

Paper: BI-632 Advanced Algorithms for Computational Biology

- CO1** Students will know about the concept of computer algorithms
T1 Write a Flow chart and algorithm to find greatest of three numbers
A1 List different types of computer Algorithms along with their important features

	Roll No	Test1	Test2	Total marks of attempted questions	Total Marks	Percentage	Score (3,2,1)	Target >= 60% (Y/N)	
Marks		10	10	20	20				
	25151	9	8	17	20	85	3 Y		
	25152	9	7	16	20	80	3 Y		
	25153	7	8	15	20	75	3 Y		
	25154	7	7	14	20	70	3 Y		
	Average							3	

%age	score
>=60	3
50-59.9	2
40-49.0	1

- CO2** Students will be able to distinguish between different algorithms such as divide and rule, genetic algorithms, machine learning etc.
A1 Write different types algorithms along with their salient features and specific applications in general
A2 Search from the internet and list softwares based on Dynamics Programming, Genetic Algorithms, Decision Tree, Neural Networks, SVM etc.

	Roll No	Assignment1	Assignment2	Total marks of attempted questions	Total Marks	Percentage	Score (3,2,1)	Target	
Marks		10	10	20	20				
	25151	9	9	18	20	90	3 Y		
	25152	8	6	14	20	70	3 Y		
	25153	6	7	13	20	65	3 Y		
	25154	8	7	15	20	75	3 Y		
	Average							3	

- CO3** Students will be able to apply these algorithms to analyze biological data
A1 What is Artificial Intelligence (AI)? What are different stages of developing an AI algorithm
A2 Write a short note on AlphaFold 2 Algorithm by Google Deepmind

	Roll No	Assignment1	Assignment2	Total marks of attempted questions	Total Marks	Percentage	Score (3,2,1)	Target	
Marks		10	10		20				
	25151	9	8	17	20	85	3 Y		
	25152	8	8	16	20	80	3 N		
	25153	6	5	11	20	55	2 N		
	25154	7	7	14	20	70	3 Y		
	Average							2.75	