

2023

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

(Objective Type Questions)

1. Choose the correct answer of the following :

1×5 = 5

(a) Multiplexer is also known as :

- (i) DEMUX
- (ii) MUX
- (iii) D/A converter
- (iv) None of these

- (b) EISA stands for :
- (i) Extended Industry Standard Architecture
 - (ii) Extention Industry Standard Architecture
 - (iii) Extended Indian Standard Architecture
 - (iv) None of these
- (c) Which Bus is unidirectional ?
- (i) Address Bus
 - (ii) Data Bus
 - (iii) Control Bus
 - (iv) None of these
- (d) Flags is a two Bistable state :
- (i) Set or Reset
 - (ii) Test or Retest
 - (iii) Reset or Reset
 - (iv) None of these
- (e) In GPR, total number of Pair of-Registers :
- (i) 3
 - (ii) 4
 - (iii) 2
 - (iv) None of these

NT - 15/3

(2)

Contd.

$$2x + 3y \leq 90$$

2. Fill in the blanks with appropriate answer :

1×5 = 5

- (a) MAR stands for _____.
- (b) LLP is also known as _____.
- (c) In 8086 Microprocessor, Data Bus is _____.
- (d) DMA stands for _____.
- (e) Microprocessor is classified into _____ categories.

Part – B

(Short-answer Type Questions)

Answer any four questions of the following :

5×4 = 20

3. (a) Explain the Bus System.
- (b) Differentiate between Pipelining and Parallel processing.
- (c) Explain the Multiplexer with diagram.
- (d) Differentiate between Half Adder and Full Adder with diagram.
- (e) What is Computer Registers ?
- (f) Differentiate between DX and SX of 80486 Microprocessor.

Part – C

(Long-answer Type Questions)

Answer any four questions of the following :

10×4 = 40

4. (a) What is Stack Organisation ? Explain the types of stack in stack organisation.
- (b) Describe the DMA Data transfer technique.
- (c) Describe the Microprocessor of Architecture and Organisation of the any microprocessor.
- (d) Explain the Microprogrammed control in computer system architecture.
- (e) Explain the Instruction Formats and Instruction Set in CSA.
- (f) Explain the following :
- (i) Ports
 - (ii) PIC
 - (iii) Associative memory
 - (iv) 80486

