. DS Stand for:
- (a) Data segment
 - (b) Direct segment
 - (c) Declare segment
 - (d) Divide segment
84. Which segment is not present in 8086?
- (a) CS (b) DS
 - (c) SS (d) FS
85. IP stands for
- (a) Industry pointer
 - (b) Instruction pointer
 - (c) Index pointer
 - (d) None of these
86. Which has great importance in modular programming?
- (a) Stack segment
 - (b) Queue segment
 - (c) Array segment
 - (d) All of these
87. Which register contains the 8086/8088 flag?

- (a) Status register
 - (b) Stack register
 - (c) Flag register
 - (d) Stand reg
88. Which flag are used to record specific characteristics of arithmetic and logical instructions?
- (a) The stack
 - (b) The stand
 - (c) The status
 - (d) The queue
89. What is the type of addresses?
- (a) Logical address
 - (b) Physical address
 - (c) Both A and B
 - (d) None of these
90. The address of a memory is a 20 bit address for the 8086 microprocessor:
- (a) Physical
 - (b) Logical
 - (c) Both
 - (d) None of these
91. DIP stands for
- (a) Deal inline package
 - (b) Dual inline package
 - (c) Direct inline package
 - (d) Digital inline package
92. EA stands for
- (a) Effective address
 - (b) Electrical address
 - (c) Effect address
 - (d) None of these
93. BP stands for
- (a) Bit pointer
 - (b) Base pointer
 - (c) Bus pointer
 - (d) Byte pointer
94. DI stands for
- (a) Destination index
 - (b) Defect index
 - (c) Definition index
 - (d) Delete index
95. SI stands for
- (a) Stand index
 - (b) Source index
 - (c) Segment index
 - (d) Simple index
96. DS stand for
- (a) Default segment
 - (b) Defect segment
 - (c) Delete segment
 - (d) Definition segment
97. ALE stands for
- (a) Address latch enable
 - (b) Address light enable
 - (c) Address lower enable
 - (d) Address last enable
98. AD stand for
- (a) Address data
 - (b) Address delete
 - (c) Address date
 - (d) Address deal
99. NMI stands for
- (a) Non mask able interrupt
 - (b) Non mistake interrupt
 - (c) Both
 - (d) None of these
100. AH stand for
- (a) Accumulator high
 - (b) Address high
 - (c) Appropriate high
 - (d) Application high
101. AL stands for
- (a) Accumulator low
 - (b) Address low
 - (c) Appropriate low
 - (d) Application low
102. Which is/are the categorized of flag?

- (a) Conditional flag (b) Control flag
(c) Both a and b (d) None of these
103. is the most important segment and it contains the actual assembly language instruction to be executed by the microprocessor:
(a) Data segment (b) Code segment
(c) Stack segment (d) Extra segment
104. The offset of a particular segment varies from in 8086 microprocessor.
(a) 000H to FFFH (b) 0000H to FFFFH
(c) 00H to FFH (d) 00000H to FFFFFH
105. FIFO stands for
(a) First in first other (b) First in first out
(c) First in first over (d) None of these
106. The parity bits are used to check that a
(a) Two bit error (b) Single bit error
(c) Multi bit error (d) None of these
107. Which is responsible for all the outside world communication by the microprocessor?
(a) BIU (b) PIU
(c) TIU (d) EU
108. INTR: it implies the signal.
(a) INTRRUPT REQUEST (b) INTRRUPT RIGHT
(c) INTRRUPT RONGH (d) INTRRUPT RESET
109. A microprocessor contains
(a) most of RAM
(b) most of ROM
(c) peripheral drivers
(d) most of the control and arithmetic logic functions of computer
110. Microprocessor is also often called a
(a) Chip (b) Resistor
(c) Capacitor (d) Transistor
111. In which microprocessor does the concept of pipeline first introduced?
(a) 8086 (b) 80286
(c) 80386 (d) 80486
112. If CS = 24F6 and IP = 634A, the physical address is
(a) 24F6: 634A (b) 34F5F
(c) 2B2AA (d) 24F60
113. Any computer must at least consist of
(a) Data bus (b) Address Bus
(c) Control Bus (d) all of the above
114. An operating system that allows several processors to perform computation at the same time is called as
(a) Single program (b) Multitasking
(c) Multiprocessing (d) Real time processing

