

**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) Differentiate between compilers and translators. 5
- (B) Explain structure of compiler. 5

**OR**

- (C) Explain compiler writing tools. 5
- (D) Explain error handling in compiler. 5

**EITHER**

2. (A) What is programming languages ? Explain structure of languages. 5
- (B) Explain Storage Management in programming languages. 5

**OR**

- (C) Explain different assignment statements used in programming languages. 5
- (D) Explain parameter transmission in programming languages. 5

**EITHER**

3. (A) What is Lexical Analyzer ? Explain role of Lexical Analyzer. 5
- (B) What is Ambiguous grammar ? How can ambiguity be removed from grammar ? 5

**OR**

- (C) Explain context free grammar in detail. 5
- (D) Explain different approaches to design lexical analyzer. 5

**EITHER**

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|--|---|
| 4. (A) Explain shift reduce parsing.           | 5 |
| (B) Explain principle for source optimization. | 5 |

**OR**

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|--|---|
| (C) Explain top down parsing.                                  | 5 |
| (D) Explain representation of basic blocks in code generation. | 5 |
5. Attempt **all** :
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|--|----|
| (A) Explain book keeping.                                      | 2½ |
| (B) Explain different operators used in programming languages. | 2½ |
| (C) Explain Parse tree.  | 2½ |
| (D) Explain symbol table in parsing.                           | 2½ |