VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Continuous Assessment Test – I I

Programme Name & Branch: M.Tech (Integrated)

Course Name & Code: CSI2005 Principles of Compiler Design

Exam Duration: 50+10 Min **Slot:B1**

Faculty Name: R KANNADASAN **Maximum Marks: 30**

Answer all Questions		
S.No.	**Questions** **SET A**	**Course Outcome (CO)**
1	Construct LALR parsing table S→ L=R S→R S→*R L→id R→L	CO1
2	Explain& example following code optimization a) Common sub expression elimination b) Copy propagation c) Dead code elimination d) Code motion	CO2
3	1) peep hole optimization, 2) register allocation and assignment, 3) instruction selection by tree rewriting	CO3
	SET B	
1	Construct LALR(1) parser table for the grammar S→iCts|CtSeS|a C→b	
2	What do you mean by three address code? Write various instruction forms in perception with three address code. Write three address code for the expression–(a+b)*(c+d) + (a+b+c) and represent it into quadruples, triples and indirect triples. Also construct the DAG representation.	
3	Briefly explain back-patching.	