Code: RA 9F00105

RA

MCA - II Semester Regular & Supplementary Examinations, August/September 2012
DATA STRUCTURES
(For readmitted students of R07 regulation only)

Time: 3 hours   Max Marks: 60

Answer any FIVE questions
All questions carry equal marks
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1 (a) What is a function? List the advantages and disadvantages of functions.
   (b) Write program in C using functions to perform the simple calculator operations.

2 (a) What are the advantages of double linked lists over single linked lists?
   (b) Explain with suitable example, the insertion operation using double linked lists.

3 (a) Write a program in C to implement the stack operations.
   (b) What is recursion? Explain it with suitable example.

4 (a) Explain the various storage representation techniques for queues.
   (b) Give brief description about the priority queues.

5   Compare the time complexities of various sorting algorithms.

6 (a) Explain any three hashing techniques with suitable examples.
   (b) Write program in C to implement the binary search operation.

7 (a) Write a non recursive tree traversal algorithm for post order.
   (b) How to delete an element from a binary search tree? Explain.

8 (a) Write a procedure to sort the elements by using heap sort technique.
   (b) Write a short notes on threaded trees.

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