Code: R7210503

R07

II B.Tech I Semester (R07) Supplementary May 2012 Examinations
ADVANCED DATA STRUCTURES
(Common to Computer Science & Engineering and Electronics & Computer Engineering)

Time: 3 hours   Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

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1.   Discuss various types of functions of detail.

2.   (a)   Write a short note on function overloading.
     (b)   How we can implement runtime polymorphism using virtual functions? Explain.

3.   (a)   How we can measure the performance of an algorithm? Discuss.
     (b)   Define abstract data type. Explain the implementation of stack ADT in detail.

4.   Discuss various collision resolution techniques in detail.

5.   (a)   Discuss priority quemes implementation in detail.
     (b)   Discuss external sorting technique with example.

6.   Define AVL tree. Discuss in detail about various operations on AVL trees with
         examples.

7.   (a)   List various operations on red-black trees. Explain in detail.
     (b)   Explain the method of deletion operation on B-trees with example.

8.   (a)   Discuss brute force pattern matching algorithm.
     (b)   Write a short note on tries.

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