Answers

1. (d)	2. (a)	3. (c)	4. (b)	5. (c)	6. (b)	7. (d)	8. (c)	9. (a)	10. (c)
11. (a)	12. (d)	13. (d)	14. (d)	15. (a)	16. (d)	17. (b)	18. (a)	19. (a)	20. (b)
21. (d)	22. (c)	23. (a)	24. (a)	25. (b)	26. (c)	27. (d)	28. (a)	29. (b)	30. (b)
31. (a)	32. (b)	33. (c)	34. (c)	35. (c)	36. (b)	37. (d)	38. (d)	39. (d)	40. (d)
41. (c)	42. (d)	43. (b)	44. (b)	45. (a)	46. (d)	47. (a)	48. (b)	49. (d)	50. (c)
51. (c)	52. (d)	53. (d)	54. (d)	55. (d)	56. (a)	57. (a)	58. (b)	59. (c)	60. (a)
61. (c)	62. (b)	63. (d)	64. (a)	65. (a)	66. (c)	67. (b)	68. (a)	69. (a)	70. (d)

71. (c)	72. (c)	73. (c)	74. (d)	75. (d)	76. (a)	77. (a)	78. (c)	79. (e)	80. (a)
81. (a)	82. (a)	83. (a)	84. (d)	85. (b)	86. (a)	87. (a)	88. (c)	89. (c)	90. (a)
91. (b)	92. (a)	93. (b)	94. (a)	95. (b)	96. (a)	97. (a)	98. (a)	99. (a)	100. (a)
101. (a)	102. (c)	103. (c)	104. (b)	105. (b)	106. (b)	107. (a)	108. (a)	109. (d)	110. (a)
111. (a)	112. (c)	113. (d)	114. (c)						

MULTIPLE CHOICE QUESTIONS (MCQ's)

- The 80386 DX is bit microprocessor.
 - 16
 - 24
 - 8
 - 32
- What is the size of data bus in 80386 DX microprocessor?
 - 8-bit
 - 16-bit
 - 32-bit
 - 64-bit
- What is the size of address bus in 80386 DX microprocessor?
 - 8-bit
 - 32-bit
 - 16-bit
 - 24-bit
- What is the size of registers in 80386 microprocessor?
 - 8-bit
 - 16-bit
 - 24-bit
 - 32-bit
- How much physical memory can be accessed by 80386 microprocessor?
 - 1 MB
 - 4 MB
 - 4 GB
 - 64 TB
- How much virtual memory can be accessed by 80386 microprocessor?
 - 1 MB
 - 4 MB
 - 4 GB
 - 64 TB
- The 80386 DX microprocessor has
 - pipelined architecture
 - separate data bus and address bus
 - multitasking
 - all of above

8. What is the size of barrel shifter in 80386 μ_p ?
- (a) 32-bit (b) 48-bit
(c) 64-bit (d) 80-bit
9. What is the size of prefetch queue in 80386 μ_p ?
- (a) 6 bytes (b) 10 bytes
(c) 12 bytes (d) 16 bytes
10. What is the function of bus interface in 80386 μ_p ?
- (a) To communicate between different parts of 80386 μ_p
(b) To generate control signals
(c) To interface between 80386 μ_p and input/output devices and memory
(d) all of above
11. If paging unit is enabled then
- (a) it translates linear address to physical address
(b) it translates virtual address to physical address
(c) (a) and (b) are same
(d) (a) or (b)
12. How many functional units are present in 80386 μ_p ?
- (a) 6 (b) 8
(c) 10 (d) 12
13. If PE = 1, then 80386 DX microprocessor operates in
- (a) Real mode (b) Protected mode
(c) Virtual 86 mode (d) Special mode
14. Actually how many pins are used in address generation of 80386 microprocessor?
- (a) 32 pins (b) 34 pins
(c) 20 pins (d) 36 pins

15. Which pin is not used for controlling bus action of 80386 microprocessor?
- (a) \overline{ADS} (b) \overline{NA}
- (c) $\overline{BS16}$ (d) RESET
16. Which pin is not present in 8086 microprocessor but present in 80386 microprocessor?
- (a) \overline{READY} (b) RESET
- (c) M/\overline{IO} (d) W/\overline{R}
17. Which pins acts as hardware interrupt pins in 80386 microprocessor?
- (a) NMI (b) RESET
- (c) INTR (d) all of above
18. Which pin is not connected to math coprocessor in 80386 microprocessor?
- (a) \overline{READY} (b) PEREQ
- (c) \overline{BUSSY} (d) \overline{ERROR}
19. What is the use of $\overline{BE0} - \overline{BE3}$ pins of 80386 microprocessor?
- (a) To enable memory ICs
- (b) To enable byte transfer
- (c) To generate an address
- (d) All of above
20. What happens after providing reset to 80386 microprocessor?
- (a) It starts execution from address FFFFFFF0H
- (b) ESP = FFFFFFFFH
- (c) 80386 operates in real mode
- (d) all of above
21. Which hardware interrupt pin has highest priority?

