



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.																			
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Mid - Term Examinations - MARCH 2026

Date: 10-03-2026

Time: 09:30am - 11:00am

School: SOCSE	Program: B. Tech		
Course Code: CSE2514	Course Name: Compiler Design		
Semester: VI	Max Marks: 50	Weightage: 25%	

CO - Levels	C01	C02	C03	C04	C05
Marks	12	14	24	-	-

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

1	What is a pattern in lexical analysis?	2 Marks	L1	C01
2	State the purpose of sentinel.	2 Marks	L1	C02
3	Define parse tree.	2 Marks	L1	C02
4	When is a grammar said to be LL(1)?	2 Marks	L1	C03
5	Define Handle in the context of bottom-up parsing.	2 Marks	L1	C03

Part B

Answer the Questions.

Total Marks 40M

6.	a.	Explain the phases of a compiler with an example.	10 Marks	L2	CO1
	b.	i) Describe the role of lexical analysis in compiler design. ii) Explain Input Buffering with suitable examples.	10 Marks	L2	CO2
Or					
7.	a.	Construct the DFA for the given regular expression $(a b)^*abb$ using Direct Method.	10 Marks	L2	CO1
	b.	Explain about Compiler Construction Tools.	10 Marks	L2	CO2

8.	a.	Construct the Predictive Parsing Table for the given context-free grammar G and parse the input string: $id + id * id$ $G = \{ \begin{array}{l} E \rightarrow E + T / T \\ T \rightarrow T * F / F \\ F \rightarrow (E) / id \\ \end{array} \}$	10 Marks	L3	CO3
	b.	Explain types of Top-Down Parsing with example.	10 Marks	L2	CO3
Or					
9.	a.	Construct CLR parsing table for the following CFG, $S \rightarrow cAd$ $A \rightarrow ab$ $A \rightarrow a$	10 Marks	L3	CO3
	b.	Explain types of Bottom-Up Parsing.	10 Marks	L2	CO3