

**B. Tech. 5th Semester (CSE) Examination,
December – 2015
MICROPROCESSING & INTERFACING
Paper–EE-309-F**

Time allowed : 3 hours] [Maximum marks : 100

Note : Attempt five questions in all, selecting one question from each unit. Q. No. 1 is compulsory.

1. (a) Define Memory Segmentation. 4
- (b) Describe the purpose of Program Counter in 8085. 4
- (c) Describe the purpose of Trap flag in 8086. 4
- (d) Explain Register Addressing Mode in 8086. 4
- (e) What is programmable Interval Timer. 4

Unit-I

2. (a) Explain the purpose of following instructions in 8085.
 - (i) RIM (ii) SIM
 - (iii) RRC (iv) XCHG
 - (v) DADRp 10
- (b) Write a program to subtract two 8 bit numbers stored in memory location D000H and D001H store the result in memory location E000H and E001H in 8085. 10

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or

3. (a) Explain Pin diagram of 8085 and describe various signals. 10
(b) Discuss in detail 8085 interrupts. 10

Unit-II

4. (a) Explain flag manipulation instruction of 8086 in detail. 10
(b) Describe 8086 Microprocessor architecture with its block diagram. 10

or

5. (a) Explain instructions formats of 8086 microprocessor in detail. 10
(b) Explain the purpose of EU and BIU in 8086. 10

Unit-III

6. (a) Write the purpose of following instruction in 8086 with example. 10
(i) LOOP (ii) RET
(iii) AAM (iv) MOVSB
(b) Explain directives used in assembly language program ? Why are segment directives used. 10

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or

7. Write an ALP of 8086 to add series of N 16 bit numbers. 20

Unit-IV

8. Explain the working of 8255 in mode 2 and BSR Mode. Also explain how the contents of control registers are interpreted in BSR and I/O mode. 20

or

9. (a) Explain Pin diagram of 8237 DMA controller. 10
(b) Explain BSR and I/O modes of 8255 PPI chips. 10

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