Voc(Sem-II) —
BCA (CC – 4)

Architecture

2022

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) Demultiplexer is also known as :

(i) DEMUX (ii) MUX

(iii) A / D Converter (iv) None of these

(b) ISA stands for :

(i) Industry Standard Architecture

(ii) Industry System Architecture

(iii) Industry System Assessment

(iv) None of these

(c) Which of the following is NOT one of the type of Buses ?

(i) Control Bus

(ii) Data Bus

(iii) Address Bus

(iv) Utility Bus

(d) Which of these is a CPU Register ?

(i) PC

(ii) MAR

(iii) MDR

(iv) All of these

(e) Condition Codes are also referred to as _____.

(i) Index Register

(ii) Stack Pointer

(iii) Segment Pointer

(iv) Flag

2. Fill up the blanks : 1×5 = 5

(a) MBR stands for Master - Boot Record.

(b) The Circuit used to store one bit of data is known as Flip Flop.

(c) Cache Memory acts between CPU and RAM.

(d) The operation executed on data stored in register is called micro operation.

(e) The two kinds of Main Memory are Primary & Secondary.

Part – B

(Short-answer Type Questions)

Answer any **four** questions of the following : 5×4 = 20

3. (a) Explain the Microprogrammed Control.

(b) Differentiate between Multiplexer and Demultiplexer.

(c) Differentiate between ISA and EISA Bus Architecture.

(d) What is DMA Controller ?

(e) Differentiate between Encoder and Decoder.

(f) What is Instruction Cycle ?

Part – C

(Long-answer Type Questions)

Answer any **four** questions of the following : 10×4 = 40

4. (a) What is Bus System ? Explain the Bus Interconnection design of Computer.

   (b) What is Register Organisation ? Explain the types of Register in Register Organisation.

   (c) Explain the types of mapping.

   (d) Explain the Real Mode and Protected Mode.

   (e) Describe the Logical and Arithmatic Micro Operation.

   (f) Explain the Architecture and Organisation of 8086.

   (g) Explain any **two** of the following :

   (a) Communication

   (b) Interupts

   (c) Cache Memory

   (d) Addressing Mode