

Kulri

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

Test 1, Examination -- February 2016

B.Tech/ 2nd Semester

COURSE NAME: Basic Data Structures

MAX. MARKS: 15

COURSE CODE: 14B21CI211

COURSE CREDITS: 04

MAX. TIME: 1 hr

Note: All questions are compulsory

1. What is meant by recursion? Write a recursive function to obtain the sum of first 25 natural numbers. (5 marks)
2. (i) What do you understand by space time complexity. What are the properties of good algorithm (2.5 marks)
(ii) List the various data structures specifying a defining feature of each. (2.5 marks)
3. Write the program for creation of a singly linked list and inserting a node at the end of the list. (5 marks)

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