Panipat Institute of Engineering & Technology
Department of CSE-AI&DS
LESSON PLAN

Subject: Compiler Design　　　　　　　　　**Subject code: PC-CS-AIDS-302A**
Session: Jan.-June 2023-24　　　　　　　　**Semester: 6th**

SNo	Topic	CO Covered	Assignment	Teaching Methodology
1	Introduction to Language Processing System,	Co 1	Assignment 1	White board
2	Compiling Analysis of the Source Program	Co 1		White board
3	Phases of a Compiler, Compiler Construction Tools	Co 1		White board
4	Introduction to Finite Automata and Regular Expression	Co 1		White board
5	Conversion of Regular Expression to NFA	Co 1		White board
6	Conversion of Regular Expression to NFA	Co 1		White board
7	Role of Lexical Analyzer, Specification of Tokens	Co 2	Assignment 2	White board
8	Syntax Analysis: Role of the Parser, Abstract Syntax Trees	Co 2		White board
9	Ambiguity in Context- Free Grammars	Co 2		White board
10	Ambiguity in Context- Free Grammars	Co 2		White board
11	Types of Parsing: - Top- Down Parsing	Co 2		Smart board
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13	Recursive Descent Parsing	Co 2		Smart board
14	LL Parser	Co 2		Smart board
15	LL Parser	Co 2		Smart board
16	Back Tracking, Canonical LR Parser	Co 2		Smart board
17	LALR Parser	Co 2		Smart board
18	Bottom-Up Parsing,	Co 2		Smart board
19	Bottom-Up Parsing, SLR Parser	Co 2		Smart board
20	Canonical LR Parser, LALR Parser	Co 2		Smart board
21	Semantic Analysis: Semantic Errors,	CO3	Assignment 3	Smart board
22	Attribute Grammar, Synthesized attributes	CO3		White board
23	Static Allocation, Stack Allocation,	CO3		White board
24	Heap Allocation,	CO3		White board
25	Activation Trees, Symbol Table,	CO3		White board
26	Intermediate Code Generation and Code Intermediate languages	CO3		White board
27	Declarations, Assignment Statements	CO3		White board
28	Boolean Expressions	CO3		White board
29	Case Statements, DAG representation of Basic Blocks,	CO3		White board
30	A simple Code generator from DAG	CO3		White board
31	Issues in the Design of Code Generator	CO3		White board

32	Issues in the Design of Code Generator	CO3		White board
33	Code Optimization and Run Time Environments	CO4		White board
34	Machine-independent Optimization, Machine-dependent Optimization, Optimization of Basic Blocks,	CO4		Smart board
35	Loop Optimization, Peephole Optimization, Introduction to Global Data Flow Analysis	CO4	Assignment 4	Smart board
36	Storage Organization, Static Storage Management, Heap Storage management,	CO4		Smart board
37	Parameter Passing. Error Recovery,	CO4		Smart board
38	Panic mode, Statement mode, Global correction.	CO4		Smart board