

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 07

B.Sc.(IT) (Sem.-2)
DATA STRUCTURES THROUGH 'C'
Subject Code : BS-108
Paper ID : [B0408]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.

SECTION-A**1. Write briefly :**

- a) What is Analysis? a2zpapers.com
 - b) What are various operations that can be performed on arrays?
 - c) Limitations of array of pointers to strings
 - d) Application of stacks
 - e) Priority queues
 - f) Doubly link list
 - g) Multiplication of sparse matrix
 - h) LIFO vs FIFO
 - i) How can you traverse binary trees?
 - j) What are maximum number of nodes in a binary tree with depth n ?
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SECTION B

2. Write an algorithm to perform various operations on stacks.
3. What are Strings? Write an algorithm and program to reverse the string using stacks.
4. Write an algorithm to insert a node in BST.
5. Write an algorithm to implement binary search. Compare algorithm of binary search with linear search.
6. Write an algorithm to insert and delete an element in queues.
7. Write an algorithm and program to delete last node in linked list.

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