

1 . Mode 1 of 8255 is used for which of these I/O methods

- (a) Bi-Directional Handshake
- (b) DMA I/O
- (c) Strobed or Hand Shake mode**
- (d) Simple Input/Output

2 . If the 8255 is selected for addresses 0F800H to 0F806H, which one of the following is the address of PORT C

- (a) 0F806H
- (b) 0F802H
- (c) 0F804H**
- (d) 0F800H

3 . If 8 seven segment led multiplexed displays including the decimal point are connected. How many wires are needed to connect the segments (not including power supply wires)?

- (a) 15
- (b) 16**
- (c) 56
- (d) 64

4 . The diode kept across the coil of a step per motor is for ?

- (a) Shorting the Back EMF**
- (b) To stop the step per motor
- (c) Stopping flow of current
- (d) Allowing flow of current

5 . In the A/D converter ADC0808 which of these signals tri states the digital output of ADC

- (a) EOC
- (b) ALE
- (c) SOC
- (d) OE**

6 . The fourth response of the 8086 to an interrupt is which one of the following ?

- (a) Decrements the SP by 2 & pushes flag register
- (b) It disables interrupt flag
- (c) Decrements the SP& pushes current CS contents
- (d) Resets Trap Flag**

7 . What is the size of the vector interrupt table?

- (a) 256 bytes
- (b) 65536 bytes
- (c) 1024 bytes**
- (d) 4096 bytes

8 . Which of these values in AH perform input from keyboard ?

- (a) 02
- (b) 09
- (c) 17
- (d) 01**

9 . Which one of these BIOS services is used for Mouse Operation?

- (a) 10H
- (b) 13H
- (c) 16H
- (d) 33H**

10. The PIC interrupt controller which Masks the Interrupt is?

- (a) IRR
- (b) IMR**
- (c) ISR
- (d) PR

11. Data line which can be transfer in only one direction is referred as

- (a) Half Duplex
- (b) Com plex
- (c) Full Duplex
- (d) Simplex**

12. In the Synchronous mode the 8251 which signal indicates that the specified Synchronous character is received ?

- (a) Tx C
- (b) SYNDET/BD**
- (c) CLK
- (d) C/D

13. The outer loop counter for N numbers is

- (a) N-1**
- (b) N-2
- (c) N
- (d) N/2

14. If the CPU has not read a character from the 8251 before the arrival of the next character. Which of the following errors is supposed to have occurred?

- (a) Even Parity error
- (b) Framing Error
- (c) Over Run Error**
- (d) Odd Parity Error

15. The 8051 is a

- (a) 32 bit micro controller

- (b) 24 bit micro controller
- (c) 16 bit micro controller
- (d) 8 bit micro controller**

16. Serial port operates in Multi Processor mode in which of these modes?

- (a) Mode3
- (b) Mode2**
- (c) Mode0
- (d) Mode1

17. The upper 8 bits of address bus are generated on which of these ports?

- (a) Port2**
- (b) Port3
- (c) Port1
- (d) Port0

18 . Two 8255's IC1&IC2 are connected to 8086 16 bit bus and D0 to D7 are connected to IC1 and D8 to D15 are connected to IC2. The base address signals A0&A1 go to IC1&IC2's A0&A1 pins respectively. If a decoded signal with a range of 0FFE0H to 0FFE3H then What is the address of IC1PORT B register

- (a) 0FFE2H
- (b) 0FFE0H
- (c) 0FFE3H
- (d) 0FFE1H**

19. If 8 seven segment led multiplexed displays including the decimal point are all lighted up and each of these is biased to carry 5mA. What is the total current drawn from the power supply when all the segments are ON?

