

## 19-202-0712 LANGUAGE PROCESSORS LABORATORY

### **Course Outcomes:**

*On completion of this course the student will be able to:*

1. *Design assemblers and macro processors .*
2. *Design deterministic finite automata for any language.*
3. *Implement lexical analyser.*
4. *Implement YACC programs for any context free grammar.*
5. *Design any top-down or bottom-up parsing algorithm.*

### **Cycle-I**

Implementation Two Pass Assemblers, Macro Processors and Deterministic Finite Automata.

### **Cycle- II**

Implementation of LEX programs.

### **Cycle-III**

Implementation of YACC programs.

### **Cycle-IV**

Implementation of parsing algorithms.

### **References:**

1. Hopcroft J. E., Motwani, R. and Ullman J. D., Introduction to Automata Theory, Languages, and Computation, 3<sup>rd</sup> Edition, ISBN : 978-03-214-5536-9.
2. Padma Reddy, A.M., Finite Automata and Formal Languages, 1<sup>st</sup> Edition, Pearson , Education ISBN 978-81-317-6047-5.
3. Mishra, K.L.P. and Chandrasekaran, N., Theory of Computer Science, Automata, Languages and Computation, 3<sup>rd</sup> Edition, PHI, 2014, ISBN 978-81-203-2968-3.
4. Peter Linz, An Introduction to Formal Languages and Automata, 4<sup>th</sup> Edition, Narosa Publishing Co., ISBN 978-81-7319-781-9.
5. John R Levine, Tony Mason and Doug Brown, Lex & YAcc, Oreilly, 2nd edition
6. web reference: Lex and Yacc Tutorial by Tom Niemann