



B. P. Poddar Institute of Management & Technology

Department of Information Technology

Lesson plan

Stream : Information Technology

Subject : Compiler Design

Subject Code : PCC-CS501

Faculty Name : Ranjit Haldar

L.No	Description	Reference	Teaching Methodology	Teaching Aids
L1	Introduction to compiler and cousins of it	Ref	presentation, Talk and Board wok	White board and Projector
L2	Introduction to phases of compiler	Ref	presentation, Talk and Board wok	White board and Projector
L3	Source code analysis	Ref	presentation, Talk and Board wok	White board and Projector
L4	The Role of LA	Ref	presentation, Talk and Board wok	White board and Projector
L5	Patterns, Lexemes, Input buffering	Ref	presentation, Talk and Board wok	White board and Projector
L6	Specifications of a token, Recognition of a tokens,	Ref	presentation, Talk and Board wok	White board and Projector
L7	Finite automata, From a regular expression to an NFA,	Ref	presentation, Talk and Board wok	White board and Projector
L8	From a regular expression to DFA	Ref	presentation, Talk and Board wok	White board and Projector
L9	Design of a lexical analyzer generator (Lex)	Ref	presentation, Talk and Board wok	White board and Projector
L10	The role of a parser, Context free grammars, Writing a grammar	Ref	presentation, Talk and Board wok	White board and Projector
L11	Top down Parsing, Back tracking	TE2	presentation, Talk and Board wok	White board and Projector
L12	No recursive Predictive parsing	TE	presentation, Talk and Board wok	White board and Projector
L13	Bottom up parsing, Handles, Viable prefixes	TE	presentation, Talk and Board wok	White board and Projector
L14	Operator precedence parsing	TE	presentation, Talk and Board wok	White board and Projector



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L15	LR parsers (SLR, LALR)	TE	presentation, Talk and Board wok	White board and Projector
L16	CLR	TE	presentation, Talk and Board wok	White board and Projector
L20	, Parser generators (YACC).	TE	presentation, Talk and Board wok	White board and Projector
L21	Syntax director definitions, Construction of syntax trees,	TE	presentation, Talk and Board wok	White board and Projector
L22	Bottom-up evaluation of S attributed definitions	TE	presentation, Talk and Board wok	White board and Projector
L23	s, L attributed definitions,	TE	presentation, Talk and Board wok	White board and Projector
L24	Bottom-up evaluation of inherited attributes	TE	presentation, Talk and Board wok	White board and Projector
L25	L attributed definitions,	TE	presentation, Talk and Board wok	White board and Projector
L26	Type systems	TE	presentation, Talk and Board wok	White board and Projector
L27	Specification of a simple type checker	TE	presentation, Talk and Board wok	White board and Projector
L28	Equivalence of type expressions,	TE	presentation, Talk and Board wok	White board and Projector
L29	Type conversions	TE	presentation, Talk and Board wok	White board and Projector
L30	Activation trees, Control stack, scope of declaration	TE	presentation, Talk and Board wok	White board and Projector
L31	Subdivision of run-time memory	TE	presentation, Talk and Board wok	White board and Projector
L32	Storage allocation strategies, Parameter passing	TE	presentation, Talk and Board wok	White board and Projector
L33	Symbol tables	TE	presentation, Talk and Board wok	White board and Projector
L34	dynamic storage allocation techniques	TE	presentation, Talk and Board wok	White board and Projector
L35	Intermediate languages, Graphical representation	TE	presentation, Talk and Board wok	White board and Projector
L36	Three-address cod	TE	presentation, Talk and Board wok	White board and Projector
L37	Implementation of three address statements	TE	presentation, Talk and Board wok	White board and Projector
L38	(Quadruples, Triples, Indirect triples)	TE	presentation, Talk and Board wok	White board and Projector



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L.No	Description	Reference	Teaching Methodology	Teaching Aids
L39	Introduction, Basic blocks & flow graphs	TE	presentation, Talk and Board wok	White board and Projector
L40	Transformation of basic blocks	TE	presentation, Talk and Board wok	White board and Projector
L41	Dag representation of basic blocks	TE	presentation, Talk and Board wok	White board and Projector
L42	The principle sources of optimization	TE	presentation, Talk and Board wok	White board and Projector
L43	, Loops in flow graph, Peephole optimization	TE	presentation, Talk and Board wok	White board and Projector
L44	Issues in the design of code generator	TE	presentation, Talk and Board wok	White board and Projector
L45	a simple code generator	TE	presentation, Talk and Board wok	White board and Projector
L46	Register allocation	TE	presentation, Talk and Board wok	White board and Projector
L47	Register assignment	TE	presentation, Talk and Board wok	White board and Projector

Text Book: TE

Text book and Reference books: 1.Aho, Sethi, Ullman - "Compiler Principles, Techniques and Tools" - Pearson Education.

Ref: 2. Holub - "Compiler Design in C" - PHI.

Faculty Signature

HOD-IT