- (a) 280 mA
- (b) 80 mA
- (c) 40 mA**
- (d) 300 mA

20. The diode kept across the coil of a stepper motor is for?

- (a) Stopping flow of current
- (b) To stop the stepper motor
- (c) Allowing flow of current
- (d) Shorting the Back EMF**

21. The fourth response of the 8086 to an interrupt is which one of the following?

- (a) Decrements the SP by 2 & pushes flag register
- (b) Resets Trap Flag
- (c) It disables interrupt flag
- (d) Decrements the SP& pushes current CS contents**

22. What is the segment address of the vector interrupt table?

- (a) 0F000H

- (b) 00000H
- (c) 10000H
- (d) 0F000H

23. Which of these values in AH performs output on video display of Ascii character in DL?

- (a) 01
- (b) 09
- (c) 02
- (d) 17

24. Which one of these BIOS services is used for Key Board Operation ?

- (a) 33H
- (b) 13H
- (c) 16H
- (d) 10H

25. The PIC interrupt controller connects the single 8086 IRQ to how many IRQ input lines?

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

26. Which combination of the flags indicate that the source is greater than the destination

- (a) CY=1,Z=1
- (b) CY=0,Z=0
- (c) CY=0,Z=1
- (d) CY=1,Z=0

27. When a valid stop bit is not detected at the end of every character in a synchronous mode, the error is called as which one of the following?

- (a) Over Run Error
- (b) Odd Parity Error
- (c) Even Parity error
- (d) Framing Error

28. USB stands for which one of the following?

- (a) Universal Sequential Bus
- (b) Unidirectional Serial Bus
- (c) Universal Serial Bus
- (d) SMCE bus

29. The size of the ROM in 8051 is

- (a) 32 K bytes
- (b) 16 K bytes
- (c) 4 K bytes

(d) 8 K bytes

30. If the bit 8th bit of memory location 20H is to be set, what will be its bit addressable memory location?

- (a) 06
- (b) 09
- (c) 08
- (d) 07**

31. The TF bit is in which of these registers?

- (a) TCON**
- (b) TLx
- (c) THx
- (d) TMOD

32. The interrupt vector address for timer 0 is which one of the following addresses?

- (a) 000BH**
- (b) 0003H
- (c) 0023H
- (d) 0013H

33. The instruction used to access data from external memory is which one of the following?

- (a) MOV @
- (b) MOV
- (c) MOVC
- (d) MOV X**

34 . The number of ports 8255 PPI has is

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

35 . If the control word 09BH is given to the control register of the 8255 PPI then which of these options are the condition of the ports

- (a) PORT's A&B INPUT,PORT C OUTPUT
- (b) ALL PORT's INPUT**
- (c) BIT SET RESET
- (d) ALL PORT's OUTPUT

36. A key board is made using 12 keys connected not as a matrix. How many pins of the I/O port are used?

- (a) 12**
- (b) 07
- (c) 11
- (d) 09

37. What is the angle per step of a step per motor in full step mode?

- (a) 1.0 degrees
- (b) 1.8 degrees**
- (c) 0.45 degrees
- (d) 0.9 degrees

38. The second response of the 8086 to an interrupt is which one of the following?

- (a) Resets Trap Flag
- (b) Decrements the SP by 2&pushes flag register
- (c) Decrements the SP & pushes current CS contents
- (d) It disables interrupt flag**

39. Which of these is called when an NMI occurs?

- (a) INT3
- (b) INT2**
- (c) INT0
- (d) INT1

40. The DOS function AH=9 INT2 1H displays a message till which one of this character is reached

- (a) \$**
- (b) ×
- (c) #
- (d) *

41. Which one of these BIOS services is used for Communication Operation?

- (a) 17H
- (b) 15H
- (c) 16H
- (d) 14H**

42. The total number of interrupts available if all the 8 inputs of PIC are each having a slave is?

- (a) 128
- (b) 64**
- (c) 256
- (d) 16

43. The USART used as Serial Communication controller is

- (a) 8259
- (b) 8257
- (c) 8250
- (d) 8251**

44. USART stands for which of the following ?

- (a) Unidirectional Synchronous Asynchronous Receiver Transmitter

- (b) **Universal Synchronous Asynchronous Receiver Transmitter**
- (c) Unidirectional Sequential Asynchronous Receiver Transmitter
- (d) Universal Serial Addressed Receiver Transmitter

