題號: 464 國立臺灣大學 103 學年度碩士班招生考試試題

科目:普通植物學

節次: 2

問答題:

- 1. Give some examples of polygenic inheritance and pleiotropy. How could you distinguish between these conditions? (10 points)
- 2. What are the four main groups of Archaea? What features do they have in common? How do they differ? (12 points)
- 3. What are trichomes? List some of their functions, and discuss the control of trichome development as deduced from studies of *Arabidopsis*. (16 points)
- 4. What are the two most common causes of seed dormancy? Discuss some of the ways in which seeds can overcome dormancy. (8 points)
- 5. Discuss some of the features that distinguish mesophytes, xerophytes, and hydrophytes. (10 points)
- 6. Why is it important to maintain the genetic diversity of crop plants? Give examples to support your answer. (14 points)
- 7. Discuss the coevolution of angiosperms and animals in terms of pollination, fruit dispersal, and secondary plant products. (20 points)
- 8. What is "Golden rice," and why is it important? (10 points)

試題隨卷繳回