


National University of Computer and Emerging Sciences, Lahore Campus

	Course:	Design and Analysis of Algorithms	Course Code:	CS302
	Program:	BS(Computer Science)	Semester:	Spring 2018
	Duration:	10 Minutes	Total Marks:	10
	Paper Date:	26-April-18	Weight	3
	Section:	D	Page(s):	1
	Exam:	Quiz 5	Roll No:	
			Section:	

Give an $O(V + E)$ time algorithm to compute the component graph of a directed graph $G(V, E)$. Make sure that there is at most one edge between two vertices in the component graph your algorithm produces.