

(3 Hours)

Max Marks: 80

- Note:**
- 1. Question No. 1 is compulsory.**
 - 2. Out of remaining questions, attempt any three questions.**
 - 3. Assume suitable additional data if required.**
 - 4. Figures in brackets on the right hand side indicate full marks.**

- (A) Explain interrupt pins of 8085. (05)

(B) Explain string addressing mode of 8086 (05)

(C) Explain memory segmentation of 8086. (05)

(D) Write control word of 8255 to initialize port A as input port, port B and C as output port, Group A and B in mode 0. (05)
- (A) Draw and explain timing diagram for read operation of 8086 in minimum mode. (10)

(B) Write a program to set up 8253 as square wave generator with 1 ms period if input frequency of 8253 is 1 MHz. (10)
- (A) Draw and explain interfacing of ADC 0808 with 8086 microprocessor using 8255. (10)

(B) Explain 8086 interrupt structure. (10)
- (A) Describe in brief architecture of 80286 microprocessor (10)

(B) Explain Modes of 8254 Timer/Counter peripheral IC with the help of timing diagram. (10)
- (A) Draw and Explain interfacing of Math co-processor with 8086. (10)

(B) Explain interfacing of 8086-8259 (10)
- (A) Explain interfacing of 8086 with 8257 DMA controller. (10)

(B) Explain how 64 KB EPROM can be interfaced with 8086 that operates at frequency of 10 MHz using 8 KB device. (10)
