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Semester: VII (B. Tech)

Er. No 20.1.B208

Academic Year: 2023-24

Jaypee University of Engineering & Technology, Guna

T-3 (Odd Semester 2023)

18B14CI541 – COMPILER DESIGN

Maximum Duration: 2 Hours

Maximum Marks: 35

Notes:

1. This question paper has five questions.
2. Write relevant answers only.
3. Do not write anything on question paper (Except your Er. No.).

		Marks	CO No.
Q1.	Construct the NFA for a regular expression (a | b) * abb using McNaughton-Yamada-Thompson algorithm. Find the equivalent DFA for constructed NFA.	[07]	CO3
Q2.	Consider the following grammar. S→aAd | bBd | aBe | bAe A→c B→c Construct the LR (0) parser and explain the conflict situation if any.	[07]	CO4
Q3.	Show the contents of the data storage, symbol and block tables, and string tables by a suitable block structured program.	[07]	CO4
Q4.	Explain the variety of ways in which a compiler can react to mistake in the source program. Also explain the minimum distance correction method of syntactic errors.	[07]	CO2
Q5.	Write the three-address instructions for 10 X 10 identity matrix and find the leaders, basic blocks and prepare the flow of graph.	[07]	CO5