SCHEDULE OF THE COURSE

Week	*Topic*	*Time*
1	Course introduction and syllabus overview. Discussion of the basic ideas of the Computation Theory.	27/9/2023
2	Finite Automata, Deterministic Finite Automata, Nondeterminism	4/10/2023
3	Closure Properties of Regular Languages, Regular Expressions, Equivalence between Regular Expressions and Finite Automata	11/10/2023
4	Regular Pumping Lemma, Non Regular Languages, Context Free Grammars	18/10/2023
5	Pushdown Automata-CF Pumping Lemma Non Context Free Languages	25/10/2023
6	Turing Machines	1/11/2023
7	TM Variants, Church-Turing Thesis	8/11/2023
8	**Midterm Exam**	15/11/2023
9	Decision Problems for Automata and Grammars	22/11/2023
10	Undecidability, Reducibility	29/11/2023
11	Post's Correspondence Problem, Recursion Theorem	6/12/2023
12	Time Complexity	13/12/2023
13	P and NP, SAT, Poly-time Reducibility	20/12/2023
14	NP-Completeness	27/12/2023
15	**Final Exam**	3/1/2023

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