Subject Code: G4001/R13

M. Tech – I Semester Regular/Supplementary Examinations, April, 2015 ADVANCED DATA STRUCTURES/ ADVANCED DATA STRUCTURES AND ALGORITHM ANALYSIS/ DATA STRUCTURES

(Common to IT, CS&T, CS and SC&E)

Time: 3 Hours Max Marks: 60

Answer any FIVE questions All questions carry EQUAL marks

- 1. Explain all the operations of double linked lists?
- 2. Explain merge and insertion sorts with suitable examples?
- 3. Explain separate chaining and open addressing in detail?
- 4. Explain all the operations of binary search tree?
- 5. Explain the operations on AVL Trees in detail?
- 6. a) Explain the procedure to sort the nodes in a single linked list?
 - b) Explain breadth first travel with an example?
- 7. a) Explain how post fix can be evaluated?
 - b) Explain one of the ways to represent a Hash table?
- 8. a) Explain the concept of Dequeue?
 - b) What is the purpose of Red-Black Trees?
