Code :CS05007

RA

III B.Tech I Semester(R05) Supplementary Examinations, May 2011
ADVANCED DATA STRUCTURES
(Computer Science & Engineering)
(For students of RR regulation readmitted to III B.Tech I Semester R05)

Time: 3 hours **Max Marks: 80**

Answer any FIVE questions
All questions carry equal marks

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1. (a) What do you mean by this pointer? Give Example.
   (b) Write a simple C++ program which explains the concept of friend function.
2. (a) What is inheritance? Explain the different types of inheritance.
   (b) Explain base and derived classes and base class access control.
3. (a) What are various types of linked list? Explain them.
   (b) Give an ADT for the stack.
4. (a) List out the difference between hashing and skip list.
   (b) Discuss extensible hashing with suitable example.
5. Define max tree, max heap, min heap with suitable example.
6. Provide the specification for abstract data type bsTree(Binary search tree) and C++ abstract class to this ADT.
7. (a) Write pseudo code for right rotate in red black tree
   (b) Write a insertion algorithm for red black tree. Also analyze its complexity.
8. Write an algorithm for suffix tries and derive it time complexity.

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