



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)
उत्तराखण्ड मुक्त विश्वविद्यालय, हल्द्वानी (नैनीताल)

BCA 1ST YEAR 2ND SEMESTER ASSIGNMENT

Last Date of Submission: 15 July 2015

Course Title: Data Structure through C Language

Course Code: BCA-06

Year: 2014-15

Maximum Marks: 40 Marks

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answer 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

1. What do you mean by dynamic memory allocation? How it is useful?
2. What is binary search tree?
3. What is best case, worst case and average case of algorithm?
4. What is B-tree? What are the properties of a B-tree?
5. What is a stack? What different operations can be performed on stacks?
6. What is queue? What are the applications of queue?
7. What are the advantages of binary search technique?
8. Distinguish between the directed and undirected graphs.

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answer 02 questions only.

1. Describe the delete operation in a single linked list.
2. Describe two applications of stack.
3. Explain linear and binary search
4. Explain the various types of binary trees.