

八十八學年度 生命科學系 生物技術所 系(所) 甲 組碩士班研究生招生考試

科目 生物學 0702 科號 1002 共 1 頁第 1 頁 *請在試卷【答案卷】內作答
壹、問答題 (80%)，共八題、每題十分

1. What is the human genome project? How do researchers locate genes for specific diseases?
2. What is recombinant DNA and how is it useful?
3. How do cells extract energy from glucose?
4. How do bacteria acquire resistance to antibiotics?
5. What determines whether a population grows?
6. What advantages do C₄ plants have over C₃ plants? Why don't C₄ plants take over everywhere? What limits them?
7. Describe the different types of T cells, and describe the function of each type.
8. What is biodiversity (biological diversity)? Describe the values of biodiversity.

貳、解釋名詞 (20%)，共十題、每題二分

1. protease
2. phenotype
3. pituitary gland
4. niche
5. locus
6. crossing over
7. carcinogen
8. adenosine triphosphate
9. sexual dimorphism
10. taxonomy