

SECTION-C

Note: Long answer type questions. Attempt any three questions.

$$3 \times 10 = 30$$

- Q.3 Draw the block diagram of 8085 and explain function of each block.
- Q.4 Explain data transfer instructions in case of 8085 with example.
- Q.5 What are various data transfer scheme ? Explain in detail.
- Q.6 Draw the block diagram of 8257 DMA controller & explain it.
- Q.7 Write short note on following:
- Stack
 - Non-maskable interrupt.

No. of Printed Pages : 4

Roll No.

120844/31045

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

Subject : Microprocessor and Peripheral Devices

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts.

$$(15 \times 2 = 30)$$

- Q.1 a) Microprocessor 8085 is a _____ pin IC.
b) What is the function of address bus ?
c) Give one example of logical group of instruction ?
d) Define ALE.
e) What is the function of program counter ?
f) RST 7.5 is maskable interrupt (T/F)
g) STM stands for _____.
h) Define register indirect addressing mode.
i) Instruction IN20H is _____ byte instruction.

(4020)

(4)

120844/31045

(1)

120844/31045

- j) What is assembler ?
- k) Define fetch cycle.
- l) Give two instructions used for stack operation.
- m) What is memory mapping ?
- n) EPROM stands for _____.
- o) Define non-maskable interrupt.
- p) What is handshaking ?
- q) IC 8253 is called _____.
- r) Expand USART.
- iv) What is multiplexing ? Explain how will you demultiplex AD₇-AD₀.
- v) Write different addressing mode of 8085.
- vi) Explain CALL & RET instruction with example.
- vii) Describe different instruction format in 8085.
- viii) Write a program to add two 8 bit numbers.
- ix) Differentiate between memory mapped I/O & I/O mapped I/O.
- x) Explain primary & secondary memories.
- xi) Draw timing diagram of memory read cycle.
- xii) Explain concept of address decoding.
- xiii) Differentiate between hardware and software interrupt.
- xiv) What is the basic difference between programmed data transfer and DMA scheme ?
- xv) Draw the block diagram of 8255 PPT.

SECTION-B

Note: Short answer type questions. Attempt any ten parts $10 \times 4 = 40$

- Q.2
- i) Name four operations preformed by microprocessor.
 - ii) Describe flags of 8085.
 - iii) What are general purpose register ?

(2)

120844/31045

(3)

120844/31045