REV-00 BCA/41/46

BACHELOR OF COMPUTER APPLICATION

SECOND SEMESTER DATA STRUCTURES THROUGH C BCA – 202(OLD)

Duration: 2 Hrs. 40 Mins.

Marks: 50

{ Part : A (Objective) = 20 Part : B (Descriptive) = 50 }

[PART-B: Descriptive]

[Answer question no. One (1) & any four (4) from the rest]

1.	Define Stack with diagram. Explain push, pop and display functions.	4+6=10
2.	Explain the different types of queues. Discuss the Delete operation for a normal queue.	7+3=10
3.	Define Circular singly linked list with diagram. Explain the steps to insert a node at the rear end in a circular singly linked list.	5+5=10
4.	Explain the tree traversal technique with algorithm, and example for each. Define Binary tree, Strictly Binary tree and Complete Binary tree.	6+4=10
5.	What is Depth First and Breadth First traversal? Explain Kruskal's algorithm to find minimum spanning tree.with suitable examples.	4+6=10
6.	Explain the types of basic searching techniques. Write a 'C' program to search for an item using Binary Search.	5+5=10
7.	Write a 'C' program to arrange the numbers in ascending order using Selection Sort technique.	10
8.	Explain the following: (c) Quick sort (d) Doubly Linked List	5+5=10

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