MERI College of Engineering & Technology (MERI-CET)

Session: 2020-2021
Department: CSE
Subject code: CSE-405-F

Course- CSE
Semester: 7th
Faculty Name : Ms. PREETI

LESSON PLAN

Name of the Faculty	:	Ms. Preeti (Theory & Practical)
Discipline	:	CSE
Semester	:	7th
Subject	:	Compiler Design (CSE-405-F)
Lesson Plan Duration	:	15 Weeks (from Aug., 2020 to Nov., 2020)

** Work Load (Lecture/Practical) per week (in hours): Lectures-03, Practicals-06

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Practical day	Topic
1st	1st	**Introduction To Compilers:**:	1st	
	2nd	Compilers and translators need of translators,		
	3rd	structure of compiler, its different phases,		Practice of LEX/YACC of compiler writing.
2nd	4th	Compiler construction tools.	2nd	
	5th	**Lexical Analysis:** Role of lexical analyzer,		Write a program to check whether a string belong to the grammar or not.
	6th	design of lexical analyzer, regular expressions		
3rd	7th	Specification and recognition of tokens,	3rd	
	8th	input buffering,		Write a program to generate a parse tree.
	9th	A language specifying lexical analyzer.		
4th	10th	Finite automata,	4th	
	11th	conversion from regular expression to finite automata, and vice versa,		

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	12th	minimizing number of states of DFA,		Write a program to find leading terminals.
5th	13th	Implementation of lexical analyzer.	5th	
	14th	Revision		Write a program to find trailing terminals.
	15th	Assignment-1		
6th	16th	**Syntax Analysis:**Role of parsers	6th	Write a program to
	17st	context free grammars		compute FIRST of non-terminal.
	18nd	definition of parsing, Parsing Technique		
7th	19th	Shift- reduce parsing,	7th	
	20th	operator precedence parsing,		Write a program to compute FOLLOW of non-terminal.
	21th	top down par sing, predictive parsing.		
8th	22th	Revision,Assignment-2	8th	
	23th	**LR parsers,**		Write a program to remove left factoring.
	24th	**SLR, LALR**		
9th	25nd	**Canonical LR parser,**	9th	Write a program to check whether a grammar is operator precedent.
	26rd	**Syntax Directed Translations**		
	27th	Syntax directed definition, construction of syntax trees		
10th	28th	syntax directed translation scheme	10th	
	29th	implementation of syntax directed translation		
	30th	three address code, Quadruples, triples ASSIGNMENT-3		To show all the operations of a stack.
11th	31th	**Symbol Table & Error Detection And Recovery**		
	32nd	Symbol tables,		
	33rd	contents and data structure for symbol tables;, trees, arrays, linked lists		
12th	34th	hash tables, Errors,		

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	35th	. lexical phase error		
	36th	syntactic phase error, semantic error		
13th	37th	**Code Optimization & Code Generation :** Code generation		
	38th	forms of objects code, Machine dependent code		
	39st	optimization, register allocation for temporary and user defined variables.		
14th	40nd	ASSIGNMENT 4		
	41rd	Revision of syllabus		
	42th	Revision of syllabus		
	43th	Revision of syllabus		
15th	44th	Pre-University Exams		