45. Which one of these serial data transmission standards is single ended and does not use low impedance drivers?

- (a) RS449
- (b) **RS232C**
- (c) RS423A
- (d) RS422A

46. Which one of the following is the 8051 architecture based upon?

- (a) Princeton Architecture
- (b) Param Architecture
- (c) **Harvard Architecture**
- (d) Von Neumann Architecture

47. General purpose registers R0 to R7 can be referred as sets of four banks (0to3) and also by memory location. If a register R3 in Bank2 is referred, what is its internal ram location address?

- (a) 14H
- (b) 10H
- (c) 12H
- (d) **13H**

48. Timer0 is functional as an 8 bit counter while timer 1 is stopped in which of the following modes?

- (a) Mode2
- (b) Mode1
- (c) **Mode3**
- (d) Mode0

49. Which of the following is the correct order of priority in decreasing order from left to right?

- (a) EX0,EX1,ET0,ET1,ES,
- (b) ES,EX1,ET0,E01,ET1
- (c) ET0,EX0,ET1,EX1,ES
- (d) **EX0,ET0,EX1,ET1,ES**

50. One of these signals indicates that address is available on Port0?

- (a) EA
- (b) RESET
- (c) **ALE**
- (d) PSEN

51 . The 8255 PPI has

- (a) 28 pins

- (b) 16 pins
- (c) 40 pins**
- (d) 64 pins

52 . Two 8255's IC1&IC2 are connected to 8086 16 bit bus and D0 to D7 are connected to IC1 and D8 to D15 are connected to IC2. The base address signals A0&A1 goto IC1&IC2's A0&A1 pins respectively. If a decoded signal with a range of 0FFE0H to 0FFE3H then What is the address of IC1 PORTB register

- (a) 0FFE2H
- (b) 0FFE3H
- (c) 0FFE1H**
- (d) 0FFE0H

53 . A key board is made using 12 keys connected not as a matrix. How many pins of the I/O port are used?

- (a) 12**
- (b) 07
- (c) 09
- (d) 11

54 . How many wires does a stepper motor effectively have?

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

55 . Which of these signals has the highest priority?

- (a) IRQ
- (b) Hold
- (c) NMI
- (d) Reset**

56 . What is the number of Software interrupts available in the Interrupt Vector Table?

- (a) 4096
- (b) 256**
- (c) 1024
- (d) 512

57 . DOS is an abbreviation which stands for?

- (a) Data Output Storage
- (b) Disk Operating Systems**
- (c) Disk Output Storage
- (d) Device Operating System

58. The PIC interrupt controller which indicates that an interrupt is being requested is?

- (a) ISR
- (b) IRR**

- (c) IMR
- (d) PR

59. The device from which data originates or terminates is called

- (a) DSR
- (b) DTR
- (c) DTE**
- (d) DCE

60. The 8051 micro controller does not have one of the following as its built in peripheral?

- (a) Timers
- (b) Counters
- (c) UART
- (d) DMA controller**

61. Which of these registers cannot be decremented?

- (a) SP
- (b) B register
- (c) Accumulator A
- (d) DPTR**

62. One of these registers is loaded with the upper byte of the terminal count?

- (a) THx**
- (b) TMOD
- (c) TLx
- (d) TCON

63. The bit which disables reception of serial data is which one of the following?

- (a) RB8
- (b) TB8
- (c) RI
- (d) REN**

64. The instruction which activates the PSEN signal is which one of the following?

- (a) MOV C**
- (b) MOV @
- (c) MOV
- (d) MOV X

65 .Which of these is Double Hand Shake

- (a) STB followed by ACK
- (b) STB followed by ACK and removal of ACK**
- (c) STB only
- (d) ACK followed by STB

66. Two 8255's IC1&IC2 are connected to 8086 16 bit bus and D0 to D7 are connected to IC1 and D8 to D15 are connected to IC2. The base address signals A0&A1 goto IC1&IC2's

A0&A1 pins respectively. If a decoded signal with arrange of 0FFE0H to 0FFE3H then What is the address of IC1 PORTB register

- (a) 0FFE2H
- (b) 0FFE0H
- (c) 0FFE3H
- (d) 0FFE1H**

67 . A key board is made using 12 keys connected as a matrix of 4X3. How many pins of the I/O port are used?

