## AMBALA COLLEGE OF ENGINEERING AND APPLIED RESEARCH DEPTT. OF COMPUTER & ENGINEERING

**Lecture Plan-(PC-CS-302A)** 

Name of the Faculty: Seema Rani

Discipline: CSE Semester: 6th

Subject : Compiler Design(PC-CS-302A)
Lesson Plan Duration: 15 weeks (Febuary-May 2021)

\*\* Work (03 Lecture) per week (In Hours):Lecture -03 (Of One Section)

Veek	Lecture Day	Topic (including assignment/test) (In Each Section )	Practical Day
1	1	Introduction to Language Processing System	NA
	2	Compiling Analysis of the Source Program	1
	3	Phases of a Compiler	1
2	1	Phases of a Compiler	NA
	2	Compiler Construction Tools	
	3	Lexical Analysis –Regular Expression	1
3	ĺ	Introduction to Finite Automata and Regular Expression	NA
	2	Introduction to Finite Automata and Regular Expression	
	3	Conversion of Regular Expression to NFA	
4	1	Role of Lexical Analyzer	NA
	2	Specification of Tokens	
	3	Revision of Unit-1	1
5	1	Syntax Analysis:Role of the Parser	NA
	2	Abstract Syntax Trees	1
	3	Ambiguity in Context-Free Grammars	1
6	1	Types of Parsing:- Top Down Parsing	NA
	2	Sessional-1	1
	3	Sessional-1	
7	1	Recursive Descent Parsing	NA
	2	LL Parser	
	3	Back Tracking	1
8	1 1	Bottom Up Parsing	NA
	2	SLR Parser	1
	3	Canonical LR Parser	
9	1	LALR Parser	NA
	2	Semantic Analysis: Semantic Errors	
	3	Attribute Grammar, Synthesized attributes	
10	1	Static Allocation, Stack Allocation	NA
	2	Heap Allocation, Activation Trees	
	3	Symbol Table, Intermediate Code Generation	27.4
11	1	Code Intermediate languages	NA
	2	Declarations, Assignment Statements	
	3	Boolean Expressions	27.4
12	1	Sessional-2	NA
	2	Sessional-2	
	3	Case Statements, DAG representation of Basic Blocks	
13	1	A simple Code generator from DAG	NA
	2	Issues in the Design of Code Generator	
	3	Code Optimization and Run Time Environments, Principal Sources of	1
14	1	Machine-independent Optimization, Machine-dependent Optimization	
	2	Optimization of Basic Blocks, Loop Optimization	1
	3	Peephole Optimization, Introduction to Global Data Flow Analysis	1
15	1	Storage Organization, Static Storage Management	NA
	2	Heap Storage management, Parameter Passing. Error Recovery	1
	3	Panic mode, Statement mode, Global correction	1