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PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 09-10-2025

Time: 11.45am to 01.15pm

School: SOCSE	Program: B.TECH	
Course Code : CSE2253	Course Name: Data Structures	
Semester: III	Max Marks: 50	Weightage: 25%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	26	24			

Instructions:

- (i) *Read all questions carefully and answer accordingly.*
- (ii) *Do not write anything on the question paper other than roll number.*

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

1	What is the difference between Array and Structure	2 Marks	L1	CO1
2	What is the difference between Static and Dynamic Memory allocation	2 Marks	L1	CO1
3	How can be pointer be declared and accessed in a Program	2 Marks	L1	CO1
4	List the Applications of Stack	2 Marks	L2	CO2
5	List the Applications of Queue	2 Marks	L2	CO2

PART B

Answer the Questions.

Total Marks 40M

6.	a.	Explain Structures and Union taking ur own Example	10 Marks	L1	CO1
Or					
7.	a.	Write a Program to Reverse a String and check whether is Palindrome or not	10 Marks	L1	CO1

8.	a.	What is Data structure? Give the Classification of data Structure	10 Marks	L1	CO1
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Or

9.	a.	Explain the Concept of Recursion taking an example	10 Marks	L1	CO1
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10.	a.	Convert the following infix to Postfix Expression i) $A^*(B+C)/D$ ii) $(A+B)/(C-D)-(E^*F)$	10 Marks	L2	CO2
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Or

11.	a.	Evaluate the given Postfix Expression $10\ 5\ +\ 60\ 6\ /*\ 8\ -$	10 Marks	L2	CO2
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12.	a.	Explain how Enqueue, Dequeue can be implemented in Queue	10 Marks	L2	CO2
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Or

13.	a.	Explain how the disadvantage of Queue can be Overcome by using Circular Queue	10 Marks	L2	CO2
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