

1. Describe the reason why the "capping" and "poly(A) tail" are needed for the transcription in mammalian cells.
2. Outline a model for explaining the chemiosmotic theory.
3. Define the following terms:
 - (a) allosteric enzyme.
 - (b) Edman reaction.
4. When you find a new protein (enzyme), how do you determine its structure?
5. Outline the possible mechanism in the regulation of cholesterol synthesis.
6. Describe how the iodide metabolism involves thyroid follicle.
7. What is "second messengers"?
8. What is "PCR" (polymerase chain reaction)?
9. Describe the conversion of tyrosine to epinephrine and norepinephrine in neuronal and adrenal cells.
10. Describe the relationships among missense mutation, nonsense mutation, frame shift mutation and suppressor mutation.