

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 <i>reconstruct the original sequence</i>, 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