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**Question Paper Code: 45052**

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Fifth Semester

Electronics and Instrumentation Engineering

14UEI 502 - MICROPROCESSORS AND INTERFACING

(Regulation 2014)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

**(Answer any six of the following questions)**

1. The first Microprocessor was

- (a) Intel 4004                      (b) 8080                      (c) 8085                      (d) 4008

2. The operating frequency of 8085A microprocessor is

- (a) 3MHz                      (b) 5 MHz                      (c) 4 MHz                      (d) 6 MHz

3. Mention data store instruction in a stack memory.

- (a) CALL                      (b) PUSH                      (c) POP                      (d) RET

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

- (a) Arithmetic operations                      (b) Logical operations  
(c) Data transfer operations                      (d) Branch operations

5. Maximum number of interrupts that we can connect with Programmable Interrupt Controller is

- (a) 8                      (b) 16                      (c) 32                      (d) 64

6. Mention the type of IC 8253

- (a) Programmable interrupt controller      (b) Programmable interval timer  
(c) Programmable peripheral interface      (d) Keyboard display controller

7. How many bits wide is the address bus in 8086 Microprocessor ?s.

- (a) 12 bit                      (b) 10 bit                      (c) 16 bit                      (d) 20 bit

8. The no of bits in 8086 flag register is

- (a) 8                      (b) 10                      (c) 13                      (d) 16

9. IMUL source is a signed

- (a) Multiplication      (b) Addition                      (c) Subtraction                      (d) Division

10. The IF Flag is called as

- (a) Initial Flag                      (b) Indicate Flag                      (c) Interrupt Flag                      (d) Inter Flag

PART – B (3 x 8= 24 Marks)

**(Answer any three of the following questions)**

11. Draw the pin diagram of 8085 and explain the function of each pin. (8)

12. Give the classification of 8085 instructions and explain any SIX instructions by choosing any one category of instruction set in detail. (8)

13. Explain in detail the architecture of 8251 interfacing with its operating modes. (8)

14. Draw the internal architecture of 8086 and explain the function of special purpose registers. (8)

15. Write an assembly language program to find the largest and smallest of an array of N-numbers. (8)

