

No. of Printed Pages : 4

180844/170844/120844

Roll No. ....

/031045/30834

**4th Sem. / Comp. Eltx. Med Eltx, Mecatronics**

**(5th Sem) Power Eltx.**

**Sub : Microprocessor & Peripheral Devices/  
Microprocessor & Applications**

Time : 3 Hrs.

M.M. : 100

**SECTION-A**

**Note: Multiple choice Questions. All Questions are compulsory. (10x1=10)**

Q.1 Which of the following is not a microprocessor? (CO1)

- a) Android
- b) Intel i4
- c) Intel 8086
- d) Pentium3

Q.2 How many flags are there in a 8085 microprocessor? (CO3)

- a) 4
- b) 5
- c) 7
- d) 10

Q.3 Which of the following is not true about 8085 microprocessor? (CO1)

- a) It is an 8-bit microprocessor
- b) It is a 40 pin DIP chip
- c) It is manufactured using PMOS technology
- d) It has 16 address lines

Q.4 Which of the following is a special-purpose register of microprocessor? (CO1)

- a) Program counter
- b) Instruction register
- c) Accumulator
- d) Temporary register

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Q.5 DMA is a (CO5)

- a) Interrupt
- b) Data transfer technique
- c) Addressing mode
- d) None

Q.6 Addressing mode used in MVI,A, 08 is (CO2)

- a) Register mode
- b) Direct Mode
- c) Indirect mode
- d) Immediate mode

Q.7 SP in 8085 stands for (CO2)

- a) Stack pointer
- b) Shift pin
- c) Serial process
- d) None

Q.8 Which of the following flag is used to check null output? (CO3)

- a) Zero flag
- b) Auxiliary carry flag
- c) Interrupt flag
- d) Sign flag

Q.9 ALE is used for (CO1)

- a) Data transfer
- b) Control signal transfer
- c) Demultiplexing address and data bus
- d) All of above

Q.10 Microprocessor codes are written using (CO2)

- a) High level language
- b) Assembly language
- c) Machine language
- d) Java

**Section-B**

**Note: Objective type questions. All questions are compulsory. (10x1=10)**

Q.11 8085 is called \_\_\_\_\_ bit microprocessor. (CO1)

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- Q.12 Data bus has \_\_\_\_\_ pins in 8085 microprocessor. (CO1)
- Q.13 ALE stands for \_\_\_\_\_. (CO1)
- Q.14 Name two addressing modes in 8085. (CO2)
- Q.15 \_\_\_\_\_ is the highest priority interrupt in 8085. (CO5)
- Q.16 8085 is a \_\_\_\_\_ pin microprocessor. (CO1)
- Q.17 What is the size of Program counter register? (CO1)
- Q.18 FLAG is the non maskable interrupt. (True/False) (CO3)
- Q.19 Name two Arithmetic group instructions. (CO2)
- Q.20 DMA is interrupt driven data transfer technique. (True/False) (CO5)

### Section-C

**Note:** Short answer type Questions. Attempt any twelve questions out of fifteen Questions. (12x5=60)

- Q.21 What is the role of ALU in micro processor. (CO1)
- Q.22 Explain the function of various registers available in 8085. (CO1)
- Q.23 Explain how ALE helps in de-multiplexing address and data bus in 8085. (CO1)
- Q.24 What are addressing modes? Explain various addressing modes available in 8085. (CO2)
- Q.25 What is the significance of flag register. Discuss various flags in 8085. (CO3)
- Q.26 Discuss various type of interrupts in 8085. (CO5)
- Q.27 Explain in steps how a stored program is executed in 8085. (CO2)

- Q.28 Write a program in assembly language for multiplication of two 8-bit numbers. (CO2)
- Q.29 Draw the timing diagram of MEMW operation. (CO1)
- Q.30 Define instruction and classify them on the basis of size. (CO3)
- Q.31 What are interrupts. Differentiate between maskable and non-maskable interrupts. (CO5)
- Q.32 Draw and explain the pin diagram of 8257 DMA controller. (CO4)
- Q.33 Discuss the concept of memory mapping and compare memory mapped i/o with i/o mapped i/o. (CO5)
- Q.34 Discuss various type of data transfer instruction available in 8085 with example. (CO5)
- Q.35 What is the purpose of status bits in 8085. What role they play in decision making in 8085. (CO1)

### Section-D

**Note:** Long answer questions. Attempt any two questions out of three Questions. (2x10=20)

- Q.36 Draw and explain the functional block diagram of 8086 microprocessor. (CO1)
- Q.37 Discuss in detail various data transfer techniques in 8085. (CO5)
- Q.38 Draw and explain the pin diagram of 8085 with functional detail of each pin. (CO1)