

	DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE Supplementary Winter 23 Course: B. Tech.Branch : Computer Engineering and Allied Semester : VI Subject Code & Name: BTCOC601_Y20 -Compiler Design Max Marks: 60 Date: 16/01/2024 Duration: 3 Hr.			
	Instructions to the Students: 1. All the questions are compulsory. 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question. 3. Use of non-programmable scientific calculators is allowed. 4. Assume suitable data wherever necessary and mention it clearly.			
		(Level/CO)	Marks	
Q. 1	Solve Any Two of the following.			12
A)	Draw a neat diagram and explain different phases of compiler.	Remembering		6
B)	What do you understand by "Input Buffering"? Explain 'Buffer pairs' and sentinels.	Remembering		6
C)	List out and explain different compile-construction tools.	Analyzing		6
Q.2	Solve Any Two of the following.			12
A)	What is a finite automata? Construct transition diagram of a DFA for the string $(a+b)^*$.	Applying		6
B)	What is Lex? Explain.	Applying		6
C)	Give the formal definition of Context-Free Grammar.	Analyzing		6
Q.3	Solve Any Two of the following.			12
A)	What is Parse Tree? Explain with example.	Remembering		6
B)	What is LL(1) Grammar?	Remembering		6
C)	Explain Bottom-Up parsing.	Applying		6
Q.4	Solve Any Two of the following.			12
A)	What is Syntax-Directed Definition?	Understanding		6
B)	Explain type checking in detail.	Analyzing		6
C)	What is Symbol Table? Explain the organization of symbol table in detail.	Applying		6
Q.5	Solve Any Two of the following.			
A)	Define the DAG representation of basic blocks.	Applying		6
B)	Explain the various storage allocation strategies?	Applying		6
C)	What is syntax directed translation in compiler design?	Understanding		6
	*** End ***			

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