

Roll No.....

BCA 403(O)

**B.C.A (Semester- IV) Exam.-2014
(Old Course)**

Paper: III

Data Structure using 'c'

Time: Three Hours]

[Maximum Marks: 75

Note: Section A is compulsory. Attempt seven questions from Sec B, One question from Section C.

Section-A

1. What are the features of structured Programming methodologies?
2. What are primitive data type ?
3. Compare the advantages and disadvantages of bubble, insertion and selection sort.

SECTION B

4. Write what are the methods available in sorting sequential files?
5. Draw the B-tree of order 3 created by inserting the following data arriving in sequence.
92 24 6 7 11 8 22 4 5 16 19 20 78
6. Write a program to merge two sorted arrays of integers.
7. Compare queue and linked list to perform insertion operation.
8. Write a program to convert an infix expression into post fix operation.
9. Explain binary search free operation in detail.

SECTION C

10. Write short notes on any five :
 - a. Linear search
 - b. Stack application
 - c. Leap sort
 - d. D-queues
 - e. hashing
11. Write a program for creating, inserting and deletion in a Binary tree.