

1.If we want to interface an 82C55 with the keyboard and mouse, which step has to be done first?

- a.Enable RD pin to receive data from port A
- b.Enable RD pin to receive data from port B
- c.Write a word in the control register to program 8255
- d.To check either port C is handshaking properly or not

2.What would happen with port-A and C if the control word is: 10001011?

- a.Keyboard can be added in port-A and Mouse can be added in port-C
- b.Printer can be added in port-A and LED can be added in port-C
- c.Touchscreen can be added in port-A and Seven segment display can be added in port-C
- d.LEDs can be added in port-A and switch can be added in port-C
- e.Switches can be added in port-A and LEDs can be added in port-C

3.If the value of the pin STB (Strobe Input) falls to low level, then:

- a.Interrupt gets disabled.
- b.It indicates input data is loaded into buffer
- c.It indicates the input buffer can't accept more data.
- d.All of the above

4.Suppose you want to program the control register, which one of the following control signals should be True?

- a.R=0,W=1,CS=0,A0=1,A1=1
- b.R=1,W=0,CS=1,A0=1,A1=1
- c.R=1,W=0,CS=0,A0=1,A1=1
- d.R=0,W=0,CS=0,A0=1,A1=1

5.When does the OBF signal go high?

- a.When CPU enables the write signal to send output to port-A.
- b.When the output device responds with an ACK signal
- c.When the data has been written in the output port.
- d.When PC7 is set to 1.

6.Suppose you have connected an Ipad to port-A and a printer to port-B. How many ports from port-C can you use for I/O?

- a.5
- b.3
- c.0
- d.2

7. What does the following control word represent, 00100001?

- a. The CPU is writing to Port A and reading from Port C.
- b. PC1 is set to 1.
- c. PC0 is set to 1
- d. The CPU is writing from port-B and reading from port-C.

8. Suppose you have connected a mouse to port-B, LED to port-A and switch to port-C. What should be the control register?

- a. 00010111
- b. 10010111
- c. 00010110
- d. 10001110

9. If the control bits for 82C55 is 1011101, which of the following is false?

- a. Port C Pin 4 and 5 are configured as Inputs.
- b. There is only one interrupt pin for both Port A and Port B.
- c. Port C lower pins can not take inputs.
- d. Both input and output handshaking can take place.

10. What should be the control bits if we connect a pendrive as a simple handshaking input device to Port A and a headphone as a simple handshaking output device to Port B?

Answer: 1011X10X

11. Which signal initiates the Output Handshaking?

- a. OBF
- b. ACK
- c. WR
- d. INTR

12. What is the bit length of data that can be transferred between the 82C55 and the interfaced device at a time?

- a. 1 byte
- b. 3 byte
- c. 32 bits
- d. 16 bits

13. When the microprocessor receives an Interrupt signal from the 82C55 IC in Input Handshaking for port B, which one of the following control signals should be True?

- a. A1=0, A0=0, WR'=0
- b. A1=0, A0=1, RD'=1
- c. A1=1, A0=0, RD'=0

d.  $A_1=0$ ,  $A_0=1$ ,  $RD'=0$

14. When the microprocessor receives an Interrupt signal from the 82C55 IC in Output Handshaking for port A, which one of the following control signals should be True?

a.  $A_1=0$ ,  $A_0=0$ ,  $WR'=0$

b.  $A_1=0$ ,  $A_0=1$ ,  $WR'=1$

c.  $A_1=1$ ,  $A_0=0$ ,  $RD'=0$

d.  $A_1=0$ ,  $A_0=1$ ,  $RD'=0$

15. Which of the following statements is False for Latch and Buffer?

a. Latch can cancel the noise in the stored data

b. Buffer can modify the data according to the requirement of the device

c. Latch can hold 1 bit at a time

d. A latch will store the same data until it is cleared

16. Which Port C pins are available for I/O when the control bits for configuring 82C55 is 10101101?

a. PC6, PC7

b. PC4, PC5

c. PC0, PC1, PC2

d. PC5, PC6

17. For Bit Set-Reset mode, which of the following control register values is correct if we want to Reset PC6?

a. 0xxx1101

b. 1xxx0101

c. 0xxx1100

d. 1xxx1101

18. For Input Handshaking, which signal is sent from the 82C55 to the interfaced device?

a. Strobe Signal

b. Interrupt Request

c. Input Buffer Full

d. Interrupt Enable Signal

19. For Output Handshaking, when is the OBF signal disabled?

a. When the ACK signal is received from the device

b. When the INTR signal is sent to microcontroller

c. When the microcontroller enables Write pin

d. When the microcontroller sends data to the designated port

20. If we want to use the 8 pins of Port C as output for 8 buzzers (Output Device), which of the following control signals is correct?

a. 11010011

**b. 10000000**

c. 10001001

d. 01111111

21. Which pins are used to transfer data from the Data Bus Buffer to the Microprocessor?

a. PA0 - PA7

**b. D0 - D7**

c. WRO - WR7

d. PC0 - PC7