ADIKAVI NANNAYA UNIVERSITY:: RAJAHMAHENDRAVARAM

B Sc Computer Science Syllabus(w.e.f: 2020-21 A.Y)

MODEL QUESTION PAPER (Sem-end. Exam)
B.Sc DEGREE EXAMINATIONS

Semester - II

Course 2: DATA STRUCTURES USING C

Time: 3Hrs   Max.marks:75

Section - A

Answer any FIVE question   5X5 = 25M

1. Explain about Abstract Data Types.
2. Define linear and non-linear data structures.
3. Explain Atomic Linked List.
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.

Section - B

Answer ALL following question 5X10 = 50M

9. a) What are primitive and non-primitive data structures with an example?
    (OR)
    b) Explain different approaches to designing an algorithm.

10. a) Explain different types of arrays. (OR) b) What is linked list?

    Explain different types of linked lists in data structures. 1

11. a) What is stack? Write ADT. Explain various operations of stack.
    (OR)
    b) What is a Deque? What are the different techniques used to represent Deque? Explain.

12. a) Write about different tree traveling techniques and write an algorithm for traveling

    techniques.

        (OR)

    b) Explain different applications and properties of binary tree.

    13. a) Write about various Graph Travelling techniques.

(OR)

b) What is searching? Explain Linear Search Algorithm with example.