Reg. No								
21081210			 		 _		_	

B.Tech. (PT) DEGREE EXAMINATION, DECEMBER 2023

Fifth Semester

19PCSC31J - COMPILER DESIGN

(For the candidates admitted during the academic year 2020 - 2021 to 2022 - 2023)

Note:

i. Part - A should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.
 ii. Part - B and Part - C should be answered in answer booklet.

Time	Max. Marks: 100			
PART - A (10 × 2 = 20 Marks) Answer all Questions				CO
1.	What is the use of interpreter?	2	1	1
2.	List the types of target code.	2	1	1
3.	What is the function of lexical analyzer?	2	2	2
4.	Define left recursion in the context of grammar and parsing?	2	2	2
5.	What are the error recovery strategies?	2	2	3
6.	Define the Left most derivation and the right most derivation.	2	1	3
7.	Define Synthesized attribute.	2	2	4
8.	Define register and address descriptor.	2	1	5
9.	List down the advantages of optimizing compiler.	2	2	6
10.	What is DAG?	2	2	6
	Mark	s BL	CO	
11.	(OR)	16	3	1
	(b) Construct the minimized DFA for the regular expression (0+1)*(0+1)10.	16	2	2
12.	(a) Enumerate the role of parser in detail. (OR)	16	3	2
	(b) Consider the following grammar and construct predictive parsing table. E-> E+T/T T->T*F/F F->(E)/id			
13.	(a) Explain in detail about operator precedence parsing. (OR)	16	3	3
	 (b) Consider the following grammar S-> AS/b A->SA/a Construct the SLR parsing table for the grammar. Show the actions of the parser for the input string "abab". 			
14.	generator.	16	3	4
	(OR) (b) Describe the various methods for implementing three address statements.			

- 15. (a) Describe about the function preserving transformation with an example. 16 3 6
 - (b) Explain data flow abstraction with example.
