

### UNIT 3

1. Write the definition of symbol table and procedure to store the names in symbol table.
2. What are the data structures used in the symbol table?
3. What is a symbol table?
4. What is a symbol table? What are its Contents?
5. What is syntax directed translation (SDD)?
6. Write short note on:
  - Synthesized attributes
  - Inherited attributes
  - Dependency graph
  - Evaluation order
  - Directed Acyclic Graph (DAG)
7. Draw the syntax tree and DAG for the following expression:  $(a*b)+(c-d)*(a*b)+b$
8. Differentiate between synthesized translation and inherited translation.
9. Construct syntax tree and postfix notation for the following expression:  
 $(a+(b*c)^d-e/(f+g))$
10. Differentiate SDD and SDT.

### UNIT 4

1. What are the limitations of stack allocation?
2. Write two important points about heap management.
3. Write the comparison among Static allocation, Stack allocation and Heap Allocation with their merits and limitations.
4. What is activation record? Write the various fields of Activation Record.
5. What are the functions of error handler?
6. Write a short note on Error Detection and Recovery.
7. Classify the errors and discuss the errors in each phase of Compiler.
8. What is intermediate code and write the two benefits of intermediate code generation.
9. Write the short note on:
  - Abstract syntax tree
  - Polish notation
  - Three address code
  - Backpatching
10. Write quadruples, triples and indirect triples for the expression:  
 $-(a*b)+(c+d)-(a+b+c+d)$
11. Write the three address statement with example for:
  - Assignment
  - Unconditional jump (goto)
  - Array statement (2D and 3D)
  - Boolean expression
  - If-then-else statement
  - While, do-while statement
  - Switch case statement