- (a) 12
- (b) 09
- (c) 07**
- (d) 11

68 . How many steps per revolution does a stepper motor in full step mode take?

- (a) 200**
- (b) 400
- (c) 380
- (d) 220

69 . Which of these signals has the second highest priority?

- (a) NMI**
- (b) Hold
- (c) Reset
- (d) Irq

70. Which of these is called for doing Single Stepping?

- (a) INT0
- (b) INT2
- (c) INT3
- (d) INT1**

71. Which one of these BIOS services is used for Video Operation?

- (a) 13H
- (b) 10H**
- (c) 33H
- (d) 16H
- (d) ISR

72. Given the program shown below , What is the value of R after this program executes?

```
P db 5
Q db 6
R db 7
MOV AL,[P]
MUL AL
MOV BL,AL
MOV AL,[Q]
```

ADD AL,BL

MOV [R],AL

(a) $R = (P+Q)$

(b) $R = (P+Q)^2$

(c) $R = (P^2+Q^1)[P^2+Q]$

(d) $R = P + Q^2$

73. USB connector has how many pins?

(a) 3

(b) 2

(c) 5

(d) 4

74. The 8051 micro controller is?

(a) 8 bits

(b) 32 bits

(c) 16 bits

(d) 24 bits

75. Which one of the following starts the timer?

(a) IE1

(b) TF

(c) TR

(d) IT1

76. The interrupt vector address for serial reception is which one of the following addresses?

(a) 0003H

(b) 0023H

(c) 000B H

(d) 0013H

77. The instruction used to access internal RAM is which one of the following?

(a) MOV @

(b) MOV

(c) MOV X

(d) MOVC

78. When 8255 port is to be read then which of these combinations is valid

(a) $RD = 1, WR = 0, RESET = 0, CS = 0$

(b) $RD = 0, WR = 1, RESET = 1, CS = 0$

(c) $RD = 0, WR = 1, RESET = 0, CS = 1$

(d) $RD = 0, WR = 1, RESET = 0, CS = 0$

79. Which of these key switches is non mechanical contact type?

(a) MECHANICAL KEY SWITCHES

(b) HALL EFFECT KEY SWITCHES

- (c) MAGNETIC REED KEY SWITCHES
- (d) MEMBRANE KEY SWITCHES

80. An A/D converter which has a maximum output digital value of 1023 need show many wires for connecting its digital output to a peripheral chip

- (a) 10**
- (b) 13
- (c) 12
- (d) 8

81. Which of these is used for Power brown out management?

- (a) Hold
- (b) NMI**
- (c) Irq
- (d) Reset

82. Which of these is called when a Divide Error occurs?

- (a) INT3
- (b) INT1
- (c) INT2
- (d) INT0**

83 . DOS Interrupts reside in the?

- (a) ROM
- (b) Floppy Disk
- (c) Hard Disk
- (d) RAM**

84 . For which one of these values of AL does the Video interrupt sets 80X25 color video mode?

