

B.E. 5th Semester (ECE) Examination,

December-2012

MICROPROCESSORS AND INTERFACING

Paper-EE-309-E

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt any five questions.

1. (a) Explain the architecture of 8085 microprocessor with neat block diagram. 10
(b) Explain in detail the 8085 vectored interrupts. 10
2. (a) Explain the following instructions with example :
PCHL, LDAX, CPI, CMA, ANA 10
(b) WAP to arrange sixteen 8 bit Nos in ascending order using 8085 instructions. 10
3. (a) Explain in detail the pin diagram of 8086 microprocessor. 10
(b) If the data segment register (DS) contains 4000 H, what physical address will the instruction MOV AL, [234 BH] read ? 5

- (c) Describe the function of the 8086 queue. How does the queue speed up processing ? 5
4. (a) List and describe in general terms, the steps an 8086 microprocessor will take when it responds to an interrupt. 10
- (b) Explain the block diagram of 8255 PPI. 10
5. (a) Explain the following instructions of 8086
MOVSB, LODSB, LDS, JNGE, IMUL. 10
- (b) Explain the block diagram of Intel 8259. 10
6. Explain in detail the interfacing of Keyboard and seven segment display with 8085 using 8255 PPI. 20
7. Explain the block diagram of Intel 8254. Also explain in detail the modes of operation of 8254. 20
8. Write a short note on :
- (a) DMA controller
- (b) Assembler Directives of 8086. 20