# MCA – 4<sup>TH</sup> Sem

### Compiler Design

Section-A	Marks
Attempt All Question	2*7=14
1. What is Translator?	
2. Differentiate b\w Compiler & Assembler.	
3. Write a short note on Symbol Table.	
4. What are prefix & Postfix notation?	
5. What is Source to Source Compiler?	
6. What are Quadruples?	
7. What do you mean by Regular Expression?	

# Section-B

## **Attempt Any Three Question**

3\*7=21

- 1. Explain Non-Recursive Predictive Parsing & Recursive Decent Parsing.
- 2. What is Language Processing System?
- 3. Explain Compiler Architecture with suitable diagram. Define DAG.

4. What is Parse tree? Calculate the Left most derivation & Right most derivation For the following, step by step-

#### **Production Rules-**

E -> E \* E

E -> E + E

E-> id

#### Expression-

E+E\*E

5. State & Prove Arden's Theorem. Explain Code Optimization Techniques.

# Section-C

- 1. What are the Error recovery strategies?
- 2. Explain the All types of Recursive decant parsing. Explain Predictive Parser with Diagram.
- 3. Explain Bottom up Parser in details.
- 4. Differentiate b\w LL & LR Parsing.
- 5. Explain implementation of Lexical Analyzer.
- 6. Explain the Grammar & its type with suitable examples.
- 7. (i) Parse Tree & Ambiguity
  - (ii) Difference b\w NFA & DFA
  - (iii) Explain Thompson's Construction