Bachelor of Science (B.Sc.I.T.) Semester–IV (CBS) Examination

COMPILER CONSTRUCTION

Paper—V

Time : Three Hours]   [Maximum Marks : 50

N.B. :— (1) All the questions are compulsory and carry equal marks.

        (2) Draw neat and labelled diagram wherever necessary.

EITHER

1. (a) Explain the need of translator.   5

   (b) Write a short note on structure of compiler.   5

OR

   (c) Explain the phase code optimization.   5

   (d) What is the role of error handling in compilation process ?   5

EITHER

2. (a) Explain the hierarchical structure of programming language.   5

   (b) What is data element ?   5

OR

   (c) Explain the types of storage.   5

   (d) Explain data structure supported by higher level language.   5

EITHER

3. (a) Explain the role of lexical analyzer.   5

   (b) What is context free grammar ? Explain in detail.   5

OR

   (c) What is regular expression ?   5

   (d) Explain ambiguous grammar with example.   5

EITHER

4. (a) What do you mean by handle ? Explain handle pruning.   5

   (b) Explain operator precedence parsing technique.   5

OR

   (c) Explain predictive parsing algorithm.   5

   (d) How basic block can be represented by DAG ?   5

5. Attempt all :

   (a) Explain the role of table management.   2½

   (b) Explain parameter passing in detail.   2½

   (c) What do you mean by left most derivation ? Explain with example.   2½

   (d) What is object program ?   2½