- (a) 02H
- (b) 00H
- (c) 03H**
- (d) 01H

85. Which of these Initialization Command Word indicates whether slave connected to the PIC IRQ pins?

- (a) ICW3**
- (b) ICW2
- (c) ICW4
- (d) ICW1

86. When the MODEM is ready to Transmit Data it Asserts which one of these signals is asserted?

- (a) DSR
- (b) CD
- (c) RTS
- (d) CTS**

87. Given the program shown below, What is the expression evaluated by this program?

P db 5

Q db 6

R db 7

MOV AL,[P]

MUL AL

MOV BL,AL

MOV AL,[Q]

MUL AL

ADD AL,BL

MOV [R],AL

(a) $R=(P^2+ Q^2)$

(b) $R=(P+Q)$

(c) $R= P+Q^2$

(d) $R=(P+Q)^2$

88. The L2 and 1 bits in the Mode word are used for setting which of these parameters?

(a) NUMBER OF STOP BITS

(b) **CHARACTER LENGTH**

(c) BAUD RATE FACTOR

(d) PARITY

89. The data signals used by USB are of which type of the following?

(a) Uni-Phase

(b) Quad Phase

(c) **Bi-Phase**

(d) Tri-phase

90. The 8051 micro controller built in timer is of how many bits?

(a) **16**

(b) 8

(c) 32

(d) 24

91. Which of these register of 8051 is 16 bit?

(a) **DPTR**

(b) PSW

(c) SP

(d) A

92. Which of these signals is used for enabling the external ROM?

(a) ALE

(b) RESET

(c) EA

(d) **PSEN**

93 .Which of these is Single Hand Shake

- (a) STB followed by ACK and removal of ACK
- (b) STB only
- (c) STB followed by ACK**
- (d) ACK followed by STB

94. At power on or after reset the ports are in which of these conditions

- (a) PORT A=INPUT,PORT B=INPUT,PORT C=INPUT**
- (b) PORT A=INPUT,PORT B=OUTPUT,PORT C=OUTPUT
- (c) PORT A=OUTPUT,PORT B=INPUT,PORT C=OUTPUT
- (d) PORT A= INPUT,PORT B=INPUT, PORT C=OUTPUT

95. Which of these key switches is non mechanical contact type ?

- (a) MEMBRANE KEY SWITCHES
- (b) HALL EFFECT KEY SWITCHES**
- (c) MECHANICAL KEY SWITCHES
- (d) MAGNETIC REED KEY SWITCHES

96. How many steps per revolution does a stepper motor in half step mode take?

- (a) 200
- (b) 220
- (c) 400**
- (d) 380

97. The third response of the 8086 to an interrupt is which one of the following?

- (a) Resets Trap Flag**
- (b) Decrements the SP by 2&pushes flag register
- (c) Decrements the SP & pushes current CS contents
- (d) It disables interrupt flag

98. In the single character display using Interrupt 21H,DL is the register which contains the character to display. If DL contains 61 H which of these characters is displayed?

- (a) B
- (b) a**
- (c) b
- (d) A

99. For which one of these values of AH the key board interrupt wait for a key to be pressed before returning?

- (a) 03H
- (b) 01H
- (c) 02H
- (d) 00H**

100. Which of these Initialisation Command Word indicates whether PIC is being used in Single or Cascaded mode?

- (a) ICW3
- (b) ICW1**

- (c) ICW4
- (d) ICW2

101. Serial data is received by the DTE from the DCE through which one of these signals?

- (a) RTS
- (b) CD
- (c) CTS
- (d) RxD**

102. The lower byte of a 16 bit count is loaded in which of these registers?

- (a) TLx**
- (b) THx
- (c) TCON
- (d) TMOD

103. The Serial Interrupt is enabled by which of these bits?

- (a) ES**
- (b) EA
- (c) ET
- (d) EX

104. This input pin is used for accessing Internal or External Memory and also generating the bus signals for micro processor operation of the micro controller?

- (a) PSEN
- (b) EA**
- (c) RESET
- (d) ALE

105 . The 8255 PPI has

- (a) 64 pins
- (b) 16 pins
- (c) 40 pins**
- (d) 28 pins

106 . If 8 seven segment led non multiplexed displays including the decimal point are connected. How many wires are needed to connect the segments(not including power supply wires)?

- (a) 64**
- (b) 15
- (c) 56
- (d) 16

107 . What is the angle per step of a stepper motor in full step mode?

