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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:2023-24** | | |
| **Subject Code: 20CS3601** | | **Subject Name: Compiler Design** | | | | **Regulation: PVP20** | | |
| **Duration:1hr 30Min** | | **Maximum Marks:15 Marks** | | | | **Date:29-01-2024** | | |
| **Answer all the questions. Each question carries 5M 5 X 3 = 15M** | | | | | | | | |
| **Q.No** | **Questions** | | | | **Marks** | | **CO** | **Level** |
| **1(a)** | **Discuss the phases of a compiler indicating the inputs and outputs of each phase in translating the statement**  **“S = T + Q \* 10”.** | | | | **3** | | **CO1** | **L2** |
| **1(b)** | **Discuss about the input buffering scheme in lexical analyzer.** | | | | **2** | | **CO1** | **L2** |
|  | | | | | | | | |
| **2(a)** | **Eliminate left recursion from the given grammar.**  **E->EZM/M/2M**  **M->MUF/F**  **E->a**  **Z->b**  **M->c**  **U->d**  **F->e** | | | | **2.5** | | **CO2** | **L3** |
| **2(b)** | **Consider the following grammar**  **S→A**  **A→aB | Ad**  **B→bBC | f**  **C→g**  **Construct predictive parsing table for the grammar and Analyse whether the given grammar is LL(l) or not.** | | | | **2.5** | | **CO5** | **L4** |
|  | | | | | | | | |
| **3** | **Consider the following grammar:**    **Construct shift reduce parsing of the input string “id+id+id”.** | | | | **5** | | **CO3** | **L3** |