

CSE115 IBCC Time: 40 Minutes Sec: B ID:

Q1	Given that, BWT(T): SCTTGA\$TPC Using the given BWT(T) string, apply the proper technique to reconstruct the original sequence, then generate the Burrows–Wheeler Matrix (BWM) and identify the corresponding Suffix Array (SA(T)) of the original DNA sequence.	7
Q2	Given that, Query Sequence: LACGGTAGCTAN Target Sequence: CTCACGGTCTQ Apply the FASTA algorithm with K = 1 for both the query sequence and the target sequence to find the best matching subsequences.	8