

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

PDCA-390

Post-Graduate Diploma in Computer Application Examination, 2021

COMPUTER ORGANIZATION

Paper - PGDCA-101

Time : 1½ 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.

BI-969

(1)

PDCA-390 P.T.O.

Section–A

2 each

1. (i) What is Positional Number System ?
- (ii) Why Primary memory is essential in system ?
- (iii) Define the Full Adder.
- (iv) What is Combinational Circuit ? How is it differ from sequential circuit ?
- (v) How the I/O Interface work ? Define in brief.
- (vi) Define any two modes of Data Transfer.
- (vii) Draw the Hirerarchy of memory.
- (viii) Define the type of Primary memory.
- (ix) What is Data and Address bus ?
- (x) Explain briefly ALU.

Section–B

2. Perform the following :

(i) $(101101)_2 \rightarrow ()_{2's \text{ compliment}}$

(ii) $(1A6.1)_{16} \rightarrow ()_{10}$

(iii) $(343)_8 \rightarrow ()_{10}$

1×3=3

Or

Define the Binary Airthmatic with example. 3

3. What is Full Adder ? Explain with logical diagram and Truth Table.

Or

Solve using K-map

$Y = \Sigma(0, 1, 2, 5, 6)$ 3

4. Define the DMA. 3

5. Explain the virtual memory. 3

6. What is Register Set. 3

Section-C

5 each

7. Explain the Input-Output Device.
8. What is Flip-Flop ? Explain RS Flip-Flop with diagram.
9. Explain any *five* modes of Data Transfer.
10. What is Cache memory ? Define formula of Hit Ratio.
11. Draw the block diagram of 8085 Architecture and explain its various part.