

- 一、試繪出果樹整枝之各種形式，並說明其與果實著生部位之關係。(20分)
- 二、試舉例說明生物技術在果樹研究及栽培上之應用價值。(20分)
- 三、試述隔年結果發生之原因及其預防之方法。(20分)
- 四、試述果樹矮化之方法及矮化栽培之利弊。(20分)
- 五、試舉例說明植物生長調節物質在台灣果樹栽培上之利用情形。(20分)

- 一、試述生產高級品質之熱帶切花之理想的作物栽培環境條件及栽培管理關鍵技術。並以火鶴花為例說明之。(25%)
- 二、試述影響文心蘭開花之調控方法，並說明文心蘭切花產期調節在台灣發展的可行性與瓶頸。(25%)
- 三、試述台灣十二大經濟切花作物(不包括蘭科作物)之種類、英名以及主要產地。(25%)
- 四、試述菊花分類方法的種類，及其分類方法之依據。在台灣菊花栽培適宜用何種分類法？選擇何種品系，作為經濟栽培的主要品種？又其理由為何？(25%)

- 一、 在景觀的領域中，landscape configuration (構圖) 與 landscape preference 關係之研究為一項被關注的議題，請你針對此一議題提出具可行性的 research proposal。(25分)
- 二、 試比較 qualitative research 和 quantitative research 之優劣，並請以離島地區 landscape image 為例，分別利用 qualitative research 和 quantitative research 的方法尋找出 landscape image 可能的組成。(30分)
- 三、 何謂 scenic road? 如何評估一條 road 是否可被列為 scenic road? 你的方法及依據之指標又為何?(25分)

四、 請翻譯下列文章並根據其內容提出可能的研究名稱及關鍵字。(20分)
Ecological environment of rural areas in Taiwan had been seriously threatened by the increasing urban sprawl. However, the related regulations and policies as guidelines for protecting ecological environment of rural areas in Taiwan had not been completely proposed. Therefore, it is urgent to propose strategies for maintaining rural areas' natural environment and ecology to avoid the continuous environmental degradation.

The study is based upon the theory of landscape ecology. By using structure, function, and change as major principles, current issues of landscape ecology in rural areas of Taiwan were discussed. To propose the appropriate strategies for protecting, maintaining, and rebuilding rural areas' landscape and ecology, data collection and integration of literature review, related regulations, and policies were used in this study. After reviewing and analyzing the related information, the study proposed strategies for different space scales, including development strategies (avoiding and compensating) for bigger space scale (e.g., proposing the best route by using the map of landscape unit analysis) and development strategies (shrinking and augmenting) for smaller space scale (e.g., introducing ecological engineering method into the constructions of riverbank, roadside, pond, etc.).

Rural landscape planning should select natural preservation areas as core areas, rural areas as buffer zones, corridors, and development areas. This study had integrated the planning concept of landscape ecology and useful strategies for illustrated areas. The comprehensive ecological networks were also proposed. The study suggested that related agencies make efforts on establishing fallows, wetlands, and subsidizing corridor development to become ecological habitats. Also, the utmost task is to build up data base of local ecological resources for facilitating the further tracing and residents' training to help environmental monitoring and achieve sustainable development purpose for rural areas.

- 一、台灣部分水果，如甜柿、新雪梨，經低溫貯藏後在回溫中，果皮會發生黑變或褐化現象，影響商品外觀，試述有何處理技術可改善此現象(25分)。
- 二、金煌芒果及凱特芒果在採收後熟後，於近果核處果肉常有果肉劣變(internal breakdown)的現象，經分析果實無機元素含量的分布，近果核處果肉的鈣濃度比其他部位低，因此，缺鈣會造成芒果果肉劣變。試問以上論述是否週延？若否，試擬試驗設計以確定「缺鈣」和「果肉劣變」之關係(25分)。
- 三、園產品在貯運過程中，處理不當時會造成寒害，試論述寒害徵狀並說明原因機制(25分)。
- 四、文心蘭是台灣的重要外銷切花，試論述影響文心蘭切花外銷到貨品質之重要因子，並說明合理之處理作業流程及學理根據(25分)。

- 一、試述蓮霧產期調節技術的方法及其原理。(二十五分)

- 二、試述蔬菜嫁接栽培的目的、原理及其應用實例。(二十五分)

- 三、試述切花採後的生理變化？目前利用基因轉移技術來延長切花保鮮時間和瓶插壽命，所使用的策略為何？(二十五分)

- 四、試述植物應用在建築物立面綠美化的功能、方式及其在植物選擇上所應考慮的要點。(二十五分)

- 一、試述近年來臺灣番茄品種育成上之主要育種目標？並說明臺灣目前番茄栽培生產上之問題及其解決方法？。(四十分)

- 二、試從遺傳上及生理上解釋「雜種優勢」之概念？並舉例說明利用雄不稔性生產蔬菜一代雜交品種種子之方法？(四十分)

- 三、試說明申請植物品種權時，「品種」之定義？並就你的觀點，說明如何有效保護育種家之權利。(二十分)