

The University of North Carolina at Chapel Hill

Comp 590/Comp 790-90 Bioalgorithms - Fall 2008

Sample Questions for Midterm #2

Open book, open notes, no computer
(100 points)
Allotted time: 1 hour

Instructions: Answer all questions using the space provided. If you need more paper, raise your hand, and it will be provided for you. If you have a question during the test, do not leave your seat. Instead, raise your hand until someone comes to assist you. If any question seems unclear or appears to lack sufficient information, state a reasonable assumption (in writing on your quiz) and proceed. The point value of each problem is indicated in parentheses. Make sure that you answer each part of each question, even if you believe you have already answered the question in an earlier part.

Name _____
(Print)

I understand that this quiz is subject to the Honor Code
of the University of North Carolina at Chapel Hill.
I neither gave, nor received, any
unsanctioned assistance during this examination.

Signed _____ Date _____

Consider the following spectrum.

AAT ATC AGA ATT CAG CGA GAT GAA TCA TTC

1. **(10 pts)** Map it to a Hamiltonian Path problem.
2. **(10 pts)** Map it to an Eulerian Path problem.
3. **(10 pts)** Write down all DNA sequences that have this spectrum?