

ACAD-27 a)	Shri Ramdeobaba College of Engineering and Management, Nagpur - 440013		Iss. No.: 01, Rev. No.: 00
Ref. Clause(s): 9.1			Date of Rev: 01/01/2018
Department: Computer Science and Engineering	Semester : VI Semester Course Code: CST 358 Course Name: Compiler Design	Shift: II	Page: 01/01
Programme: B.E.(CSE)	Test: 1		Date of Exam: 04/02/2022
Max Marks:15	Session: 2020-21	Time: 1Hr.	

	Questions		CO/EO
Q.1) a)	For the following grammar: <b>Construct LL(1) Parse.</b> $A \rightarrow B C c \mid g D B$ $B \rightarrow b C D E \mid \epsilon$ $C \rightarrow D a B \mid c a$ $D \rightarrow \epsilon \mid d D$ $E \rightarrow E a f \mid c$ Draw the parsing table	04	CO2/L4
Q.1) b)	For the following grammar, construct the LR(0) parser. $E \rightarrow E + T \mid T$ $T \rightarrow T * F \mid F$ $F \rightarrow (E) \mid id$ Perform Augmentation, Closure, and GOTO operations.	04	CO2/L4
Q.1) c)	Differentiate between top-down and bottom-up parser, with respect to: i) String derivation ii) Error Management	01	CO2/L4
	<b>Solve any one</b>		
Q.2) a)	Convert the following regular expression into <b>DFA</b> using nullable, firstpos and followpos method. $(a \mid b)^* b^* a b \#$	04	CO1/L3
	<b>OR</b>		
Q.2) a)	For the following instruction: design phase-wise output generated by each phase of the compilation process. $Amount = Prin + int * 0.5$	04	CO1/L3
Q.2) b)	Define Cross Compiler and Bootstrapping. Use suitable examples to explain the purpose of cross compiler and bootstrapping in current trends of technology	02	CO1/L3