

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)
b)

Discuss briefly about Lexical Analyzer.
Explain input buffering in lexical analysis.

[8+7]

2.a)
b)

Describe briefly about Top Down Parsing.
Write a note on Left Factoring.

[8+7]

3.a)
b)

Describe about Dependency Graphs in detail.
What is an ambiguous grammar? Give an example of the same.

[8+7]

4. What is Code Generation? Explain briefly about issues in design of code generation.
[15]

5.a)
b)
6.a)
b)

Distinguish between L-attributed and S-attributed definition.
Explain Principle Sources of Optimization in detail.
Give an overview of storage allocation strategies.
Give an overview of register allocation.

[8+7]
[8+7]

7.a)
b)

Explain briefly about reaching definitions.
Give an overview of data structures used in symbol table representation.

[7+8]

8.a)
b)

Write about Live Variable Analysis in detail.
What is Redundancy? Explain about Causes of Redundancy.

[8+7]

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