

九十一學年度 生命科學院四所 碩士班研究生招生考試

科目 生物學 科號 0802 共 1 頁第 1 頁 *請在試卷【答案卷】內作答

一、 問答題 (80%)，共八題、每題十分

1. Trace the steps by which a virus infects a cell.
2. List five trends in invertebrate evolution.
3. What does homeostasis mean? Give three examples of homeostatic mechanisms.
4. State five conditions that limit the Hardy-Weinberg principle.
5. Name five types of learning.
6. How can geneticists use RFLPs to predict whether a person has a certain defective gene?
7. Explain why the genetic code is identical in humans, bacteria, and other organisms.
8. Explain the one gene-one polypeptide hypothesis.

二、 解釋名詞 (20%) (每題兩分)

1. bacteriophage
2. chromatin
3. stem cell
4. synapse
5. T cell
6. vertebra
7. X-linked
8. zygote
9. interphase
10. Kin selection