



Course Outcomes & CO-PO-PSO Mapping and Justification

Subject	DATA STRUCTURES AND APPLICATIONS	15CS33
COURSE OUTCOMES:		
CO No.	On completion of this course, students will be able to:	Cognitive Level
15CS33.1	Understand fundamentals of data structures and their applications essential for programming/problem solving.	L2
15CS33.2	Apply linear Data Structures: Stack, Queues and Recursion.	L3
15CS33.3	Apply linear data structures: Linked lists.	L3
15CS33.4	Apply Non-linear data structures: Trees and Graphs.	L3
15CS33.5	Understand the concepts of Hashing, Files and their organization and sorting algorithms.	L2

CO-PO-PSO MAPPING

CO No.	PO 1	PO2	PO 3	PO4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3
15CS33.1	3	-	-	-	-	-	-	-	-	-	-	2	1	-	-
15CS33.2	3	2	1	1	-	-	-	-	-	-	-	2	1	-	-
15CS33.3	3	2	1	1	-	-	-	-	-	-	-	2	1	-	-
15CS33.4	3	2	1	1	-	-	-	-	-	-	-	2	1	-	-
15CS33.5	3	-	-	-	-	-	-	-	-	-	-	2	1	-	-
15CS33	3.0	2.0	1.0	1.0	-	-	-	-	-	-	-	2.0	1.0	-	-

CO-PO-PSO JUSTIFICATION

CO No.	PO/PSO	CL	Justification
15CS33.1	PO1	3	Strongly having the Knowledge of the fundamental concepts of Data Structures and its application that helps in solving complex engineering problems
	PO12	2	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of Data Structures
	PSO1	1	Slightly the student will study of fundamental concepts of Data structures to analyse and develop algorithms and implement them using high-level programming languages.
15CS33.2	PO1	3	Strongly having the Knowledge of the fundamental concepts of linear Data Structures that helps in solving complex engineering problems
	PO2	2	Moderately the student will know Principles of mathematics and engineering sciences are used in various aspects of linear Data Structures approaches.
	PO3	1	Slightly the student using the knowledge of linear Data Structures concepts, we can design and develop solutions for complex engineering problems
	PO4	1	Slightly having Knowledge of linear Data Structures can be used to conduct experiments in real life problems to provide valid conclusions
	PO12	2	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of linear Data Structures
	PSO1	1	Slightly the student will study of fundamental concepts of linear Data Structures to analyse and develop algorithms and implement them using high-level programming languages.
15CS33.3	PO1	3	Strongly having the Knowledge of the fundamental concepts of linear data structures like Linked lists that helps in solving complex engineering problems
	PO2	2	Moderately the student will know Principles of mathematics and engineering sciences are used in various aspects of linear Data Structures approaches.

	PO3	1	Slightly the student using the knowledge of linear Data Structures concepts, we can design and develop solutions for complex engineering problems
	PO4	1	Slightly having Knowledge of linked list can be used to conduct experiments in real life problems to provide valid conclusions
	PO12	2	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of linear data structures like Linked lists
	PSO1	1	Slightly the student will study of fundamental concepts of linear data structures like Linked lists to analyse and develop algorithms and implement them using high-level programming languages.
15CS33.4	PO1	3	Strongly having the Knowledge of the fundamental concepts of Non-linear data structures that helps in solving complex engineering problems.
	PO2	2	Moderately the student will know Principles of mathematics and engineering sciences are used in various aspects of non-linear Data Structures approaches.
	PO3	1	Slightly the student using the knowledge of Non-linear Data Structures concepts, we can design and develop solutions for complex engineering problems
	PO4	1	Slightly having Knowledge of Non-linear data structures can be used to conduct experiments in real life problems to provide valid conclusions
	PO12	2	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of Non-linear data structures .
	PSO1	1	Slightly the student will study of fundamental concepts of Non-linear data structures to analyse and develop algorithms and implement them using high-level programming languages.
15CS33.5	PO1	3	Strongly having the Knowledge of the fundamental concepts of Hashing, sorting algorithms that helps in solving complex engineering problems
	PO12	2	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of Hashing, sorting algorithms

	PSO1	1	Slightly the student will study of fundamental concepts of Hashing, sorting algorithms to analyse and develop algorithms and implement them using high-level programming languages.
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Prepared by

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