

Seat	
No.	



Total No of Pages: 2

Kamala College, Kolhapur
(Autonomous)
B.C.A. (Part-II) (Semester-III) (CBCS)
Examination March/April, held on May, 2023.
CC-303: Data Structure using C

Sub Code - 83376

Day and Date: Thursday, 08/06/2023
Time: 02.30 p.m. to 05.30 p.m.

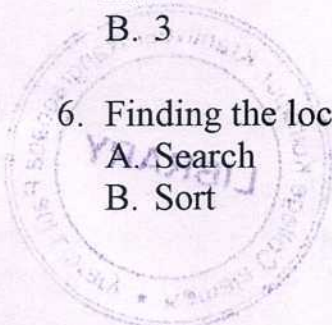
Total Marks: 70

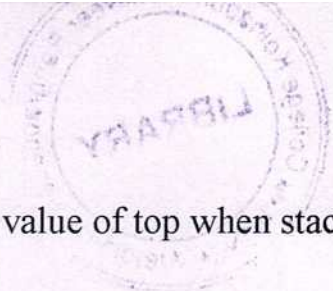
Instructions:

- 1. Que.1 and Que.6 are compulsory**
- 2. Attempt any three questions from Que. No.2 to Que. No. 5**
- 3. Figures to the right indicate total marks.**

Q. 1 A) Multiple Choice Questions (1 mark each) 10

1. A queue follows which order to store data and retrieved it?
A. Last out First in
B. First out Last in
C. First in First out
D. Last out Last in
2. A terminal node in a tree is called -----.
A. Root
B. Leaf
C. Child
D. Branch
3. Which indicates post-order traversal?
A. Left - Right - Root
B. Right - Left - Root
C. Root - Left - Right
D. Right - Root - Left
4. Which of the following is the postfix expression?
A. ABC+*
B. +A*BC
C. A+B*C
D. None of these
5. How many fields are there in a node of a single linked list?
A. 2
B. 3
C. 4
D. 1
6. Finding the location of the element with a given value is -----.
A. Search
B. Sort
C. Pop
D. None of these





7. What is the value of top when stack is empty?
 A. top= 1
 B. top= 2
 C. top= 0
 D. top= -1
8. Data means-----.
 A. Computer input
 B. Processed information
 C. Unprocessed information
 D. Manipulated input
9. Which of the following sort uses divide and conquer strategy?
 A. Bubble sort
 B. Merge sort
 C. Insertion sort
 D. Selection sort
10. Which function is used to clear the memory in linked list ?
 A. Delete
 B. Drop
 C. Clear
 D. None of these

B) Short Answer Question (Attempt any two out of three) 10

1. Explain stack data structure
2. Write Algorithm to convert an Infix expression into Postfix expression.
3. Explain types of queue data structure.

Q2. What are data structures? Explain different types of data structures. 10

Q.3 Explain insertion operation on singly linked list with a suitable example. 10

Q.4 What is tree? Explain tree traversal with appropriate example. 10

Q.5 Explain binary search with example. 10

Q.6 Write short notes on (any Four out of Six) 20

1. Concept of hashing
2. Types of linked list
3. Applications of stack
4. Operations on data structure
5. Tree terminologies
6. Applications of queue

