SR 22

SET-1

St. Peter's Engineering College (Autonomous) Dullapally (P), Medchal, Hyderabad – 500100. II - Mid Term Examination- June 2024						Dept.	:	CSE (AIML)
						Academic Year 2024-25		
Subject Code	:	AS22-66PC02	Subject	:	AUTOMATA THEORY & COMPILER DESIGN			
Class/Section	:	B. Tech. (A)	Year	:	II	Semester	:	II
Duration	:	120 Min	Max. Marks	:	30	Date:	:	

BLOOMS LEVEL					
Remember	L1	Understand	L2	Apply	L3
Analyze	L4	Evaluate	L5	Create	L6

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PART – A (10x1M = 10M)

Note: Answer all Questions. Each Question carries equal marks.

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
1	a) Define Compiler.	1M	L1	C224.4
	b) Define Source Program.	1M	L1	C224.4
	c) Define Lexical Analyzer.	1M	L1	C224.4
	d) Define Syntax Tree.	1M	L1	C224.4
	UNIT – V			
	e) Define Semantic Analysis.	1M	L1	C224.6
	f) Define Syntax Directed Definition.	1M	L1	C224.6
	g) Define Dependency Graph.	1M	L1	C224.6
	h) Define Intermediate Code.	1M	L1	C224.6
	UNIT – III			
	i) Define Blank Symbol in TM.	1M	L1	C224.3
	j) Define Decidability.	1M	L1	C224.3

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PART – B (20M)

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
2	a) Explain in detail about Complier Process.	**4M**	L4	C224.4
	b) Explain in detail about the role of Lexical Analyzer.	**4M**	L4	C224.4
	OR			
3	a) Explain in detail about Recursive Descent Parsing with Backtracking.	**4M**	L4	C224.5
	b) Explain in detail about First & Follow Symbols with examples.	**4M**	L4	C224.5
	UNIT – V			
4	a) Explain in detail about Types of Attributes.	**4M**	L4	C224.6
	b) Discuss about Symbol Table.	**4M**	L2	C224.6
	OR			
5	a) Explain in detail about Intermediate Code Generation.	**4M**	L4	C224.6
	b) Discuss about Activation Record.	**4M**	L2	C224.6
	UNIT – III			
6	Explain the Operation of Turing Machine performing any Operation.	**4M**	L4	C224.3
	OR			
7	Explain about Decidable Problem with examples.	**4M**	L4	C224.3

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SET-2

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Subject Code	:	AS22-66PC02	Subject	:	AUTOMATA THEORY & COMPILER DESIGN			
Class/Section	:	B. Tech. (A)	Year	:	II	Semester	:	II
Duration	:	120 Min	Max. Marks	:	30	Date:	:	

BLOOMS LEVEL					
Remember	L1	Understand	L2	Apply	L3
Analyze	L4	Evaluate	L5	Create	L6

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PART – A (10x1M = 10M)

Note: Answer all Questions. Each Question carries equal marks.

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
1	**a)** Define First Symbol.	**1M**	L1	C224.4
	b) Define Pre-Processor.	**1M**	L1	C224.4
	c) Define Bottom Up Parsing.	**1M**	L1	C224.5
	d) Define Syntax Analysis Phase.	**1M**	L1	C224.4
	UNIT – V			
	e) Define Semantic Rules.	**1M**	L1	C224.6
	f) Define Attribute.	**1M**	L1	C224.6
	g) Define Actual Parameters.	**1M**	L1	C224.6
	h) Define Storage Allocation.	**1M**	L1	C224.6
	UNIT – III			
	i) Define Tape in Turing Machine.	**1M**	L1	C224.3
	j) Define Undecidabilty.	**1M**	L1	C224.3

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PART – B (20M)

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
2	a) Explain in detail about Phases of Compilation.	**4M**	L4	C224.4
	b) Explain in detail about the role of Syntax Analyzer.	**4M**	L4	C224.4
	OR			
3	a) Explain in detail about Predictive Parsing.	**4M**	L4	C224.5
	b) Explain in detail about LR (0) Parsing.	**4M**	L4	C224.5
	UNIT – V			
4	a) Distinguish between S-attributes and L-attributes.	**4M**	L2	C224.6
	b) Explain in detail about Dependency Graph.	**4M**	L4	C224.6
	OR			
5	a) Explain in detail about 3 Address Code Representation.	**4M**	L4	C224.6
	b) Explain in detail about Run-Time Environment.	**4M**	L4	C224.6
	UNIT – III			
6	Explain the Operation of Turing Machine as a Substractor.	**4M**	L4	C224.3
	OR			
7	Discuss about Undecidable Problem with examples.	**4M**	L2	C224.3

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SET-3

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Subject Code	:	AS22-66PC02	Subject	:	AUTOMATA THEORY & COMPILER DESIGN			
Class/Section	:	B. Tech. (A)	Year	:	II	Semester	:	II
Duration	:	120 Min	Max. Marks	:	30	Date:	:	

BLOOMS LEVEL					
Remember	L1	Understand	L2	Apply	L3
Analyze	L4	Evaluate	L5	Create	L6

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PART – A (10x1M = 10M)

Note: Answer all Questions. Each Question carries equal marks.

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
1	**a)** Define Compiler Process.	**1M**	L1	C224.4
	b) Define an Assembler.	**1M**	L1	C224.4
	c) Define Input Buffering.	**1M**	L1	C224.4
	d) Define Follow Symbol.	**1M**	L1	C224.4
	UNIT – V			
	e) Define Grammar.	**1M**	L1	C224.6
	f) Define Directed Acyclic Graph.	**1M**	L1	C224.6
	g) Define Formal Parameters.	**1M**	L1	C224.6
	h) Define Heap Allocation.	**1M**	L1	C224.6
	UNIT – III			
	i) Define Finite Control in Turing Machine.	**1M**	L2	C224.3
	j) Define Recursive Language.	**1M**	L1	C224.3

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PART – B (20M)

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
2	a) Explain in detail about Lexical-Analyzer Generator Lex.	**4M**	L4	C224.4
	b) Distinguish between Scanning & Parsing.	**4M**	L2	C224.4
	OR			
3	a) Explain in detail about LL(1) Parsing.	**4M**	L4	C224.5
	b) Explain in detail about any one Bottom-up Parsing.	**4M**	L4	C224.5
	UNIT – V			
4	a) Explain in detail about Operations on Symbol Table.	**4M**	L4	C224.6
	b) Explain in detail about 3 Representations of Intermediate Code Generator.	**4M**	L4	C224.6
	OR			
5	Explain in detail about Storage Allocation.	**8M**	L4	C224.6
	UNIT – III			
6	Explain about Turing Machine as a Comparator.	**4M**	L4	C224.3
	OR			
7	Explain about Recursive Language and Recursively Enumerable Languages.	**4M**	L4	C224.3

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