CS/ECE/EEE/INSTR F241 – MICROPROCESSOR PROGRAMMING & INTERFACING

MODULE 2: THE X86 FAMILY

QUESTIONS

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- Q1. Distinguish between Programmer's Model and Architectural block diagram.
- **Q2.** Mention the major difference between 8086 and 8088 processor.
- **Q3.** Will there be any difference in the performance of 8086 processor if we make the size of the Instruction Queue '0'.
- **Q4.** If CS=2000 and IP= FFFE. What is the next address generated for fetching the instruction by 8086 processor
- **Q5.** Why is instruction pointer generally incremented by 2 in 8086 processors?
- **Q6.** Which Microprocessor has FS segment
- Q7. The starting address of various segments of 8086 processor is given as

Segment	Starting Address
Code Segment	F0000
Data Segment	30000
Extra Segment	00000
Stack Segment	AB000

Find the ending address.

Q8. For the Following Combinations of CS& IP what will be the physical address?

CS:2100 IP: FFFC

CS:FE00 IP:ABBE

CS:3220 IP:2140

CS:F000 IP:A1C4

- **Q9**. What are the default displacement registers for CS, SS, ES and DS?
- **Q10.** Determine the memory locations addresses by the following registers in real mode

CS:2000 EIP: 000010AC

DS:C000 ESI: 0000AB00

SS:8000 ESP:00000900

Q11. Based on the contents of Flag Register of 8086 after the add operation – what can you say about the type of result?

0	0	0	0	1	0	0	1	1	0	0	1	0	1	0	0

- **Q12.** Which Flag Bit controls INTR?
- **Q13.** What is the function of Trap Flag?
- Q14. What is the difference between the Function of Carry & Overflow flags?
- **Q15.** What is the additional flags present in 80286, 80386 and 80486 that were not there in 8086? What is their functionality?
- **Q16.** Which of the registers of 8086 can be used as pointer?