Republic of Iraq The Ministry of Higher Education & Scientific Research



University: Anbar College: CS & IT Department: computer science Stage: 2nd Instructor name: Academic status: Qualification: Place of work:

Course Weekly Outline

Course Name: Computational theory 2

Course Instructor						
E-mail						
Title						
Course Coordinator						
Course Objective						
	Grammar, Chomsky Normal Form, Greibach					
Course Description	Normal Form, LMD & RMD, Ambiguity, Regular					
	language, PDA, TM, PM.					
Textbook	Daniel L. A. Cohen, Introduction of the theory of					
	computation.					
References	-Lewis, H.R. and Papadimitriou, Christos. 1998.					
	Elements of the Theory of Computation. 2 nd					
	Edition. Prentice-Hall.					
Course Assessments	TermTests	Laboratory	Quizzes	Project	Final	
					Exam	
	Exam1=15%		10%	-	60%	
	Exam 2=15%					
General Notes						

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Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		Regular Grammar (RG or FSG)		
2		Context Free Grammar (CFG)		
3		Grammar Generating, LMD & RMD, Parsing tree		
4		Ambiguity in CFG		
5		Chomsky Normal Form		
6		Greibach Normal Form		
7		Push Dawn Automata (PDA) for a ⁿ b ⁿ		
8		Push Dawn Automata (PDA) for a ⁿ b ⁿ a ⁿ		
9		Tracing in PDA		
10		Turing Machine (TM)		
11		Insert, delette, replace TM subprogram		
12		Post Machine (PM)		
13		PM tracing		
14		Regular language		
15		Regular language		

Instructor Signature:

Dean Signature: