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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech III Year I Semester Supplementary Examinations June-2024
COMPILER DESIGN

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 60

PART-A

(Answer all the Questions 5 x 2 = 10 Marks)

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|-----|--|----|----|
| 1 a | List the various error recovery strategies for a lexical analysis. | L1 | 2M |
| b | Define Ambiguous grammar. | L1 | 2M |
| c | What is bottom up parsing? | L1 | 2M |
| d | Define rules for type checking. | L1 | 2M |
| e | Define Dead-code elimination with example. | L1 | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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|-----|---|----|----|
| 2 a | Write short notes Application of compiler technology. | L1 | 5M |
| b | Write short notes Compiler construction Tools. | L2 | 5M |

OR

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| 3 | How to design the compiler by using the source program position:=intial+rate*60? Explain. | L1 | 10M |
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UNIT-II

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| 4 a | Explain parse trees. | L2 | 5M |
| b | Describe about ambiguity. | L1 | 5M |

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| 5 | Explain Error recovery in predictive parsing with an Example. | L3 | 10M |
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UNIT-III

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| 6 | Discuss about YACC tool. | L3 | 10M |
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| 7 | Explain the Translation scheme of SDD. | L2 | 10M |
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UNIT-IV

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|---|---|----|-----|
| 8 | Describe about Control Flow Statements. | L4 | 10M |
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| 9 | Discuss Storage allocation strategies with suitable examples. | L2 | 10M |
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UNIT-V

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| 10 | Describe about global data flow analysis. | L2 | 10M |
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OR

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| 11 a | Write short notes on Simple code generator | L3 | 5M |
| b | Explain the Register allocation and assignment. | L3 | 5M |

END

