Microprocessor
Assignment 1
Vth Semester, CMP Department- D12/B

Date of Assignment- 13/09/2014 **Date of Submission- 20/09/2014**

Q1. (A) Compare 8085 with 8086 microprocessor w.r.t architecture, instruction set, speed etc. (Atleast 8 points)

(B) What is segmentation? What are the merits and demerits of segmentation?

Q2 Design an 8086 based system in minimum mode system for the following requirements:

(1) 128kB ROM using 32kBx8 memory device

(2) 512 kB RAM using 64kBx8 memory device

Q3. (A) Explain ICW's and OCW's of interrupt controller 8259.

(B) Draw the flowchart for initialization sequence of PIC.

Q4. (A) Explain with neat diagram memory read and write machine cycle in maximum mode.

(B) Explain the hardware required to generate click and reset signals.

Q5. (A) Explain assembler directives of 8086.

(B) Explain string instructions of 8086 with examples.

Q6. (A) Explain even and odd memory banks for 8086 with neat diagram

(i) accessing the even addressed byte

(ii) accessing the odd addressed byte

(iii) accessing the even addressed word

(iv) accessing the odd addressed word

(B) Write a program to transfer a block of data using string instructions. Also draw the flowchart for the same.

Q7. Explain the following instructions with one example each:

(1) SAL (2) TEST (3) STOS (4) CMP (5) JC (6) DAA (7) AAA (8) NOP (9) JA (10) SAR

Q8. Explain the architecture of 8086.