

Roll No.

Total Pages : 2

Exam Code

6107

8776

BT-7/M-11

COMPILER DESIGN

Paper : IT-455

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt only five questions. All questions carry equal marks.

1. Describe the structure of Compiler in detail. 15
2. (a) Explain the construction of Lexical analyzer and implement in transition for identifiers. 8
(b) What do you mean by Parsing ? Explain the type of — parsers with example. —7
3. $B \rightarrow E+T|T$ —
 $T \rightarrow T*F|F$
 $F \rightarrow (E)|id$
What is Predictive Parser ? Construct the Predictive Parsing table according to the above example. 15
4. What is LR Parser ? Explain with example. How is it different from LALR Parsing ? 15
5. Explain the implementation of Syntax Directed Translators. 15

6. Explain the following terms :
(i) Syntactic Phase Error.
(ii) Semantic Errors.
(iii) Detection and Recovery. 5×3=15
7. What are the principal sources of Optimization and Loop optimization ? 15
8. Explain the following terms :
(i) Object Program.
(ii) Simple Code Generator.
(iii) Peephole Optimization. 15