

Roll No.

24230

B. Tech 5th Sem. (CSE)

Examination – December, 2014

Microprocessing & Interfacing

Paper : EE-309-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

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

1. (a) Differentiate vectored and Non-vectored interrupt. 4
- (b) What is Pipelining flushing ? How does this occur. 4
- (c) What are the advantages/disadvantages of memory mapped I/O over I/O mapped I/O? 4
- (d) Explain the difference between segment and PROC directives. 4
- (e) Explain hidden DMA. 4

UNIT – I

2. (a) Describe the Pin diagram of 8085 microprocessor. 10
(b) Write an assembly language Program to find the number of negative numbers in the array. 10
3. (a) What is interrupt ? Explain interrupt structure of 8085 microprocessor with suitable diagram. 10
(b) Write an assembly language Program to transfer 150 bytes of data from memory location starting at 21000H to memory addressed by 31000H. 10

UNIT – II

4. (a) Explain BIU and EU of 8086 microprocessor. 10
(b) What is Pipelining ? How is 8086 architecture designed to incorporate Pipelining ? 10
5. (a) Calculate the Physical address represented by : 10
(a) 1234H : 0002H
(b) F2 F2 H : 1234H
(b) Describe the 8086 instruction queue. Explain the advantages of Program relocation in 8086 microprocessor. 10

UNIT – III

6. (a) Explain directives and Identifiers used in 8086 microprocessor. 10
- (b) Write a simple assembly language Program to add two memory locations where each memory location is one byte wide. 10
7. (a) Explain NOP and HLT instructions with the help of suitable example. 10
- (b) Explain instruction execution timing with example. 10

UNIT – IV

8. (a) Describe the major components of 8279 keyboard / display interface with the help of its block diagram. 10
- (b) List the operating modes of 8255 PPI chip. 10
9. (a) Explain 8237 DMA controller with help of Pin diagram. 10
- (b) Explain : 10
- (i) Mode – 2 strobed bidirection I/O of 8255
- (ii) Priority Resolver.