

Mid-Semester exam
ABIN – 2021
Max Marks: 30; TIME: 60 minutes

Instructions:

- Only handwritten (clean) answers will be considered for grading.
- Plagiarism in any form is punishable as per institutional mandate.

Ques 1.

Locally align the two sequences using Smith-Waterman Algorithm.

[10 Points]

Sequence 1-: Mount

Sequence 2-: Everest

Provide the most optimal solution.

Match: 1; Mismatch: 2; and Gap: 3.

Ques 2.

State the pseudo-code for pattern branching algorithm

[5 Marks]

Ques 3.

State the difference between De novo assembly and Reference Assembly

[5 Marks]

Ques 4.

Construct the profile matrix and the find out the consensus sequence for the following sequences-:

[10 Marks]

AGGTACTT
CCATACGT
ACGTTAGT
ACGTCCAT
CCGTACGG

