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Roll No. .... 180844/170844/120844  
/031045/030834

**4th Sem / Branch : Comp, Eltx, Med. Eltx,  
Mechatronics (5th Sem.), Power Eltx.**

**Subject:- Microprocessor and Peripheral Devices /  
Microp. & App.**

Time : 3Hrs. M.M. : 100

### SECTION-A

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

- Q.1 What is Microprocessor? CO1  
a) A multipurpose PLD that accepts binary data as input  
b) A multipurpose PLD that accepts an integer as input  
c) A multipurpose PLD that accepts whole numbers as input  
d) A multipurpose PLD that accepts prime numbers as input
- Q.2 The microprocessor of a computer can operate on any information if it is present in \_\_\_\_\_ only. CO1  
a) Program Counter b) Flag  
c) Main Memory d) Secondary Memory
- Q.3 Which of the following addressing method does the instruction, ADDA, B represent? CO2  
a) register indirect addressing mode  
b) direct addressing mode  
c) register addressing mode  
d) register relative addressing mode

(1) 180844/170844/120844  
/031045/030834

- Q.4 How many data lines are there in 8085 microprocessor? CO1  
a) 8 b) 16  
c) 24 d) 12

- Q.5 DMA stands for CO4  
a) Direct memory allocation  
b) Direct memory access  
c) Dual Memory Allocation  
d) None of the above

- Q.6 Which stack is used in 8085 microprocessors? CO1  
a) FIFO b) FILO  
c) LIFO d) LILO

- Q.7 How many interrupts are maskable in 8085? CO5  
a) One b) Two  
c) Three d) Four

- Q.8 Which of the following is not a condition flag? CO3  
a) Trap flag b) Auxiliary carry flag  
c) Parity flag d) Zero flag

- Q.9 PC register in 8085 stands for CO1  
a) Program Counter b) Personal Computer  
c) Pixel Count d) None of above

- Q.10 Which of the following is a software interrupts? CO4  
a) TRAP b) INTR  
c) RST-6.5 d) RST-5

### SECTION-B

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

- Q.11 There are \_\_\_\_\_ address lines in 8085 microprocessor. CO1

(2) 180844/170844/120844  
/031045/030834

- Q.12 ALU stands for \_\_\_\_\_ CO1  
 Q.13 Control bus carries \_\_\_\_\_ signals. CO1  
 Q.14 Name two addressing modes in 8085. CO2  
 Q.15 \_\_\_\_\_ is a non-maskable interrupt. CO4  
 Q.16 \_\_\_\_\_ pin is used for demultiplexing address and data bus. CO1  
 Q.17 8085 is a \_\_\_\_\_ pin microprocessor. CO1  
 Q.18 What is the size of stack pointer? CO1  
 Q.19 TRAP is the highest priority interrupt. (True/False) CO4  
 Q.20 Name two data transfer group instructions. CO5

### SECTION-C

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

- Q.21 Define microprocessor. Why 8085 is called 8-bit microprocessor? CO1  
 Q.22 What is the role of memory unit in 8085? Draw its register structure. CO1  
 Q.23 How ALE helps in demultiplexing address and data bus in 8085? CO1  
 Q.24 Explain the bus structure of 8085. CO1  
 Q.25 Write the steps used to execute a stored program in 8085. CO2  
 Q.26 Name and explain various machine control instructions in 8085. CO2  
 Q.27 Define instruction and classify them on the basis of size. CO2

(3) 180844/170844/120844  
/031045/030834

- Q.28 What are addressing modes? Explain various types of addressing modes in 8085 with example. CO3  
 Q.29 What is the difference between memory mapped i/o and i/o mapped i/o? CO5  
 Q.30 Define interrupts. Explain various software interrupts available in 8085. CO5  
 Q.31 Draw and explain pin diagram of 8255 PPI. CO4  
 Q.32 Differentiate between synchronous and asynchronous data transfer techniques. CO5  
 Q.33 Write an assembly language program for addition of two 8-bit numbers. CO2  
 Q.34 What is the role of flag register in 8085? Explain various flags. CO3  
 Q.35 Draw and explain the timing diagram of opcode fetch operation. CO1

### SECTION-D

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

- Q.36 Explain the organization of microprocessor and elaborate its applications in various fields. CO3  
 Q.37 Draw and explain the functional block diagram of 8085 microprocessor. CO1  
 Q.38 Draw and explain the pin diagram of 8085 microprocessor chip. CO1

(**Note:** Course outcome/CO is for office use only)

(2540)

(4) 180844/170844/120844  
/031045/030834