Q.P. CODE: 37024

K. G. C. E.
EXAM
KARJAT, RAIGAD

(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 memory segmentation of 8086 and its advantages. (10)

   (B) Explain input output control word format of 8255. (10)

   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.

2. (A) Explain addressing modes of 8086 microprocessor. (10)

   (B) Explain maximum mode of 8086 microprocessor. Draw timing diagram for read operation in minimum mode. (10)

3. (A) Draw and explain interfacing of DAC 0808 with 8086 microprocessor using 8255. Write a program to generate square wave. (10)

   (B) Draw and Explain interfacing of Math co-processor with 8086. (10)

4. (A) Describe in brief and compare architecture of 80286 and 80486 microprocessor. (10)

   (B) Explain how 32 KB EPROM can be interfaced with 8086 that operates at frequency of 10 MHz using 4 KB device. (10)

5. (A) Explain 8086 interrupt structure and its method of interfacing with 8086 microprocessors with suitable example. (10)

   (B) Write a program to set up 8253 as square wave generator, assume suitable data. (10)

6. (A) Explain in brief HOLD, HLDA, TRAP, RESET IN, RD, WR, SID, SOD pins of 8085. (10)

   (B) Discuss the functions of general purpose registers of 8086. Explain the function of each register and instruction support for these function. (10)

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