

國立中山大學100學年度碩士班招生考試試題

科目：生態學【生科系碩士班丙組】

I. 解釋名詞，共 20 分 (20%)

1. La Niña (5 分)
2. Phenotypic plasticity (5 分)
3. Green house gases (5 分)
4. Water use efficiency (5 分)

II. 問答題，共 80 分 (80%)

5. Discuss at least four major factors in deep that will affect biodiversity. (20分)
6. Discuss four important characteristics of species that affect their potential rates of colonization and extinction. (20 分)
7. Explain why an invasive species represent a threat to native species. Discuss and give three examples of invasive species in Taiwan threatening the ecology of native species. (20分)
8. Discuss and give examples of bottom-up and top-down control in food chains. Design a series experiments to test these hypotheses. (20分)