- (a) 0.45 degrees
- (b) 1.0 degrees
- (c) 0.9 degrees
- (d) 1.8 degrees**

108 . In the A/D converter ADC 0808 which of these signals is used select an analog input channel to be digitised

- (a) EOC
- (b) OE
- (c) ALE**
- (d) SOC

109 . When an interrupt service is over, what is the instruction which makes 8086 continue executing the program it was executing before the Interrupt occurred

- (a) JMP
- (b) ESC
- (c) IRET**
- (d) RET

110 . What is the offset address of INT 20H in the vector interrupt table?

- (a) 0050D
- (b) 0050H
- (c) 0080D
- (d) 0080H**

111 . Which one of these BIOS services is used for Printer Operation?

- (a) 15H
- (b) 14H
- (c) 17H**
- (d) 16H

112. How many registers does 8251 have?

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

113. Which one of these instructions could be used for swapping in a sort program

- (a) XCHG AX,DX**
- (b) SBB AX,DX
- (c) SUB AX, DX
- (d) MOV AX,BX

114. If B1=0 and B0=0 in the mode register of the 8251.The USART is working in which of these modes?

- (a) Synchronous mode
- (b) Asynchronous mode with BRF=16**
- (c) Asynchronous mode with BRF=64
- (d) Asynchronous mode with BRF=1

115. The serial data transmission standards which uses differential Rx & Tx signals is

which one of the following?

- (a) RS232C
- (b) RS449
- (c) RS423A
- (d) RS422A**

116. The 8051 is a

- (a) 16 bit micro controller
- (b) 24 bit micro controller
- (c) 8 bit micro controller**
- (d) 32 bit micro controller

117. Which of the registers R0 to R7 support indirect addressing?

- (a) R6 & R7
- (b) R0 & R6
- (c) R0 & R7
- (d) R0 & R1**

118. Which of these modes the timer is a 16 bit timer?

- (a) Mode 2
- (b) Mode 3
- (c) Mode 1**
- (d) Mode 0

119. The mode in which serial port operates like a shift register is which one of the following?

- (a) Mode0**
- (b) Mode2
- (c) Mode3
- (d) Mode1

120 . Group B port assignments of 8255 is

- (a) Port B & Lower PortC**
- (b) Port A& Upper Port C
- (c) Port B& Upper PortC
- (d) Port A & Lower Port C

121 . If the control word 00 is given to the control register of the 8255 PPI then which of these options are the condition of the ports

- (a) BIT SET RESET**
- (b) ALL PORT's OUTPUT
- (c) PORT's A&B INPUT, PORT C OUTPUT
- (d) ALL PORT's INPUT

122. The electro mechanical device which produces mechanical displacement in proportion to an applied voltage is know as

- (a) Solenoid
- (b) Contactor

(c) Actuator

(d) Relay

123 . In a D/A converter the output voltage is

(a) Voltage

(b) Pulses

(c) current

(d) Ramp

124 . Which of these is called Break Point Interrupt?

(a) INT2

(b) INT1

(c) INT0

(d) INT3

125. The PIC interrupt controller which indicates that an Interrupt is already in service is?

(a) ISR

(b) IRR

(c) IMR

(d) PR

126. Communications which take place in either direction between two systems, but can only occur in one direction at a time is known as

(a) Complex

(b) Half Duplex

(c) Full Duplex

(d) Simplex

127. The 8251 gets its clock from which of these signals?

(a) SYNDT/BD

(b) C/D

(c) CLK

(d) Tx/C

128. Which combination of the flags indicate that the source is equal to the destination

(a) CY=1,Z=1

(b) CY=0,Z=0

(c) CY=1,Z=0

(d) CY=0,Z=1

129. Which of these bits in status register is used to clear all errors?

(a) ER

(b) EN

(c) RTS

(d) IR

130. The size of the internal data RAM in 8051 is

- (a) 128 bytes
- (b) 256 bytes
- (c) 32 bytes
- (d) 1 K bytes

131. Counter or timer operation is chosen in which of these registers?

- (a) TLx
- (b) THx
- (c) TCON
- (d) TMOD

132. Which of these modes is a standard USART mode?

- (a) Mode3
- (b) Mode0
- (c) Mode1
- (d) Mode2

133. Which of these is Double Hand Shake

- (a) STB only
- (b) STB followed by ACK
- (c) STB followed by ACK and removal of ACK
- (d) ACK followed by STB

