

- Q-2** Do as directed. (ATTEMPT ANY SEVEN) 14
- (1) What is Data Structure? List out applications of Data structure.
 - (2) Differentiate: Linear and Non-linear data structure.
 - (3) What is 'Queue'? How does it differ from a 'Stack'?
 - (4) List out only those operators which cannot be overloaded in C++.
 - (5) What is copy constructor?
 - (6) Differentiate: Static binding and Dynamic binding.
 - (7) What is function overloading?
 - (8) Define pointer. Why it is required?
 - (9) List out various modes of file management with their meaning.
- Q-3** **A** Explain the basic terminology related to OOP's. List advantages and disadvantages of OOP's. 6
- B** Write a short note on: 6
- (I) Default arguments (II) Inline function
- OR**
- B** Write a short note on Sequential file organization. 6
- Q-4** **A** Explain Binary operator overloading with an example. 6
- B** Write a brief note on hashing function. 6
- OR**
- B** What is a binary tree? Explain inorder, preorder and postorder traversal of a binary tree. 6
- Q-5** **A** Write an algorithm to delete an element from a Simple Queue. 6
- B** What is Linked List ? Write an algorithm for insertion of new element at the beginning of the singly Linked List. 6
- OR**
- B** Write an algorithm to insert an element into Circular Queue. 6
- Q-6** **A** Discuss the storage representation of binary tree. 6
- B** Write a brief note on Inheritance. 6
- OR**
- B** Write a brief note on ISAM. 6