

FINAL EXAMINATION

INSTRUCTION TO STUDENTS: OBSERVE SILENCE. ATTEMPT ALL
QUESTIONS

1. What you understand by the following terms?
 - a) Enzyme -
 - b) Protein folding-
 - c) Molecular chaperones –
 - d) Chaperonins:
 - e) Immobilization of enzymes –

2. One of the major functions of molecular chaperones is to prevent both newly synthesized polypeptide chains and assembled subunits from aggregating into non-functional structures. List five properties of molecular chaperones.

3. Protein stability is one of the common problems in protein expression. During this process, protein sequences cannot be deleted or mutated thus the need for strategies for improving protein stability for these proteins. Discuss five of these strategies that improve protein stability.

4. There are several methods of enzyme immobilization. State FIVE below and briefly state their individual advantages and disadvantages

5. a) The Genome is basically an organism's complete set of genetic instructions. Expand.
- b) What is a proteome?
- c) What are Transposable elements in genome study and practice?
- d) What are Polypeptides?
- e) What is Metabolic engineering?

GOOD LUCK!