134 . At power on or after reset the ports are in which of these conditions

- (a) PORT A=INPUT,PORT B=INPUT, PORT C=INPUT
- (b) PORT A=INPUT,PORT B=INPUT, PORT C=OUT PUT
- (c) PORT A=INPUT, PORT B=OUTPUT, PORT C=OUTPUT
- (d) PORT A=OUTPUT, PORT B=INPUT, PORT C=OUTPUT

135 . Which of these Peripheral ICs is made for interfacing Keyboards and Multiplexed LED displays?

- (a) 8259
- (b) 8237
- (c) 8251
- (d) 8279

136. Which of these motors works like a digital system

- (a) DC MOTOR
- (b) STEPPER MOTOR
- (c) INDUCTION MOTOR
- (d) SYNCHRONOUS MOTOR

137. An 8 bit A/D converter with a reference voltage of 5 Volts will be able to read a lowest non zero voltage of

- (a) 20 mV
- (b) 19.5 mV

- (c) 21 mV
- (d) 19 mV

138 . In the single character display using Interrupt 21H, DL is the register which contains the character to display. If DL contains 41H which of these characters is displayed?

- (a) A
- (b) B
- (c) b
- (d) a

139. Given the program shown below, What is the expression evaluated by this program?

```
P db 5
Q db 6
R db 7
S db 6
MOV AL,[P]
MOV BL,[Q]
ADD AL,BL
MUL AL
ADD AL,R
MOV CL,S
DIV CL
```

- (a) $((P+Q)2+R)/S$
- (b) $(P+Q2+R)/s$
- (c) $((P +Q)2+R)/S$
- (d) $(P+(Q+R)2)/S$

140. Which of these parameters are set by the S2& S1 bits?

- (a) BAUD RATE FACTOR
- (b) PARITY
- (c) CHARACTER LENGTH
- (d) NUMBER OF STOP BITS

141. The data signals used by USB are of which type of the following?

- (a) Uni-Phase
- (b) Quad Phase
- (c) Bi - Phase
- (d) Tri-phase

142. Which of these modes the timer is a 16 bit timer?

- (a) Mode 3
- (b) Mode 0
- (c) Mode 2
- (d) Mode 1

143. The mode in which serial port operates like a shift register is which one of the

following?

- (a) Mode 0
- (b) Mode 1
- (c) Mode 3
- (d) Mode 2

144. Which of these signals is used for enabling the external ROM ?

- (a) EA
- (b) RESET
- (c) ALE
- (d) PSEN

145. Which combination of the flags indicate that the destination is greater than the source

- (a) CY=1,Z=1
- (b) CY=0,Z=0
- (c) CY=0,Z=1
- (d) CY=1,Z=0

146.The number of modes of operation of 8255 PPI is 2

147.When A0=1 and A1=0 and the 8255 PPI is selected then which of these register or port is being accessed PORTB

148.A keyboard is made using 64 keys connected as a matrix of 8*8, port A is used for selecting Rows and port B is used for sensing closed keys. what is the control word to be given to the 8255 if port C is in Output mode? 82H

149.Wof starts the timer TR

150.How many wire does the stepper motor effectively have 5

151.An 12 bit A/D converter with a reference voltage 4.096 will be able to read a lowest non zero voltage of 1mv

152.The electro mechanical device which produce mechanical displacement in portion to an applied voltage is known as Actuator

