



ADITYA DEGREE COLLEGES

ANDHRA PRADESH

IV SEMESTER - PREFINAL EXAMINATIONS

II B.Sc - COMPUTER SCIENCE (DS)

Max. Marks : 75

Time : 3 Hours

Date:

SECTION - A

I. Answer any FIVE questions from the following

5X5= 25M

1. Difference between array and linked list.
2. Explain stack applications
3. How to represent a binary tree
4. Explain circular queue
5. Explain Threaded Binary tree
6. How to represent of graph ?
7. Write an algorithm to implement insertion sort ?
8. Explain Linear search.

SECTION - B

II. Answer ALL Questions

5X10=50M

9. a) What is a data structure ? Explain classification of data structure .

(OR)

b) Explain SLL operations

10. a) Explain stack operations using arrays.

(OR)

b) Explain queue operations using SLL

11. a) What is a tree ? Write about tree properties ?

(OR)

b) Explain BST traversal

12. a) Explain Graph traversal

(OR)

b) Explain minimum spanning tree

13. a) Explain to implementation of quick sort

(OR)

b) Explain binary search