

December 2006
Microprocessor & Assembly Language Programming
CS-208
(B-Tech. Sem. - 4th, 2126)

M.M: 60

Time. 3Hrs.

Note: - Section A is compulsory. Attempt any four questions from Section B and any two questions from Section C.

Section A

(2 × 10 = 20)

Q1(a) Find the errors in the following instructions.

- (i) POP CS
- (ii) ROR BL, 04

- (b) Write an assembly program that accepts a string of characters?
- (c) What is the word size on the 8086?
- (d) List the sequence of operations needed for the FETCH cycle of a basic computer?
- (e) How many clock cycles occur in 1 wait cycle?
- (f) Why data transfer with DMA is accelerated?
- (g) What is the last instruction executed by every interrupt?
- (h) What is the function of IF flag?
- (i) What is contained in interrupt vector table of each interrupt?
- (j) How many bus cycles are required to read as unaligned word of data from memory?

Section B

(4 × 5 = 20)

- Q2. Draw a circuit diagram demonstrating how to create a 32 k × 8 EPROM from two 16k×8 EPROMs showing all signal connections.
- Q3. Write an assembly language program to calculate the 2's complement of a 16 bit no.
- Q4. Write an assembly language program that reads numbers from the users until the user types 5.
- Q5. Write an assembly language program to generate Fibonacci sequence.
- Q6. Draw Block diagram of 8251.

Section C

(2 × 10 = 20)

Q7. Interface the following memory ICS with 8086.

- (a) Two 4KB EPROMS, ending at FFFFFH.
- (b) Two 4KB SRAMS, starting at 00000H.

Describe the traffic light system, stepper motor interface.

Ram's Exam. Papers in Microprocessor & Assembly Language Programming

Q9. Explain the function of ALE and IO/M signals of the 8085 microprocessor.