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| **P.V.P Siddhartha Institute of Technology** | | | | | | | | |
| **Department of Computer Science and Engineering** | | | | | | | | |
| **Course: B.Tech.** | | **Year: III** | **Semester: II** | **A.Y:2023–24** | | **Date:** | | |
| **Subject Code:** 20**CS3601** | | **Subject Name: Compiler Design** | | | **Regulation:PVP20** | | | |
| **ASSIGNMENT-2** | | | | | | | | |
| **Q. No** | **QUESTION** | | | | | | **CO** | **Level** |
|  | Construct CLR parsing table for the given context-free grammar  S–>AA  A–>aA|b | | | | | |  |  |
|  | | | | | | | | |
|  | Covert the following statements into the Quadruple, Triple and Indirect triple representation:  A = -B\*(C+D) | | | | | |  |  |
|  | | | | | | | | |
|  | Sketch syntax tree for the expression a=b\*– c+b\*– c. | | | | | |  |  |
|  | | | | | | | | |
|  | Construct Three Address Code for the following expression:  (a \* b) + (c + d) – (a + b + c + d) | | | | | |  |  |
| Construct DAG for the following statement. a+b\*c+d+b\*c. | | | | | |  |  |
|  | | | | | | | | |
|  | Show the following grammar is LALR(1)  S → Aa / bAc / dc / bda  A → d | | | | | |  |  |
|  | | | | | | | | |
|  | Compare different storage allocation strategies. | | | | | |  |  |
| Analyze the given code and apply copy propagation  x=t3  a[t2]=t5  a[t4]=x  got to B2 | | | | | |  |  |
| Analyze the given code and identify dead code/ Not reachable code.  x=a\*b  y=a+c  z=y+d | | | | | |  |  |
|  | | | | | | | | |