



ATHARVA EDUCATIONAL TRUST'S ATHARVA COLLEGE OF ENGINEERING

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Department of Computer Engineering Internal Assessment- I Question Bank

Year/Sem/AY: S.E./III/2023-24

Subject: Data Structure

Subject Code: CSC303

Q.1	Attempt any five	Marks
a	List the application of Stack.	2
b	List the application of Queue.	2
c	What is Queue? List the types of Queues.	2
d	List any two advantages of Linked List over arrays.	2
e	List the operations on Stack.	2
f	What is the Priority Queue? List the types of Queues.	2
g	List types of Linked Lists.	2
h	Define ADT with an example.	2
i	Define Circular Queue.	2
j	Compare and contrast Singly Linked List and Doubly Linked List.	2
k	List the operations on Stack.	2

Q.2	a	Write a C program to perform stack using an array.	5
		OR	
	b	Write a C program to perform a circular queue using an array.	5
Q.2	a	Write a C program to perform Queue using an array.	5
		OR	
	b	Write a C program to perform a priority queue using an array.	5
Q.3	a	Design an algorithm to insert a node at the beginning of SLL.	5
		OR	
	b	Design an algorithm to insert a node at the end of DLL.	5
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		OR	
	b	Design an algorithm to insert a node at the beginning of DLL.	5