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| **P.V.P Siddhartha Institute of Technology** |
| **Department of Computer Science & Engineering** |
| **Course: B.Tech** | **Year: III** | **Semester: II** | **Descriptive Exam - I** | **A.Y:2024-25** |
| **Subject Code: 20CS3601**  | **Subject Name: Compiler Design** | **Regulation: PVP20** |
| **Duration:1hr 30Min** | **Maximum Marks:15 Marks** | **Date:20-01-2025** |
| **Answer all the questions. Each question carries 5M 5 X 3 = 15M** |
| **Q.No** | **Questions** | **Marks** | **CO** | **Level** |
| **1** | Discuss the phases of a compiler indicating the inputs and outputs of each phase in translating the statement**“A = B + C\* 30”.** | **5** | **CO1** | **L2** |
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| **2** | Construct predictive parsing table and justify whether the given grammar is LL(l) or not **S→aBDh, B→cG, G→bc | ϵ, D→ EF, E→g | ϵ, F→ f | ϵ** | **5** | **CO5** | **L4** |
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| **3(a)** | Eliminate left recursion from the given grammar. **E-->E+T | T T-->T\*F | F F-->(E) | id** | **2** | **CO3** | **L3** |
| **3(b)** | Consider the following grammar**S ->TL; T -> int | float L -> L,id | id**Apply Shift-Reduce Parsing to parse the input string **int id, id;**  | **3** | **CO3** | **L3** |