Department of Computer Science & Engineering

Lesson Plan & Work-done Diary for AY: 2025-26 (ODD Semester)

Course with Code: Theory of Computation(BCS503)				Faculty: Ashwini P			Semester & Section: 5B
Class No.	**Date planned (DD/MM)**	**Topics to be covered**	**TLP Planned**	**Class No.**	**Date of Conduction (DD/MM)**	**Topics**	**Remarks if any deviation**
1.		Introduction to Finite Automata,	PPT Chalk& Talk				
2.		Structural Representations	PPT Chalk& Talk				
3.		Automata and Complexity	PPT Chalk& Talk				
4.		The Central Concepts of Automata Theory.	PPT Chalk& Talk				
5.		Deterministic Finite Automata,	PPT Chalk& Talk				
6.		Nondeterministic Finite Automata	PPT Chalk& Talk				

Department of Computer Science & Engineering

7.		Problems on DFA and NFA	PPT Chalk& Talk				
8.		An Application of finite Automata:	PPT Chalk& Talk				
9.		Text Search	PPT Chalk& Talk				
10.		Finite Automata with Epsilon-Transitions.	PPT Chalk& Talk				
11.		Finite Automata with Epsilon-Transitions and Applications	PPT Chalk& Talk				
12.		Revision of Module 1 and VTU paper	PPT Chalk& Talk				
13.		Regular Expressions	PPT Chalk& Talk				
14.		Finite Automata and Regular Expressions	PPT Chalk& Talk				
15.		Problems on RE	PPT Chalk& Talk				

Department of Computer Science & Engineering

16.		Proving Languages not to be Regular	PPT Chalk& Talk				
17.		Problems on RE and FA	PPT Chalk& Talk				
18.		Closure Properties of Regular Languages	PPT Chalk& Talk				
19.		Problems on closure Properties	PPT Chalk& Talk				
20		Equivalence and Minimization of Automata	PPT Chalk& Talk				
21.		Problems on Minimization of automata	PPT Chalk& Talk				
22.		Revision of Module 2 and VTU paper	PPT Chalk& Talk				
23.		Applications of Regular Expressions	PPT Chalk& Talk				
24.		Context-Free Grammars,	PPT Chalk& Talk				

Department of Computer Science & Engineering

25		Parse Trees,	PPT Chalk& Talk				
26		Ambiguity in Grammars and Languages	PPT Chalk& Talk				
27		Ambiguity in Grammars and Languages problems	PPT Chalk& Talk				
28		Definition of the Pushdown Automaton	PPT Chalk& Talk				
29		Problems on Pushdown Automaton	PPT Chalk& Talk				
30		The Languages of a PDA	PPT Chalk& Talk				
31		Equivalence of PDA's and CFG's	PPT Chalk& Talk				
32		Deterministic Pushdown Automata	PPT Chalk& Talk				
33		Revision of Module 3 and VTU paper	PPT Chalk& Talk				

Department of Computer Science & Engineering

34		Deterministic Pushdown Automata problems	PPT Chalk& Talk				
35		Normal Forms for Context-Free Grammars,	PPT Chalk& Talk				
36		Types of Normal Forms for Context-Free Grammars,	PPT Chalk& Talk				
37		Types Normal Forms for Context-Free Grammars,	PPT Chalk& Talk				
38		The Pumping Lemma for Context-Free Languages	PPT Chalk& Talk				
39		The Pumping Lemma for Context-Free Languages	PPT Chalk& Talk				
40		Problems of Pumping lemma	PPT Chalk& Talk				
41		Problems of Pumping lemma	PPT Chalk& Talk				
42		Closure Properties of Context-Free Languages.	PPT Chalk& Talk				
43		Closure	PPT Chalk& Talk				

Department of Computer Science & Engineering

		Properties of Context-Free Languages.					
44		Revision of Module 4 and VTU paper	PPT Chalk& Talk				
45		Turing Machines	PPT Chalk& Talk				
46		Introduction to Turing Machines:	PPT Chalk& Talk				
47		Problems That Computers Cannot Solve	PPT Chalk& Talk				
48		The Turing Machine	PPT Chalk& Talk				
49		The Turing Machine problems	PPT Chalk& Talk				
50		The Turing Machine problems	PPT Chalk& Talk				
51		Programming Techniques for Turing Machines	PPT Chalk& Talk				
52		Extensions to the Basic Turing Machine	PPT Chalk& Talk				

Department of Computer Science & Engineering

53		Undecidability	PPT Chalk& Talk				
54		Problem on Undecidability	PPT Chalk& Talk				
55		A Language That Is Not Recursively Enumerable.	PPT Chalk& Talk				

	Activity	Planned	Actual	Remarks
1	Theory Classes	50		
3	Tutorials/ Extra classes	03		
4	Internal Assessments	03		
5	ICT based Teaching (% of usage in Curriculum)	100		

Planning	**Execution**
Faculty Signature:	**Faculty Signature:**
HoD Signature:	**HoD Signature:**