

## DR. MPS MEMORIAL COLLEGE OF BUSINESS STUDIES

## SIKANDRA, AGRA

## QUESTION BANK 2022 Data Structure Using C/C++ BCA SEMESTER – 2

- Q1: What is a data structure? Explain various different operations that can be performed on a data structure.
- Q2. Describe Algorithm analysis and Time complexity.
- Q3. What is a Stack? Write a program to implement Push() and Pop() operations.
- Q4. What are Infix and Postfix expressions? Convert a postfix expression to prefix and vice versa.
- Q.5 What is a Queue? Explain in detail various types of queues.
- Q6. What are Link Lists? Explain in detail the various types of link lists. Write a program to insert a node in a singly link list.
- Q7. What is recursion? WAP using recursion to reverse a number.
- Q8. What is a Tree data structure. Explain Binary and Binary Search Trees.
- Q9. Explain inorder, preorder and postorder traversal with an example.
- Q10. WAP for i) Bubble Sort ii) Insertion Sort iii) Selection Sort iv) Binary Search