Institute of Engineering Science and Technology, Shibpur.
IT Department , Session 2018 July-Dec

DATA STRUCTURE LABORATORY 2018

ASSIGNMENT - 4

BATCH HY   **DUE DATE : 09.08.2018**

1. Write a C Program to implement Circular-Queue in an array.

2. Write a program to implement a queue using two stacks data structure.

3. Write a program to implement priority scheduling scheme using a circular queue. In priority scheduling, higher priority elements selected first.

4. Suppose we have two queues, P and Q, and one stack S. We are only allowed to dequeue from P and allowed to enqueue into the Q. We can do push and pop from the stack. In this assignment, you will be given a permutation of n numbers and asked to check if it is a stack permutation or not.

[*Stack permutation:* A stack permutation is an ordering of numbers from 1 to n that can be obtained from the initial ordering 1, 2, ... n by a sequence of stack operations as described above.]