

- (B) Write ALP of Division of two 8-bit data using 8086 microprocessor. 6

OR

10. (P) Write ALP to add two 16 bit data using 8086 microprocessor. 6

- (Q) Explain any six MOV instructions. 6



AL - 532

Third Semester B. C. A. (Part - II) Examination

**ELECTRONICS**

3ST5

P. Pages : 4

Time : Three Hours ]

[ Max. Marks : 60

- Note : (1) All questions are compulsory.  
(2) All questions carry equal marks.

1. **EITHER**

- (A) Draw the block diagram of architecture of 8085 microprocessor and explain ALU and Register arrays section. 6  
(B) Draw and Explain the timing diagram of memory read cycle. 6

OR

2. (P) Draw the block diagram of microcomputer and explain each block. 6  
(Q) State the function of following pins of 8085 microprocessor.  
(1) READY  
(2) ALE

(3) SOD

(4) INTR

(5)  $IO/\overline{M}$ 

(6) SID 6

## 3. EITHER

(A) What is Stack ? Explain stack related instructions. 6

(B) Draw the flow chart and write ALP for addition of two 8-bit nos. store result at memory location 1500 H. 6

OR

4. (P) What is subroutine ? Explain CALL and RET instruction. 6

(Q) Explain the addressing mode of 8085 microprocessor with suitable example. 6

## 5. EITHER

(A) Draw the block diagram of 8255 PPI and explain function of each block. 7

(B) Explain memory mapped I/O and I/O mapped I/O scheme. 5

OR

6. (P) Explain the I/O control word format of 8255 PPI with suitable diagram. 7

(Q) Explain synchronous and Asynchronous data transfer scheme. 5

## 7. EITHER

(A) Draw block diagram of 8086 Microprocessor and explain Bus interface unit. 5

(B) Explain various registers used in 8086 microprocessor. 7

OR

8. (P) Draw pin diagram of 8086 Microprocessor and explain the function of each pins. 7

(Q) Explain :—

(i) Segment register.

(ii) Index register. 5

## 9. EITHER

(A) Explain PUSH and POP instruction of 8086 microprocessor. 6