## 2021

Time: 3 hours

Full Marks: 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from all the Parts as directed.

## Part - A

- 1. Choose the correct answer in each of the following:  $1 \times 5 = 5$ 
  - (a) Multiplexer is also known as:
    - (i) MUX
      - (ii) DEMUX
      - (iii) A/D Converter
      - (iv) None of these

- (b) Which of the following circuit converts the Binary Data into Decimal?
  - (i) Decoder
  - (ii) Encoder
    - (iii) Code Converter
    - (iv) Multiplexer
- (c) Subtraction in computer is carried out by:
  - (i) 1's Complements
    - (ii) 2's Complements
  - (iii) 3's Complements
- (iv) 9's Complements
- (d) Which of the following computer bus connects the CPU to a memory on system borad?
  - (i) Expansion Bus
    - (ii) Width Bus
    - (iii) System Bus
    - (iv) None of these
- (e) DMA stands for:
  - (i) Direct Memory Access
    - (ii) Directly Memory Address
    - (iii) Directly Memory Addition
    - (iv) None of these

.2.	Fill	in the blanks: $1 \times 5 = 5$
	(a)	Cpomputer address Bus is indistructional
	(b)	circuit is used to store one bit of
		the data.
	(c)	The collection of 8 bits is called as
	(d)	PIC Stands for
do	(e)	ISA Stands for

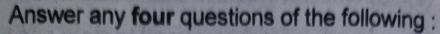
## Part - B

Answer any four questions of the following:

5×4 = 20

- 3. (a) Differentiate between Half Adder and Full Adder.
  - (b) Explain the Associative Memory.
  - (c) Diferentiate between Pipelining and Parallel Processing.
  - (d) Explain the Instruction set.
    - (e) Describe the Arithmetic and Logical microoperation.
    - (f) Differentiate between DX and SX of different microprocessor.

## Part - C



 $10 \times 4 = 40$ 

- 4. (a) What is Stack organisation? Describe the stack organisation with diagram.
  - (b) What is DMA Data Transfer Scheme? Explain the function of DMA Data Transfer.
  - (c) Explain the Architecture and Organisation of 80286 Microprocessor (mp)
  - (d) Differentiate between Encoder and Decoder.
  - (e) Explain the computer registers in Computer System Architecture.
  - of interrupts in Microprocessor (mp)
    - (g) Explain any three of the following:
      - (i) DMA System
      - (ii) Ports
      - (iii) Clock Pulse Generator
      - (iv) Cache Memory
      - (v) Bus Width

