## 2022

## COMPUTER SCIENCE AND TECHNOLOGY

(Theory Paper)

Paper Code: CSIT 2.3

(Microprocessor 8085 and 8086)

Full Marks-80

Time-Three hours

The figures in the margin indicate full marks for the questions.

- 1. Answer the following questions:  $1 \times 6 = 6$ 
  - (i) How many flip-flops are there in a flag register of 8085 Microprocessor?
  - (ii) What is opcode?
  - (iii) What is operand?
  - (iv) How many data lines are there in 8085?
  - (v) How many address lines are there in 8086?
  - (vi) What is Microprocessor?

[Turn over

- 2. Answer the following questions:
- 2×5=10
- (i) What is Micro-controller?
- (ii) What is Bus system?
- (iii) What is clock signal for Microprocessor?
- (iv) What are the meaning of MOV  $R_d$ ,  $R_o$ ?
- (v) What is the difference between:

LDA, XXXX and STA, XXXX

3. Answer any six of the following questions:

Define:

5×6=30

- (i) Instruction Register
- (ii) General Purpose Register
- (iii) Program Counter
- (iv) Accumulator
- (v) Flag Register
- (vi) Control Block of Microprocessor
- (vii) Interrupt Block of Microprocessor
- (viii) Programmable Peripheral Interfacing Device
- (ix) Stack Pointer.

- 4. Answer any *two* of the following questions:  $10\times2=20$ 
  - (i) Draw the block diagram of 8085 microprocessor and describe.
  - (ii) Draw the block diagram of 8086 microprocessor and describe.
  - (iii) Write about address bus and data bus of 8085 microprocessor. How do address and data bus demultiplexed in this microprocessor?

6+4=10

5. Answer any one of the following questions:

14×1=14

- (i) Describe the operation to be performed by a microprocessor.
- (ii) Describe the instruction set of a microprocessor with a special reference to 8085 microprocessor.

(3)

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