

R18

Code No: 156CP

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, February/March - 2022

PRINCIPLES OF COMPILER CONSTRUCTION

(Information Technology)

Time: 3 hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

- 1.a) Discuss briefly about Lexical Analyzer. [8+7]
b) Explain input buffering in lexical analysis.
- 2.a) Describe briefly about Top Down Parsing. [8+7]
b) Write a note on Left Factoring.
- 3.a) Describe about Dependency Graphs in detail. [8+7]
b) What is an ambiguous grammar? Give an example of the same.
4. What is Code Generation? Explain briefly about issues in design of code generation. [15]
- 5.a) Distinguish between L-attributed and S-attributed definition. [8+7]
b) Explain Principle Sources of Optimization in detail.
- 6.a) Give an overview of storage allocation strategies. [8+7]
b) Give an overview of register allocation.
- 7.a) Explain briefly about reaching definitions. [7+8]
b) Give an overview of data structures used in symbol table representation.
- 8.a) Write about Live Variable Analysis in detail. [8+7]
b) What is Redundancy? Explain about Causes of Redundancy.

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