153.In A/D converter and 0808 how many channels of analog input are available 8

154.How many groups are the 8255 port organized as 2

155.What is the angle of Half stepper motor 0.9 degrees

156.What is the unit of the torque produced by a stepper motor Kg-Cm

157.In A/D converter ADC0808 WOF signals indicates output is saved EOC

158.Mode 2 of 8255 port is used for which of these I/O modules Bidirectional HandShake

159.A keyboard made using 12 keys connected as a matrix of 4X3,How many ports if the I/O port are used 7

160.Which of these motors works like a digital System Stepper motor

161.A keyboard mode is using 12 keys connected not as matrix. How many pins of I/O port are used 12

162.In A/D Converter ADC0808 which of these signals is used to indicate a conversion SOC

163.An 8-bit A/D Converter with reference voltage of 5 Volts

164.Group A port assignment of 8255 is Port A & upper portC

165.A 10 bit D/A converter with a reference voltage of 10V is given a digital i/p number

256.which of these is the nearest to the expected O/P voltage 2.5V

166. When 8255 is not enabled/selected for operation then which of these combination is valid RD=0, WR=1, RESET=0, CS=1
167. A keyboard switches don't change position 8 months but generate transients. This is called which one of these Keybounce
168. How many windings does a stepper motor have 4
169. Which one of these values in AH performs display of message on video display 09
170. Which of these signals has the 3rd highest priority HOLD
171. The BIOS routines are present in ROM
172. The interrupt vector table is located in which of these regions RAM
173. The software interrupts pick up the address of the routine from the interrupt vector table. Which of the following is correct: IP in lower word and CS in upper word
174. The PIC interrupt controller which resolves the priority of an interrupt is PR
175. The first response of 8086 to an interrupt is : Decrement the SP by 2 and push flag register
176. Which of these are the new line characters 0AH, 0DH
177. The fourth response of 8086 to an interrupt is which one of the following decrements the Stack pointer pushes current CS contents
178. Which of these register is used to point to start of message to be displayed on video display using DOS function call 09 interrupt 21H? DX
179. Which of these installation of BIOS services is used for DISK operation 13H
180. Which of these initialization CW indicates interrupt vector number to be used for the current service ICW1
181. When an interrupt Occurs the microprocessor executes the interrupt service routine after which of the following: Instruction Cycle
182. Which of these is improved in RS232C by using low impedance drivers RS422A
183. When the modem receives a signal the remote modem is active it asserts which one of these signals CTS
184. The device which facilitates communication is DTE
185. The USB signal is encoded using which of these formats NRZI
186. When the DTE is ready to Transmit Data it Asserts which one of these signals is asserted? RTS
187. The 8251 register are accessed by which of these following CLD
188. The mode word the DEN and Ep bits are used for setting Which of these parameters PARITY
189. Asynchronous serial data transmission sends data in which of the following ways First start bit, next 7 data bits, next parity bit followed by 1 or 1 a half stop bits
190. Synchronous serial data transmission sends data in which of the following ways A block of data bytes with start and end of block identified by 4 fixed parts of bits
191. Sorting N numbers how many loops necessary 2
192. A 37 pin connector is used by one of the following serial data transmission standards which one it is RS449
193. If data bits are 7, parity is odd and 1 stop bit is transmitted how many bits are transmitted? 10
194. If the frequency-19,200HZ and the baud rate is 1200. Which of the following is the baud rate factor 16
196. How many register banks are there in 8051 4
197. How many modes of serial operations are there 4

- 198.The RD and WR signals are generated on which of these port? PORT3
- 199.The 8051 micro controller has how many I/O ports 3
- 200.The bit addressable RAM occupies which of the following port? Port3
- 201.If the entire memory space of RAM and ROM is used the total memory access is which of the following 128 Kbytes
- 202.How many timers does 8051 have 2
- 203.The data bus and lower 8 bits of these of address bus generated on which of these ports? Port 0
- 204.Timer is used as a 13 bit timer in which of these modes? Mode0
- 205.The interrupt vector address for timer0 000BH
- 206.How many general purpose registers are there in 8251 34
- 207.Global enable is controlled by which of these bits EA

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