

編號: G 435 系所: 生物化學暨分子生物學研究所乙組 科目: 細胞生物學概論

本試題是否可以使用計算機: 可使用, 不可使用 (請命題老師勾選)

簡答下列問題, 每題十分。所有考題務必在答案卷上作答。

1. What is the transition temperature of a membrane? List the factors that may affect the transition temperature.
2. Describe the structure and function of mitochondria.
3. What are the roles of proteoglycans and collagen in the extracellular space?
4. What are the similarities and differences between integrins and cadherins?
5. How does the structure of a gap junction contribute to its function?
6. What are the major differences in functions between rough endoplasmic reticulum and smooth endoplasmic reticulum?
7. Describe the technique used to generate transgenic mice.
8. Give two examples of hormone-induced responses mediated by cAMP.
9. Describe the structure and function of G-protein-coupled receptors.
10. Describe the mitochondria-mediated pathway of apoptosis.