Roll No ....

CS - 601
B.E. VI Semester
Examination, December 2014
Micro Processor and Interfacing

Time : Three Hours

Maximum Marks : 70

Note: Attempt any one question from each unit. All questions carry equal marks.

Unit - I

1. a) Give in brief the evolution of advanced microprocessors.
   b) Explain the application of microprocessor.

OR

2. a) Specify the functions of address and data bus.
   b) Distinguish between input/Output mapped Input/Output and memory mapped Input/Output.

Unit - II

3. a) Draw the functional block diagram of 8085 microprocessor and explain.
   b) Explain register organization of 8085 and explain typical application of each register.

OR

4. a) Draw the pin diagram of 8085 and explain the functions of each pin.
   b) Explain the interrupt process in 8085.

Unit - III

5. a) Discuss the flags of 8086 microprocessor.
   b) With the help of a Schematic diagram explain how the bus AD7 – AD0 is demultiplexed.

OR

6. a) Describe the instruction format of 8086. Also describe the MOV instruction of 8086.
   b) Write a program in 8086 assembly language to count the number of positive and negative number in a given series of numbers.

Unit - IV

7. a) Explain the block diagram and operation of programmable Keyboard/Display interface.
   b) Explain various operating mode of 8253 Programmable Interval Timer.

OR

8. a) Explain with a neat diagram the operation of the 8257 DMA controller.
   b) Explain the different modes of 8255.

Unit - V

9. a) What is Micro-controller? Explain the architecture of 8051 Micro-controller.
   b) What are the various addressing modes of 8051?

OR

10. a) Give an overview of 8051 instruction set
    b) Discuss the register set and flags of 8051 Microcontroller.