(a) INTR

(b) NMI

(c) RESET

(d) Cannot define

22. When carry flag is set?

(a) If carry generated out of MSB

(b) If carry generated out of D15 bit

(c) If carry generated out of D3 bit

(d) All of above

23. When parity flag is set?

(a) If result contains even number of 1's

(b) If lower byte contains even number of 1s

(c) If lower byte contains odd number of 1s

(d) If lower word contains odd number of 1s

24. When auxiliary flag is set?

(a) If carry generates out of MSB

(b) If carry generates out of D7 bit

(c) If carry generates out of D3 bit

(d) If carry generates out of D15 bit

25. When overflow flag is set?

(a) If carry is generated out of D6 bit in signed number operation

(b) If carry is generated out of D14 bit in signed number operation

(c) If carry is generated out of D30 bit in signed number operation

(d) All of above

26. If direction flag is set then

(a) SI is automatically decremented

(b) SI is automatically incremented

(c) DI is automatically decremented

(d) Both (a) and (c)

27. What is the use of trap flag?

(a) To debug the program

(b) To execute the instruction at a time

(c) To check register or memory contents before complete execution

(d) All of above

28. Which flag is not present in 8086 microprocessor but present in 80386 microprocessor?

(a) Nested Task Flag

(b) Sign Flag

(c) Trap Flag

(d) Zero Flag

29. Which IOPL value has highest priority?

(a) 0 (b) 2

(c) 1 (d) 3

30. When zero flag is set?

(a) After comparison instruction if source and destination are equal

(b) If ALU result is zero

(c) Both (a) and (b)

(d) It depends on programmer.

31. What is the use of base registers and offset registers?

(a) To hold 16-bit relative address present within the segment

(b) To perform arithmetic and logical operations

(c) To hold the data temporary

(d) All of above

32. Which register cannot be divided into 8 bit data?

- | | |
|--------|--------|
| (a) AX | (b) CX |
| (c) DX | (d) SI |

33. How many segment registers are present in 80386?

- | | |
|-------|-------|
| (a) 4 | (b) 2 |
| (c) 6 | (d) 8 |

34. How many data segments are present in 80386 microprocessor?

- | | |
|-------|-------|
| (a) 2 | (b) 3 |
| (c) 4 | (d) 5 |

35. What is the size of segment selector in 80386 microprocessor?

- | | |
|------------|------------|
| (a) 16 bit | (b) 32 bit |
| (c) 48 bit | (d) 64 bit |

36. What is the size of offset register in 80386 microprocessor?

- | | |
|------------|-------------|
| (a) 16 bit | (b) 32 bits |
| (c) 48 bit | (d) 64 bits |

37. What is the size of general purpose registers in 80386 microprocessor?

- | | |
|------------|-------------|
| (a) 16 bit | (b) 32 bits |
| (c) 48 bit | (d) 64 bits |

38. What is the size of control registers in 80386 microprocessor?

- | | |
|-------------|-------------|
| (a) 16 bits | (b) 32 bits |
| (c) 48 bits | (d) 64 bits |

39. How many control registers are present in 80386 microprocessor?

- | | |
|-------|-------|
| (a) 1 | (b) 2 |
| (c) 3 | (d) 4 |

40. What is the size of debug registers in 80386 microprocessor?

- | | |
|-------------|-------------|
| (a) 16 bits | (b) 32 bits |
|-------------|-------------|

- (c) 48 bits (d) 64 bits

41. How many debug registers are present in 80386 microprocessor?

- (a) 3 (b) 4
(c) 7 (d) 8

42. How many break point addresses we can load in debug registers of 80386 microprocessor?

- (a) 4 (b) 5
(c) 7 (d) 8

43. What is the size of test registers?

- (a) 16 bits (b) 32 bits
(c) 48 bits (d) 64 bits

44. What is the use of test registers in 80386?

- (a) To test complete memory management unit
(b) To test complete 80386 microprocessor
(c) To test translation lookaside buffer
(d) All of above

