

DOON UNIVERSITY, DEHRADUN

Mid Semester Examination, Semester, 2015-16 School of Technology

M.C.A. (Integrated) Fig. 1984 STM-521: Microprocessor and Applications

Time Allowed: 2Hours

Maximum Marks: 30

Note: Attempt All Questions from Sections A, B, C.

SECTION: A

(Marks: 6X 1=6)

- 1. Describe the following in short.
 - A. Micro computer.
 - B. Carry Flag
 - C. Register Addressing Mode
 - D. ALU
 - E. LSI
 - F. Two Shortcoming of assembly language

SECTION: B

(Marks: 3X4=12)

- 1. Write in detail about the architecture of 8086 microprocessor.
- 2. Describe the various types of addressing modes in 8086 microprocessor.
- 3. How an assembly language programming is different from high level programming. Write two uses of the assembly language. Write a program to add two 8 bit numbers stored in same segment,

SECTION: C

(Marks: 2X6=12)

- 1. Register set of 8086 microprocessor consist of 14 registers. Draw a block diagram of these registers. Write in detail about the index and pointer register. What are the roles of segment registers?
- 2. Write down the types of instructions in Instruction set of 8086. How physical address is generated in 8086.