

Bachelor of Science (B.Sc. I.T.) Semester-IV (C.B.S.) Examination**COMPILER CONSTRUCTION****Paper—V**

Time : Three Hours]

[Maximum Marks : 50

Note :—(1) All questions are compulsory and carry equal marks.

(2) Draw neat and labelled diagram wherever necessary.

EITHER

1. (a) Write short notes on :

(i) Book keeping

(ii) Boot strapping. 5

(b) What is compiler ? Explain structure of a compiler. 5

OR

(c) Explain lexical analysis with an example. 5

(d) What do you mean by optimization ? Explain local optimization with an example. 5

EITHER

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

(b) What is operator ? Explain arithmetic properties of operators. 5

OR

(c) What is statement ? What are the types of statement ? 5

(d) Explain parameter transmission. 5

EITHER

3. (a) Explain role of Lexical Analyzer. 5

(b) Define deterministic finite automata. Give one example. 5

OR

(c) Write short note on context free grammar. 5

(d) Explain how lexical analyzer is implemented. 5

EITHER

4. (a) Explain the problems encountered in code generation. 5

(b) Write short flow graph and induction variable. 5

OR

(c) Explain top down parsing with one example. 5

(d) What is parser ? Explain predictive parsing. 5

5. Attempt **All** :

(1) What is error handling ? 2½

(2) Explain storage management. 2½

(3) What do you mean by Ambiguous grammar ? 2½

(4) Explain machine model. 2½