

Roll No

CS - 601**B.E. VI Semester**

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Examination, June 2014

Micro Processor and Interfacing**Time : Three Hours****Max. Marks : 70**

- Note:** i) Attempt all Questions.
ii) All questions carry equal marks.

UNIT-I

1. a) What is tristate logic? Why is it needed in a microprocessor system? 7
- b) What is a microprocessor? Explain the basic fundamental blocks of a microprocessor. 7

Or

2. a) How is the READY signal used in a microprocessor system? 7
- b) What is HOLD and HLDA? How is it used? 7

UNIT-II

3. a) What factors should you consider to estimate the interrupt response time in 8085 microprocessor? 7
- b) Discuss the various types of addressing modes available in 8085 with an example of each. 7

Or

4. a) Explain the difference between the conditional and unconditional return instruction in 8085? 7
- b) i) How are slow peripherals interfaced with an 8085 Microprocessor? 3.5
- ii) What is the difference between wait state and bus idle condition? 3.5

UNIT-III

5. a) Explain the architecture of the microprocessor 8086. 7
- b) Discuss in detail the segmentation of memory in 8086. What are its advantages in 8086? 7

Or

6. a) Write an Assembly language program to find the largest word from the 100 words present in the memory from address 76000h and store the result in register BX. 7
- b) Explain the following instructions of the microprocessor 8086: 7

i) PUSH F	ii) AAA
iii) IDIV BYTE PTR [BX]	iv) REPNZ
v) SHL DX, 1	vi) LODSB

UNIT-IV

7. a) Draw the interfacing diagram of the 8086 microprocessor in the maximum mode configuration? 7
- b) Draw the architecture of the 8259 and explain the facilities available. 7

Or

8. a) Explain with a neat diagram the operation of the 8257 DMA controller. 7
- b) Explain the following terms in relation to the 8279 programmable keyboard and display controller. 7

UNIT-V

9. a) Draw the architecture of 8051 microcontroller? List the features of 8051 microcontroller. 7
- b) What are the operating modes of serial port of an 8051? 7

Or

10. a) Discuss briefly the interrupt of an 8051 microcontroller. 7
- b) Write down the various applications of microcontrollers. 7