Code No: D109115801
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I Semester Regular Examinations March 2010
ADVANCED PROBLEM SOLVING
(COMMON TO COMPUTER SCIENCE& ENGINEERING, COMPUTER SCIENCE, INFORMATION TECHNOLOGY, IMAGE PROCESSING)

Time: 3hours   **Max.Marks:60**
Answer any five questions
All questions carry equal marks
- - -

1.a)   Write a Java Program for Reading and Writing Objects.
  b)   Explain about O-mega and Theta Notations.

2.   How can you do insert, delete operations in Doubly Linked List?

3.a)   Implement a Queue as a Linked List.
  b)   Write an algorithm for Depth First Traversal.

4.a)   Write about Union and Find Algorithms.
  b)   Explain about Red Black Trees.

5.a)   Illustrate Threaded Binary Trees.
  b)   Write short notes on Hashing in java.util package.

6.a)   Implement Heap Sort.
  b)   How can you resolve collisions in Hashing?

7.a)   Write about BFS Graph Traversal.
  b)   Explain Minimum Cost Spanning Trees.

8.a)   Explain about Compressed Tries algorithm.
  b)   Write about Boyer-Moore Algorithm.

****