Course Outcomes &CO-PO-PSO Mapping and Justification

Subject	Data Structures with C Lab	15CSL38
COURSE OUTCOMES:		
CO No.	**On completion of this course, students will be able to:**	**Cognitive Level**
15CSL38.1	Develop a program using linear data structures such as array and circular queue	**L3**
15CSL38.2	Develop a program for basic operations of Stack and its applications	**L3**
15CSL38.3	Construct a program using Non-linear data structures and their applications such as trees and graphs	**L3**
15CSL38.4	Construct a program using linear data structures for Linked Lists	**L3**

CO-PO-PSO MAPPING

CO No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
15CSL38.1	3	2	1	1	-	-	-	-	-	-	-	1	1	-	-
15CSL38.2	3	2	1	1	-	-	-	-	-	-	-	1	1	-	-
15CSL38.3	3	2	1	1	-	-	-	-	-	-	-	1	1	-	-
15CSL38.4	3	2	1	1	-	-	-	-	-	-	-	1	1	-	-
Avg. Mapping	**3.0**	**2.0**	**1.0**	**1.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1.0**	**1.0**	**-**	**-**

CO-PO-PSO JUSTIFICATION

CO No.	PO/PSO	CL	Justification
15CSL38.1	PO1	3	Strongly having the Knowledge of the fundamental concepts of linear Data Structures, arrays and queues 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, arrays and queues 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, arrays and queues can be used to conduct experiments in real life problems to provide valid conclusions
	PO12	1	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of linear Data Structures, arrays.
	PSO1	1	Slightly the student will study of fundamental concepts of linear Data Structures, arrays to analyse and develop algorithms and implement them using high-level programming languages.
15CSL38.2	PO1	3	Strongly having the Knowledge of the fundamental concepts of linear Data Structures like stack 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 and its applications.
	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 stack can be used to conduct experiments in real life problems to provide valid conclusions

	PO12	1	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of linear Data Structures like stack.
	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.
15CSL38.3	PO1	3	Strongly having the Knowledge of the fundamental concepts of Non-linear data structures and their applications such as trees and graphs 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 and their applications such as trees and graphs, we can design and develop solutions for complex engineering problems
	PO4	1	Slightly having Knowledge of trees and graphs can be used to conduct experiments in real life problems to provide valid conclusions
	PO12	1	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of Non-linear data structures and their applications such as trees and graphs.
	PSO1	1	Slightly the student will study of fundamental concepts of Non-linear data structures and their applications such as trees and graphs to analyse and develop algorithms and implement them using high-level programming languages.
15CSL38.4	PO1	3	Strongly having the Knowledge of the fundamental concepts of linear data structures such as linked list 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 such as linked list can be used to conduct experiments in real life problems to provide valid conclusions
	PO12	1	Moderately the student will become aware of the need for lifelong learning and the continued upgrading of technical knowledge of linear data structures such as linked list.
	PSO1	1	Slightly the student will study of fundamental concepts of linear data structures such as linked list to analyse and develop algorithms and implement them using high-level programming languages.

Prepared by **HoD**

Jayashree L K /A.Rosline Mary/ Ashwini M **Dr.M.Ramakrishna**