**Department of Computer Science and Engineering**

**Course: Design and Analysis of Algorithms**

**Shift-I**

**Assignment-Set-7**

**Max.Marks: 10**

**Last date of submission: 19-Oct-2019**

***(Students can also submit assignment in any other programming language)***

Q.1] Write Python program to solve Bellman Ford Algorithm. Assume suitable graph for demonstration of test cases.

**Roll no 61**

Q.2] Write Python program to solve Brick Tiling problem using dynamic programming. Design suitable test cases to demonstrate correctness.

**Roll no 62**

Q.3] Use backtracking approach to print all unique permutations of string. Assume a string has permutation repeated.

**Roll no 63**

Q.5] Design Aho-coarsick pattern search program in python/java. Design test cases for proving correctness.

**Roll no 64**

Q.6] Given a string and pattern. Design pattern search algorithm which search the pattern exactly in the string or any permutation of pattern in the string.

**Roll no 65**

Q.6] Implement shortest common super sequence problem in python/java. Demonstrate correctness using test cases.

**Roll no 66**

Q.1] An array consisting of positive and negative numbers write Python program to solve Largest sum subsequence array. Assume suitable data for demonstration of test cases.

**Roll no 67**

Q.1] Write Python program to solve Word Wrap up Problem. Assume suitable data for demonstration of test cases.

**Roll no 68**

Q.1] Write Python program to solve closest pair problem. Assume suitable data for demonstration of test cases.

**Roll no 83**

Q.1] Write Python program to solve Convex Hull. Assume suitable graph for demonstration of test cases.

**Roll no 84**