AMIRAJ COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

TERM DATE: 20 JUNE -2016 TO 14 OCTOBER- 2016

HOURS	DETAILS OF TOPIC TO BE COVERED	PLANNED DATES	ACTUAL DATES
	Unit 1 - OVERVIEW		
		21/06/16 TO 03/07/16	
1	Overview of the Translation Process		
2	A Simple Compiler		
3	Difference between interpreter, assembler and compiler		
4	Overview and use of linker and loader, types of Compiler		
5	Analysis of the Source Program		
6	Phases of a Compiler		
7	Cousins of Compiler		
8	Grouping of Phases		
9	Lexical Analysis		
10	Hard Coding and Automatic Generation Lexical analyzers		
11	Front-end and Back-end of Compiler, pass Structure		
	Unit 2 - LEXICAL ANALYZER		
12	Introduction to Lexical Analyzer	04/07/16 TO 18/07/16	
13	Input Buffering		
14	Specification of Tokens		
15	Recognition of Tokens		
16	A Language for Specifying Lexical Analyzer		
17	Finite Automata From a Regular Expression		
18	Design of a Lexical Analyzer Generator		
19	Optimization of DFA		

	Unit 3 - PARSING THEORY		
20	Top Down and Bottom up Parsing Algorithms		
21	Top-Down Parsing		
22	Bottom-Up Parsing		
23	Operator-Precedence Parsing		
24	LR Parsers, Using Ambiguous Grammars	19/07/16 TO	
25	Parser Generators, Automatic Generation of Parsers	05/08/16	
26	Syntax-Directed Definitions		
27	Construction of Syntax Trees		
28	Bottom-Up Evaluation of S-Attributed Definitions		
29	L-Attributed Definitions, syntax directed definitions and translation schemes		
	Unit 4 - ERROR RECOVERY		
30	Error Detection & Recovery	08/08/16 TO	
31	Ad-Hoc and Systematic Methods	16/08/16	
	Unit 5 - INTERMEDIATE CODE GENERATION		
32	Different Intermediate Forms	17/08/16 TO	
33	Syntax Directed Translation Mechanisms And Attributed Mechanisms And Attributed Definition	26/08/16	
	Unit 6 - RUN TIME MEMORY MANAGEMENT		
34	Source Language Issues		
35	Storage Organization		
36	Storage-Allocation Strategies, and Access to Non local Names	29/08/16 TO	
37	Parameter Passing	06/09/16	
38	Symbol Tables, and Language Facilities for Dynamic Storage Allocation		
39	Dynamic Storage Allocation Techniques		
	Unit 7 - CODE OPTIMIZATION		

40	Global Data Flow Analysis	07/09/16 TO 16/09/16	
41	A Few Selected Optimizations like Command Sub Expression Removal		
42	Loop Invariant Code Motion, Strength Reduction etc.		
	Unit 8 - CODE GENERATION		
43	Issues in the Design of a Code Generator	19/09/16 TO 27/09/16	
44	The Target Machine		
45	Run-Time Storage Management		
46	Basic Blocks and Flow Graphs		
47	Next-Use Information		
48	A Simple Code Generator		
49	The DAG Representation of Basic Blocks		
50	Peephole Optimization		
51	Generating Code from DAGs		
52	Dynamic Programming Code-Generation Algorithm		
53	Code-Generator Generators		