45. In task register, how many bits are accessible by user?

- (a) 16 bits (b) 32 bits
(c) 48 bits (d) 64 bits

46. What is the size of the LDTR?

- (a) 16 bits (b) 32 bits
(c) 48 bits (d) 64 bits

47. What is the size of GDTR?

- (a) 16 bits (b) 32 bits
(c) 48 bits (d) 64 bits

48. What is the size of IDTR?

- (a) 16 bits
- (b) 32 bits
- (c) 48 bits
- (d) 64 bits

49. What GDTR and IDTR contains?

- (a) Segment base address and limit
- (b) Access Right Byte
- (c) Type of segment
- (d) All of above

50. What is the use of segment registers in 80386 microprocessor?

- (a) To hold base address of segment in real mode
- (b) To select one of the segment descriptor in protected mode
- (c) To select GDT or LDT in protected mode
- (d) All of above

51. What is the use of LDTR in 80386 microprocessor?

- (a) To select segment descriptor for LDT
- (b) To contain base address of LDT
- (c) To contain limit of LDT
- (d) Both (b) and (c)

52. Which control register is called as page directory base register?

- (a) CR0
- (b) CR1
- (c) CR2
- (d) CR3

53. Which debug register is called as debug status register in 80386?

- (a) DR5
- (b) DR5
- (c) DR6
- (d) DR7

54. Which debug register is called as debug control register in 80386?

(a) DR4 (b) DR5

(c) DR6 (d) DR7

55. What is the range of 8-bit unsigned integer?

(a) 0 to 255 (b) -128 to +127

(c) 0 to 65535 (d) -32,768 to +32,767

56. What is the range of 8-bit signed integer?

(a) 0 to 255 (b) -128 to +127

(c) 0 to 65535 (d) -32,768 to +32,767

57. What is the range of 16-bit unsigned integer?

(a) 0 to 255 (b) -128 to +127

(c) 0 to 65535 (d) -32,768 to +32,767

58. What is the range of 16-bit signed integer?

(a) 0 to 255 (b) -128 to +127

(c) 0 to 65535 (d) -32,768 to +32,767

59. What is the range of 32-bit bit unsigned integer?

(a) 0 to 65535 (b) -32, 768 to +32,767

(c) 0 to 4,294, 967, 295 (d) -2.147×10^9 to $+2.147 \times 10^9$

60. What is the range of 32 bit signed integer?

(a) 0 to 65535 (b) -32, 768 to +32,767

(c) 0 to 4,294, 967, 295 (d) -2.147×10^9 to $+2.147 \times 10^9$

61. Which data type is not present in 80386 microprocessor?

(a) Byte string (b) Word string

(c) Double word string (d) Quad word string

62. What is the maximum size of data which can be handled by 80386?

(a) 32 bits (b) 48 bits

(c) 64 bits (d) 80 bits

63. What is the range of BCD number?

(a) 0 to 7 (b) 0 to 9

(c) 0 to 15 (d) 0 to 9 and A to F

64. Which is not unpacked BCD number?

(a) 05H (b) 00H

(c) 09H (d) 10H

65. When an instruction is read from the memory, it is called

(a) Memory Read cycle (b) Fetch cycle

(c) Instruction cycle (d) Memory write cycle

66. Which flag does the 80386 use to check for unsigned arithmetic overflow?

(a) OF (b) CF

(c) SF (d) None of above

67. A port can be

(a) Strictly Input (b) Strictly Output

(c) Bidirectional (d) All of above

68. Which bus is bidirectional?

(a) Control Bus (b) Data Bus

(c) Address Bus (d) None of these

69. To prevent another master from taking over the bus during a critical operation, the 80386 can assert its signal.

(a) LOCK# (b) HOLD or BOFF

(c) HLDA (d) HOLD

70. In 80386 microprocessor, which interrupt has the highest priority?

(a) INTR (b) NMI

(c) RESET

71. Why 80386 processor is called as 32 bit processor?

(a) Because 80386 processor has 32 bit ALU

(b) Because 80386 processor has 32 bit data bus

(c) (a) and (b)

72. What is meant by Maskable interrupts?

(a) An interrupt which can never be turned off

(b) An interrupt that can be turned off by the programmer

(c) None

73. What does microprocessor speed depends on?

(a) Clock

(b) Data bus width

(c) Address bus width

74. Can ROM be used as stack?

(a) Yes (b)

No

(c) sometimes yes, sometimes no

75. In 80386 microprocessor, the following has the highest priority among all types of interrupts.

(a) NMI

(b) DIV 0

(c) TYPE 255

(d) OVER FLOW

76. Numbers are stored and transmitted inside a computer in

(a) binary form

(b) ASCII code form

(c) decimal form

(d) alphanumeric form

77. The original ASCII codes were

(a) 7 bits

(b) 8 bits

(c) represented 256 characters

(d) represented 127 characters

78. The ASCII code of 'A' is

- | | |
|---------------|---------------|
| (a) 66D | (b) 41H |
| (c) 0100 0010 | (d) 0110 0011 |

