1. What is back tracking? Write recursive procedures for each non terminal by taking suitable example.

2. Explain in detail about the Role of Parser in Compiler.

3. Discuss about Top down parsing and Bottom up parsing with an example.

4. Calculate FIRST and FOLLOW from the following grammar.

E -> TE’

E’ -> +T E’|Є

T -> F T’

T’ -> \*F T’ | Є

F -> (E) | id

5. Construct LR parsing table for the following grammar.

S → CC

C → aC | d

6. Construct SLR parsing table for the following grammar.

S → AA

A → aA | b.

7. What are different intermediate code forms? Discuss different Three Address code types and implementations of Three Address statements.

8. Construct a syntax tree for the expression: x\*y-5+z.

9. Distinguish between synthesized attributes and inherited attributes.

10. Explain in detail about basic blocks and flow graphs with an example.

11. Describe the terms with examples.

1. Code motion
2. Copy propagation
3. Dead code Elimination
4. DAG
5. Flow Graphs

12. Construct a Three-address code, quadruples, triples and Syntax tree for the following expression: a = b\* - c + b \* -c ;

13. Explain in detail about optimization of basic blocks with example.