Q.P. CODE: 37022

(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 address pins of 8085. **(04)**

(B) Explain addressing modes of 8086 **(08)**

(C) Explain memory segmentation of 8086. **(08)**

2. **(A)** Draw and explain operation of 8086 in maximum 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 interfacing of 8086 with DMA 8237 **(10)**

4. **(A)** Describe pipeline architecture of 80286 microprocessor **(10)**

(B) Explain programmable interrupt controller 8259 in brief **(10)**

5. **(A)** Draw and Explain interfacing of Math co-processor with 8086. **(10)**

(B) Explain interfacing of 8255 with 8086 microprocessor in minimum mode **(10)**

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

(B) Explain in brief HOLD, HLDA, TRAP, RESET IN, RD, WR, SID, SOD pins of 8085 **(10)**
