

**MODEL QUESTION PAPER (Sem-end. Exam)**  
**BCA II SEM – DATA STRUCTURES USING C**

**Time: 3 hours**

**Max.Marks: 75**

---

**SECTION-A**

**Answer any FIVE questions.**

**5X5 = 25M**

1. Explain about Abstract Data Types.
2. Define linear and non-linear data structures.
3. Explain Linked List concept.
4. What are the applications of stacks?
5. What is priority queue?
6. Explain about binary search tree.
7. Define sorting. What are the advantages and disadvantages of merge sort?
8. Briefly explain various representations of Graphics.
9. How to reverse a given linked list.
10. Write different applications of Binary and Binary search trees.

**SECTION-B**

**Answer following question**

**5X10 = 50M**

1. What are primitive and non-primitive data structures with an example?
2. Explain different primitive data types.
3. Explain different operations on single linked list.
4. What is linked list? Explain different types of linked lists in data structures.
5. What is stack? Explain various operations of stack.
6. Explain about Queue using linked list.
7. Explain about different tree travelling techniques.
8. Explain different applications and properties of binary tree.
9. Write about various Graph Travelling techniques.
10. What is searching? Explain Linear Search Algorithm with example.

**Note: Paper Setter must select TWO short questions and TWO essay questions from each unit.**