Total No. of Questions : **11**]   [Total No. of Printed Pages : **3**

BPP–1090

M.Sc. (Previous) Examination, 2022
COMPUTER SCIENCE

Paper MCS – 101

(Computer Organization)

Time : 3 Hours]   [*Maximum Marks : 50*

Section–A   **(Marks : 2 × 10 = 20)**

Note :–   Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section–B   **(Marks : 3 × 5 = 15)**

Note :–   Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **3** marks.

Section–C   **(Marks : 5 × 3 = 15)**

Note :–   Answer any *three* questions out of five (Answer limit **500** words). Each question carries **5** marks.

Section–A

1.   (i)   Define Processor.

     (ii)   What is Hardware-Software Interaction ?

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(iii) Define the use of Half Adder.

(iv) What is the use of D flip-flop ?

(v) What is Priority Interrupt ?

(vi) Define I/O Interface.

(vii) Define EPROM.

(viii) What is Associative Memory ?

(ix) What is the use of Data Bus ?

(x) What is OP Code ?

Section–B

2. Write the following Number System Conversions :

(i) $(11100011110)_2 \rightarrow (?)_8$

(ii) $(4734)_8 \rightarrow (?)_{10}$

(iii) $(2D9E)_{16} \rightarrow (?)_2$

Or

Explain Binary Addition with example.

3. Explain the difference between SR and JK flip-flop.

Or

What is sum of product in k-map ?

4. Explain Asynchronous Data Transfer.

Or

Explain DMA.

5. Describe Cache Memory.

Or

Explain Virtual Memory Mapping.

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6. Draw Pin Diagram of 8085.

Or

Explain Addressing Modes.

Section–C

7. Explain the role of 2's complement in binary subtraction with example.

8. Explain ripple counter with diagram.

9. Explain modes of data transfer.

10. Describe memory hierarchy in detail.

11. Explain register set in detail.