

Final Exam

Student Name: _____

Dr. Kellogg

1. What physical law is used in molecular mechanics to represent the energy and behavior of covalent (atom-atom) bond? 2.5 pts

2. Why would "Systematic Search" be a poor choice to find the global minimum energy structure of a protein? 2.5 pts

Final Exam

Student Name: _____

Dr. Rife

1. Briefly (ca. 3 sentences) describe the mechanism of action of antisense oligonucleotides.

2. Briefly (ca. 3 sentences) describe the mechanism of action of the hammerhead ribozyme.

Final Exam

Student Name: _____

Dr. Karnes

1. Which of the following is required for an FDA regulated bioanalytical laboratory? (2.5 pts)
 - a. Procedures for validation of analytical methods.
 - b. A quality assurance unit (QAU).
 - c. Potency testing of drug formulations.
 - d. Regular inspections.

2. Which of the following statements is/are true with regard to homogenous immunoassays? (2.5 pts)
 - a. Homogenous immunoassays require a physical separation of bound and free fractions of the labeled antigen.
 - b. The label response must not be affected by antibody binding for a homogenous immunoassay to work.
 - c. Homogenous immunoassays rely on a change of the label's response that is due to antibody binding.
 - d. The label chosen for homogenous immunoassay must enhance the binding affinity of the antibody.