Sumridhi Sarwajanik Charitable Trust's
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Vision: To emerge as the best Computer Science & Engineering Department through Quality Education, Industry alliances & Collaborative Research
DTE Code: EN4139
NAAC A+ Accredited

Continuous Assessment Examination - II
Session: 2024-25 [Odd-24]

Branch: CSE **Semester: 3**
Course Name: Data Structure and Program Design **Course Code: CSPC202T**
Date of Examination: 26/09/2024 **Max. Marks: 30 Marks**
Time: 1.5 hrs

Instructions to candidate:
a) All questions carry marks as indicated
b) Assume suitable data wherever necessary.

1.	Develop a C function to delete a node in a circular linked list.	(BL 3) (CO3)	6M
	OR		
2.	Develop a C program to subtract 2 polynomials using linked list	(BL 3) (CO3)	6M
3.A	What is a Binary Search Tree? Explain & construct a BST from the following data: 43, 49, 09, 20, 33, 31, 02, 01, 57, 55. Write all types of Traversals	(BL 3) (CO4)	6M
3.B	Explain Threaded Binary Tree in detail with example	(BL 2) (CO4)	6M
	OR		
4.A	Construct a tree for following pre order and inorder traversal. Preorder : G B Q A C K F P D E R H L D R In order : Q B K C F A G P E D H R D L R	(BL 3) (CO4)	6M
4.B	Develop a C program to insert a node in BST.	(BL 3) (CO4)	6M
5.A	Compare between DFS and BFS techniques of graph traversal.	(BL 2) (CO5)	6M

5.	Develop a program to create a linked list with 2 nodes.	(BL 3) (CO-3)	6M
	OR		
6.	Construct a function to insert a node in single linked list with all 3 conditions.	(BL 3) (CO-3)	6M