Sem-IV ETRX (CBGS)
Microprocessor & peripherals   8/12/16.

(3 Hours)   [Total Marks : 80

N.B. : (1) Question No.1 is **compulsory**
        (2) Attempt any **three** questions out of remaining **five** questions.
        (3) Assume any suitable data wherever required and justify the same.

Q1. Attempt the following.   20
    a) Compare architectural features of 8085 and 8086.
    b) What is multiprocessor system? Give advantages.
    c) Explain memory R/W cycle of any processor.
    d) What is interrupt? Give its application

Q2 a) Describe architecture of 8086.   10
    b) Explain 8237-DMAC and its interfacing.   10

Q3 a) Explain various addressing modes of 8086 with examples.   10
    b) What is 8255-PPI? Draw interfacing of 8255 with 8085/86.   10

Q4 a) Write an 8086 assembly language program for ordering (ascending or
        descending) a sequence of 5 numbers.   10
    b) What is need of bus arbitration? Explain 8289.   10

Q5 Interface 64 K bytes of program memory (ROM) and 12 K bytes of data
    memory (RAM), 8bit I/0 ports with 8086. Draw detailed circuit diagram,
    Memory map, I/0 map. (Assume 8K capacity devices)   20

Q6 Write short notes on.   20
    a) Loosely coupled system.
    b) Segmentation in 8086: usages and challenges.
    c) Nested interrupts using 8259PIC.