

Book ID: B0701

1. You are asked to store university Register-Numbers of all 100 students of MCA-II semester in your Learning Centre. Which data type do you use? What is its syntax? (5 Marks)
2. You are asked to store Names of all 100 students of MCA-II semester in your Learning Centre. Which data type do you use? What is its syntax? (5 Marks)
3. Let us say your Learning Centre decides to store all the three types of student data:
 - a. Register-Number
 - b. Name
 - c. AgeIn a single data type, which is the most suitable data type? Give its syntax (5 Marks)
4. Say All the Learning Centre codes of SMU are stored in an array called LC
If SMU is a variable pointing to base address of LC, write a simple program to print all the LC codes stored in variable LC (10 Marks)
5. You have a container with only one opening at TOP . Which Data structure you use? And write functions to implement it using arrays. (9 Marks)
6. When you are booking for ticket in a railway reservation counter, which data structure is applicable? implement its functions in C language. (9 Marks)
7. "You have organized a students' get together in your centre. Totally there are some 50 students in your class. But you aren't aware how many of them will turn up to the gathering" - In this situation which one of the following is best allocation? What is its name?
 - a. Arrange all 50 chairs in start itself
 - b. Arrange chairs as and when a student comesWrite functions illustrating the data structure that is used in solving such problems in C language. (8 Marks)
8. Say following TREE structure is followed in your computer lab. If there is an error in Comp-4 how do you search it using Binary Search Tree (BST) algorithm. (9 Marks)