

AM-236

B.C.A Part—II Semester – III Examination

ELECTRONICS – 3ST5

Time—Three Hours]

[Maximum Marks—60

N.B. :— (1) **ALL** the questions are compulsory.

(2) All questions carry equal marks.

EITHER

1. (A) Draw pin diagram of 8085 μ p and explain function of important pins. 6
- (B) Draw and explain timing diagram of memory write machine cycle. 6

OR

2. (P) Explain the operation of fetch and execute cycle. 4
- (Q) Explain the instruction format in 8085 microprocessor with suitable example. 4
- (R) Explain the function of different flags in 8085 microprocessor. 4

EITHER

3. (A) Explain logical group of instruction with suitable example. 6

- (B) Draw the flow chart and write ALP for finding the minimum number from two numbers. 6

OR

4. (P) State the functions of the following instructions of 8085 microprocessor :
- (i) MVI R, data
 - (ii) RAR
 - (iii) STA 1500 H
 - (iv) NOP
 - (v) XCHG
 - (vi) MOV B, C. 6
- (Q) Draw the flow chart and write ALP for division of data present at memory location 1500 H and 1501 H. Store the result at 1502 H and 1503 H. 6

EITHER

5. (A) Explain various modes of data transfer. 6
- (B) Draw the pin diagram of 8255 PPI. 2
- (C) Explain BSR mode control word format of 8255 PPI with suitable diagram. 4

OR

6. (P) Different between memory mapped I/O and I/O mapped I/O scheme. 5

- (Q) Draw the block diagram of 8255 PPI. 3
- (R) Explain the control word format of 8255 PPI in I/O mode. 4

EITHER

7. (A) Explain BIU and EU of 8086 microprocessor. 8
- (B) Explain the concept of Physical Address and Effective Address. 4

OR

8. (P) Draw and explain flag register of 8086 microprocessor. 6
- (Q) Explain general purpose register of 8086 microprocessor. 6

EITHER

9. (A) Explain any six MOV instructions of 8086. 6
- (B) Write an ALP for multiplication of two 8-bit numbers. 6

OR

10. (P) Explain LEA, LDS and LES instructions. 6
- (Q) Write an ALP using 8086 microprocessor to find the maximum number between two 16-bit numbers. 6