

Subject Code: PC602IT					AY:2022-23
	MATRUSRI ENGINEERING COLLEGE (An Autonomous Institution) 16-1-486, Saidabad, Hyderabad-500059 (Approved by AICTE, Affiliated to Osmania University)				
Department of Information Technology					
B.E. VI-SEM Assignment -I					
Subject: DAA (PC602IT)			Marks: 10 M		
S.No.	Questions	Marks	BL	CO	
1	Prove that $3n^3 + 2n^2 = O(n^3)$	2 M	L2	CO1	
2	Prove that $3^n \neq O(2^n)$	2 M	L2	CO1	
3	Define time complexity and space complexity. Write an algorithm for adding n natural numbers and find the space required by that algorithm.	3M	L2	CO1	
4	Differentiate between Best, average and worst-case efficiency.	3 M	L1	CO1	