

簡答下列問題，每題十分。所有考題務必在答案卷上作答。

1. List three general types of cytoplasmic filaments.
2. Explain how enzymes can accelerate a reaction to occur.
3. Which reactions of glycolysis involve ATP hydrolysis?
4. Describe the regulation of glycogen phosphorylase.
5. Describe the role of lipoproteins in lipid transport.
6. Describe the technique used to generate gene knockout mice.
7. Describe the chemiosmotic mechanism of ATP formation.
8. Describe the technique for the production of DNA microarrays and their use in monitoring gene transcription.
9. Describe three different ways in which gene expression might be controlled at the translational level.
10. Explain the following terms: (a) repressor; (b) enhancer.