RAYALASEEMA UNIVERSITY COLLEGE OF ENGINEERING, KURNOOL – 518007

I - B.Tech II Semester (RU23) I Sessional Tests – March 2025

DATA STRUCTURES -23APC0501T

2URUIAOSA9

(Computer Science & Engineering) And AI

Time: 90 min   **Date: 11/03/2025 (AN)**   **Max. Marks: 30**

Answer ONE FULL question from each unit   **All the Questions Carry EQUAL marks**

Q. No		Question	Unit	BT Level	CO covered	Marks Allotted
1	a)	Explain about Linear & Binary Search with programme	I		CO1	(8M)
	b)	What is the linear data structures.	I		CO1	(2M)
		(OR)				
2	a)	Explain about implementation of Bubble sort, Selection sort.	I		CO1	(8M)
	b)	Explain about Abstract data types (ADTs)	I		CO1	(2M)
3	a)	Explain about implementation of Insertion Sort with programme	I		CO1	(8M)
	b)	Explain about time and space complexity analysis	I		CO1	(2M)
		(OR)				
4	a)	Explain about Singly linked list insertion and deletion operations	II		CO2	(8M)
	b)	Define linked list with Example .	II		CO2	(2M)
5	a)	Explain about Double linked list insertion and deletion operations	II		CO2	(8M)
	b)	Explain about Applications of Linked list	II		CO2	(2M)
		(OR)				
6	a)	Explain about circular linked list insertion and deletion operations	II		CO2	(8M)
	b)	Differences between Arrays and Linked Lists	II		CO2	(2M)