

Lesson Plan

Name of the Faculty: Er. Seema Rani

Discipline :CSE

Semester :6th

Subject :Compiler Design(PC-CS-302A)

Lesson Plan Duration: 15 weeks (Feb-May 2024)

**** Work (04 Lecture) per week (In Hours):**Lecture -04

Week	Lecture Day	Topic (including assignment/test) (In Each Section)	Practical Day	Topic
1	1	Introduction: The structure of a compiler	NA	NA
	2	The role of the lexical analyzer		
	3	Top down Parsing – Recursive Descent Parsing		
	4	Revision		
2	1	Predictive Parser Implementation	NA	NA
	2	Bottom-up Parsing		
	3	Operator Precedence Parsing		
	4	Revision		
3	1	Precedence Matrix and Precedence functions	NA	NA
	2	Boolean matrices		
	3	Shift Reduce Parser		
	4	Revision		
4	1	LR Parsers – SLR parsers	NA	NA
	2	Canonical Parsers- CLR Parser		
	3	Assignmnet-1		
	4	Class Test-1st unit		
5	1	Introduction to syntax-directed translation scheme,	NA	NA
	2	syntax-directed translation scheme Of Desk calculator grammar		
	3	Syntax Directed translation scheme of Postfix Notation		
	4	Revision		
6	1	Intermediate Languages – Three address code, its types	NA	NA
	2	Implementation of Three address code		
	3	Declarations – Procedure, Scope information & Records, Back patching		
	4	Sessional Test-1		
7	1	Syntax Directed translation scheme of Assignment statements	NA	NA
	2	Syntax Directed translation scheme of Boolean expressions		
	3	Symbol Tables Data structures for symbol tables		
	4	Assignmnet-2		
8	1	Storage allocation Strategies – static, stack and heap Allocation	NA	NA
	2	Run time storage administration		
	3	Implementation of a simple stack allocation scheme		
	4	Revision		
9	1	Implementation of Block structured languages	NA	NA
	2	Error Detection and recovery method		
	3	Error: Lexical phase errors		
	4	Revision		
10	1	syntactic phase error	NA	NA
	2	Semantic error		
	3	Introduction: Principle sources of Optimization		
	4	Revision		
11	1	Loop Optimization method Basic blocks	NA	NA
	2	flow graphs		
	3	Optimization of basic blocks		
	4	Assignmnet-3		
12	1	Loops in flow graphs, Next use information	NA	NA
	2	DAG representation of basic blocks		
	3	Global data flow analysis		
	4	Sessional Test-2		
13	1	Access to non-local names, parameter passing	NA	NA
	2	A simple code generator		
	3	Issues in the design of a code generator		
	4	Revision		

14	1	The target machine	NA	NA
	2	Code generator algorithm with examples		
	3	Discussion on code generation issues		
	4	Assignmnet-4		
15	1	Runtime environment issues	NA	NA
	2	Peephole Optimization		
	3	Revision		
	4	Sessional Test-3		



Teacher's Signature