

Quiz - 3

Answer **ALL** questions

Each question carries **8 points**

Plagiarism will be tracked and penalised

1. Write the pseudo-code of the Gibbs' sampling based algorithm for Motif search.
2. What are the weaknesses of Naive Bayes classification algorithm? Describe mathematically with objectivity. Purely descriptive answers will not be graded.
3. What are the troubles involved in considering the second order Markov process for HMM? Explain mathematically? Purely descriptive answers will not be graded.
4. Derive the complexity of The Forward Algorithm for likelihood computation in the context of HMM.
5. Think of a problem other than gene finding that can be solved using HMM. Explain clearly.

Or,

Think of a use case for the BWT approach that you have learned in the context of alignment. Explain clearly.