

### Lesson Plan

**Name of Faculty** : Ms .Bharti Sethi, Assistant Professor, CSE  
**Discipline** : Computer Science and Engineering  
**Semester** : 7<sup>th</sup> sem (odd)  
**Subject** : Compiler Design (PCC-CSE-401T)  
**Lesson Plan Duration** : 15 weeks (AUG 24-DEC 24)

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

WEEK	THEORY		Topic Covered, Date and Remarks		
	Day	Topic (Including Assignment/Test)	Date	HOD	Director-Principal
1	1	Compiler and translator, need of translator			
	2	Structure of compiler and its phases			
	3	Compiler construction tools			
2	4	Regular expressions			
	5	Specification and recognition of tokens			
	6	Input buffering			
3	7	Conversion from regular expression to finite automata			
	8	Shift reduce parsing			
	9	Top down parsing			
4	10	Predictive parsing			
	11	Syntax directed translation			
	12	Construction of syntax trees			
<b>1<sup>st</sup> Minor Test</b>					
5	13	Symbol table and its types			
	14	Contents of symbol table			
	15	Data structure for symbol table			
6	16	Arrays and its attributes			
	17	Linked lists and their storage			
	18	Hash tables and collisions			
7	19	Lexical phase errors			
	20	Syntactic phase errors			
	21	Semantic errors			
8	22	Machine dependent code			
	23	Code generation			
	24	Register allocation for temporary variables			
9	25	User defined variables and their scope			
	26	Loop optimization			
	27	Scope optimization			
10	28	Machine independent code			
	29	First and follow algorithms			
	30	First and follow numerical			
<b>2<sup>nd</sup> Minor Test</b>					
11	31	LR parsers			
	32	SLR parsers			
	33	Canonical parsers			
12	34	Machine dependent code			
	35	Code generation			
	36	Forms of object code			
13	37	Register allocation for temporary variables			
	38	User defined variables and their scope			
	39	Loop optimization			
14	40	Scope optimization			
	41	Dag representation			
	42	Machine independent code			
15	43	Various phases of parsing			
	44	LALR Parser			
	45	Queries			

