PRIYADARSHINI COLLEGE OF ENGINEERING, NAGPUR
DEPARTMENT OF COMPUTER TECHNOLOGY
ACADEMIC SESSION: 2022 – 2023 (EVEN SEMESTER)
Assignment – 1

Subject	:	Compilers Design	Semester	:	VI A/B
Subject Teachers	:	Dr.(Mrs) Snehal S. Golait/Mr. C.R.Pote	Assignment No	:	1
Unit	:	I,II and III	Date of Display	:	

CO1 Explain basic fundamentals of the translators and role of the lexical analysis.

CO2 Describe principles of Parsing and will be able design various Top-Down and Bottom-Up Parsers

CO3 Explain various forms of intermediate code and will be able to demonstrate use of SDTS to translate elementary programming constructs.

	Questions	Mapping with COs	BT Level
1. a	Explain different types of translators with example.	CO1	II
2.	a) Explain the rules for calculating FIRST() and FOLLOW() b) Find the FIRST and FOLLOW sets for each nonterminal of the grammar given below: S → ABa/bCA A → cBCD/ϵ B → CdA/ad C → eC/ ϵ D → bSf/a	CO1	II I
3.	Construct an LALR(1) parsing table for the following grammar. S → Aa/aAc/Bc/bBa A→ d B → d	CO2	III
4.	Find whether the following grammar is LL(1) or not S→ AB/eDa A→ ab/c B→ dC C→ eC/ ϵ D → fD/ ϵ	CO2	I
5.	Show Quadruple , Triple and Indirect triples for the following	CO3	I

expression .
- (a + b) * (c + d) + (a + b + c)

Dr.(Mrs).Snehal S. Golait / Mr.C.R.Pote **Dr. (Mrs.) N. M. Thakare**

(Subject Teachers) **(HOD, CT)**