

**COURSE TITLE** : **MICROPROCESSOR LAB**  
**COURSE CODE** : **5138**  
**COURSE CATEGORY** : **A**  
**PERIODS/WEEK** : **4**  
**PERIODS/SEMESTER** : **52**  
**CREDITS** : **2**

**General Outcomes :**

Sl.	G.O	Student will be able
1	1	To understand the Programming environment of 8086
2	1	To understand The Instruction set and Programming Concepts of x86 Processor- Data transfer Instructions- Branch instructions- Arithmetic instructions
3	1	To understand The Instruction set and Programming Concepts of x86 Processor- Shift and Rotate Instructions- String Instructions
4	1	To understand The Instruction set and Programming Concepts of x86 Processor- Procedures, Macros and Number Format Conversions

**Specific Outcomes:**

**Module I**

- 1.0 To understand the Programming environment of 8086
- 1.1 Explore the Assembler, its different directives, and its different system interrupts

**Module II**

- 2.0 To understand The Instruction set and Programming Concepts of x86 Processor
- 2.1 Write small programs to implement the instructions and their usage in programs ( Data transfer Instructions- Branch instructions- Arithmetic instructions)

**Module III**

- 3.1 To understand The Instruction set and Programming Concepts of x86 Processor
- 3.1 Write small programs to implement the instructions and their usage in programs (Shift and Rotate Instructions- String Instructions)

**Module IV**

- 4.1 To understand The Instruction set and Programming Concepts of x86 Processor
- 4.1 Rewrite the programs done above to implement the ideas of Procedures, Macros and Number Format Conversions

Hardware Requirement : 8086 Trainer Kit  
 Software Requirement: Assembler