

Lesson Plan

Name of Faculty : Sonam Bajaj, Assistant Professor of CSE
 Discipline : Computer Science and Engineering
 Semester : 6th (even)
 Subject : Formal Language & Theory of Automata(CSE- 303 T)
 Lesson Plan Duration : 15 weeks (from Jan to May-2021)

Work Load (Lecture/Practical) per week (in hours): Lectures-03 hour

Week	Theory		Topic Covered Date and Remarks		
	Lecture Day	Topic (Including Assignment/Test)	Date	HOD	Director-Principal
1 st	1	Finite State system			
	2	NDFAs			
	3	DFA			
	4	Equivalence of DFA and NDFAs			
2 nd	5	Finite automata with E moves			
	6	Regular expression			
	7	Regular expression conversion			
3 rd	8	Arden method conversion			
	9	Concept of basic machine			
	10	Properties and limitation of FSM			
	11	Moore machine with examples			
4 th	12	Mealy machine with examples			
	13	Equivalence of Moore and Mealy machine			
	14	Properties of regular sets			
	15	Pumping lemma for regular sets			
5 th	16	Application of pumping lemma			
	17	Closure properties of regular set			
	18	Myhill Nerode theorem			
	19	Minimization of finite automata			
6 th	20	Minimization algorithm			
	21	Context free grammar			
	22	Context sensitive grammar			
	23	Reduced forms			
7 th		1st Minor Test			
8 th	24	Assignment 1 st			
	25	Removal of useless symbols			
	26	Unit productions			
	27	Ambiguity regular grammar			
9 th	28	Chomsky normal form			
	29	Greibach normal form			
	30	Introduction to pushdown machine			
	31	Application of pushdown machine			
10 th	32	Problems and solutions			
	33	Turning machine			
	34	Non deterministic turning machine			
	35	Deterministic turning machine			
11 th	36	Design of turning machine			
	37	Halting problem of turning machine			
	38	PCP problems			
	39	Assignment 2			
12 th	40	Problem and solutions			
	41	Chomsky hierarchies			
	42	Chomsky hierarchies of grammar			
	43	Unrestricted grammar			
13 th	44	Context sensitive language			
	45	Relations between languages of class			
	46	Problem and solutions			
	47	Examples of grammars			
14 th		2nd Minor Test			
15 th	48	Examples of hierarchies			
	49	Computability			
	50	Basic concept of Computability			
	51	Primitive recursive functions			
	52	Problem and solutions			