

系所組別 生物多樣性研究所

考試科目 保育生物學

考試日期：0307，節次：2

※ 考生請注意：本試題 可 不可 使用計算機

1. Define the following terms and explain its significance in conservation biology: (30%; 5% for each)

- (a). Genetic drift
- (b). Allee effect
- (c). Corridor
- (d). Umbrella species
- (e).  $\beta$  richness
- (f). Metapopulations

2. Ecotourism is a common approach promoted for sustainable development and biodiversity conservation. Whether entitled with **eco-** or not, tourism activities can and will produce potential and actual negative impacts. Please discuss these negative impacts in (a) **socio-economic**, (b) **cultural**, and (c) **environmental** perspectives. (18%)

3. Facing the potential or actual threats of **global warming** and **environmental changes**, "**extinction**" is only one of the consequences that may occur to species. What else changes may also happen to species and then, either in a short or a long period of time, affect biodiversity? Please discuss at least four possible changes in biological perspectives. (24%)

4. What are the four most significant factors causing species extinction and the loss of biodiversity? Provide an example for each of the four factors, as much detailed as you can, from Taiwan. (28%)