

ABN – 2021

Quiz 1

Total points: 35; Total time: 80 Minutes

- 1. Write the problem statements associated with the motif search and median string search problem. [5 points]**
- 2. Write the pseudocode or steps of a greedy algorithm for motif discovery. [5 points]**
- 3. Write the pseudocode of Gibbs' sampling based motif discovery. [5 points]**
- 4. Derive the time complexity of the brute force method for motif discovery. [5 points]**
- 5. Write a pseudocode for a back-tracking algorithm to find out the best local alignment following Smith-Waterman approach. [5 points]**
- 6. Systematically determine the best global alignment between: AAAC and AGC. [5 points]**
- 7. Provide Burrow's Wheeler Transformation (BWT) of "banana".**