1. What is Dequeue ? How it is represented in memory ?

2. Write short notes on :

   (a) Data Organization

   (b) Operations on Stack

3. What is a Graph ? How is it represented in memory ? Discuss breadth first search technique for traversing graph.

4. Write short notes on :

   (a) Binary Search tree

   (b) Linear search vs Binary search

5. Write an algorithm for Bubble Sort ? Discuss Bubble Sort with the help of an example.

6. Write an algorithm for Merge Sort using an example.

7. Discuss various File Organization techniques. Also discuss their relative advantages and disadvantages.

8. Briefly explain the following terms :

   (a) Hashing

   (b) Index Sequential file.