

	Faculty Department: CSE Academic Year:2024-2025	<b>Submission</b> <b>Date:03/04/25</b> <b>Max. Marks:50</b>
	<b>B.E/B.Tech: B.E Specialization:N/A Student Department: CSE</b> <b>Semester: VI Assignment:II Sub. Code &amp;Name: CS22604-</b> <b>Compiler Design</b>	

Q.No	Question / Task / Activity	CO <sup>*</sup>	RBT Level <sup>#</sup>	Marks
1	Show the following grammar : $S \rightarrow AaAb \mid BbBa$ $A \rightarrow \epsilon$ $B \rightarrow \epsilon$ , is LL(1) and Parse the string “ba”.	1	4	10
2	Perform Shift reduce parser for the following: (i). $S \rightarrow (L) \mid a$ $L \rightarrow L, S \mid S$ and the input string is “(a,(a,a))” (ii). $S \rightarrow S+S$ $S \rightarrow S-S$ $S \rightarrow (S)$ $S \rightarrow a$ and the string is “a1-(a2+a3)”	1	4	15
3	Consider the following grammar: $S \rightarrow Aa \mid bAc \mid Bc \mid bBa$ $A \rightarrow d$ $B \rightarrow d$ Compute the closure function and goto() function and parse the string “bdc”	1	3	10
4	Construct the recursive descent parser for the following grammar? $E \rightarrow E+T \mid T$ $T \rightarrow T * F \mid F$ $F \rightarrow (E) \mid id$	1	3	15
<b>Total Marks</b>				<b>50</b>