

(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.

1. (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)
2. (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)
3. (A) Draw and explain interfacing of ADC 0808 with 8086 microprocessor using 8255. (10)
- (B) Explain 8086 interrupt structure. (10)
4. (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)
5. (A) Draw and Explain interfacing of Math co-processor with 8086. (10)
- (B) Explain interfacing of 8086-8259 (10)
6. (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)