79. The ASCII code of '0' (zero) is

- | | |
|---------------|---------|
| (a) 48D | (b) 32H |
| (c) 0011 1000 | (d) 42H |

80. A byte corresponds to

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

81. A gigabyte represents

- | | |
|---------------------|--------------------|
| (a) 1 billion bytes | (b) 1000 kilobytes |
| (c) 2^{30} bytes | (d) 1024 bytes |

82. A megabyte represents

- | | |
|---------------------|--------------------|
| (a) 1 million bytes | (b) 1000 kilobytes |
| (c) 2^{30} bytes | (d) 1024 bytes |

83. A 1KB corresponds to

- | | |
|--------------------|----------------|
| (a) 1024 bits | (b) 1000 bytes |
| (c) 2^{10} bytes | (d) 210 bits |

84. 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 |

85. The minimum number of bits required to store the hexadecimal number FFH is

- | | |
|--------|--------|
| (a) 2, | (b) 4 |
| (c) 8 | (d) 16 |

86. A parity bit is

- (a) used to indicate uppercase letters
- (b) used to detect errors
- (c) is the first bit in a byte
- (d) is the last bit in a byte

87. Clock speed is measured in

- (a) bits per second
- (b) baud
- (c) bytes
- (d) Hertz

88. Pipelining improves CPU performance due to

- (a) reduced memory access time
- (b) increased clock speed
- (c) the introduction of parallelism
- (d) additional functional units

89. 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

90. A machine cycle refers to

- (a) fetching an instruction
- (b) clock speed
- (c) fetching, decoding and executing an instruction
- (d) executing an instruction

91. CPU performance may be measured in

- (a) BPS (b) MIPS
- (c) MHz (d) VLSI

92. Stack overflow causes

- (a) Hardware interrupt
- (b) External interrupt
- (c) Internal interrupt
- (d) Software interrupt

93. A 32-bit processor has

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

94. What is meant by Maskable interrupts?

- (a) An interrupt that can be turned off by the programmer
- (b) An interrupt that cannot be turned off by the programmer
- (c) An interrupt that can be turned off by the system
- (d) An interrupt that cannot be turned off by the system

95. Which of the following is not possible by a microprocessor?

- (a) Reading from Memory
- (b) Writing into Memory
- (c) Reading from Input port
- (d) Writing into Input port

Answers

115.	(	116.	(	117.	(	118.	(	119.	(	120.	(	121.	(	122.	(	123.	(	124.	(
d)		c)		b)		d)		c)		d)		d)		c)		d)		d)	
125.	(	126.	(	127.	(	128.	(	129.	(	130.	(	131.	(	132.	(	133.	(	134.	(
c)		a)		b)		b)		d)		d)		d)		a)		d)		d)	
135.	(	136.	(	137.	(	138.	(	139.	(	140.	(	141.	(	142.	(	143.	(	144.	(
c)		a)		b)		c)		d)		d)		d)		a)		a)		c)	
145.	(	146.	(	147.	(	148.	(	149.	(	150.	(	151.	(	152.	(	153.	(	154.	(
a)		d)		c)		c)		a)		b)		b)		b)		d)		b)	
155.	(	156.	(	157.	(	158.	(	159.	(	160.	(	161.	(	162.	(	163.	(	164.	(
d)		a)		b)		c)		a)		a)		c)		c)		a)		d)	
165.	(	166.	(	167.	(	168.	(	169.	(	170.	(	171.	(	172.	(	173.	(	174.	(
a)		d)		c)		d)		a)		b)		c)		d)		c)		d)	
175.	(	176.	(	177.	(	178.	(	179.	(	180.	(	181.	(	182.	(	183.	(	184.	(

d)	d)	b)	d)	b)	b)	d)	b)	a)	c)
185. (	186. (	187. (	188. (	189. (	190. (	191. (	192. (	193. (	194. (
c)	b)	c)	b)	a)	a)	a)	b)	a)	b)
195. (	196. (	197. (	198. (	199. (	200. (	201. (	202. (	203. (	204. (
a)	b)	c)	d)	c)	b)	d)	c)	d)	c)
205. (	206. (	207. (	208. (	209. (
b)	c)	d)	a)	d)					