KLS Gogte Institute of Technology, Belagavi

Department of Computer Science Engineering **Academic Year: 2020-21(EVEN SEM)**

Program: B.E (Computer Science Engineering) **Semester:** VI

IA Test – I

Course Title: COMPILER DESIGN **Code:** 18CS62

Max. Marks: 25 marks **Duration:** 1Hr15 Mins **Date:** 31/05/2021

Instructions: 1. Answer ANY FIVE full questions and each question carries five marks.

Q. No.		[L]	[CO]	[PO]	[M]
1	Define Regular definition. Construct the transition diagram to recognize the tokens a) Relational operator b) unsigned number (int and float)	1	1	1	5
2	With neat diagram demonstrate the interaction between lexical Analyzer and the parser.	2	1	1	5
3	Design a Lexical Analyzer in C++ **to recognize the stream of tokens of C identifiers. Assume the suitable C++ functions** to read the character, failure and retract(if necessary) operations.	3	1	3	5
4	Define Left Recursion and Eliminate the Left recursion for the following grammar S→A A→Ad | Ae |aB | ac B→bBc | f	2	1	3	5
5	Explain Left factoring with an algorithm ? Eliminate the Left factor from the following grammar S→iEts | iEtSeS |a E→b	2	1	3	5
6	Define FIRST and FOLLOW set symbols. Compute FIRST and FOLLOW set symbols for the following grammar S → ACB| CbB|Ba A→da | BC B→g |€ C→h|€	3	1	3	5
7	Write an algorithm to construct a Predictive parsing table.	2	1	5	5