

一、選擇題（每題 1 分，共 5 分）：

1. () According to flowering, which series was the correct order. --- a: flower initiation; b: flower development; c: flower evocation; d: flower differentiation; e: flower induction; f: anthesis--- (A) ecadbf (B) ceadbf (C) caedbf (D) acedbf (E) ceabdf.
2. () What kind of shoots should be cut out in pruning? a: spurs; b: water sprout; c: root sucker; d: trunk; e: weak narrow angle branch; f: crown sucker (A) bcef (B) abcdef (C) abde (D) bcdef (E) bce.
3. () Which plant hormone is the major substance that makes fruit drop? (A) cytokinin (B) auxin (C) gibberellins (D) ethylene (E) BA.
4. () What kinds of fruits have the single S-shape growth curve? (A) apple, pear, peach (B) litchi, mango, sweet orange (C) guava, lemon, kumquat (D) persimmon, sweet sop, kiwifruit (E) cherry, walnut, pistachio.
5. () Which irrigation manner did **not** be suitable for the hillside orchard in Taiwan? (A) sprinkler (B) furrow (C) trickle (D) regulated deficit irrigation (E) flooding.

二、解釋下列名詞（每小題 2 分，共 6 分）：

1. stratification
2. parthenocarpy
3. graft compatibility

三、試說明並比較果樹 Juvenile phase 及 Adult phase 之差異（4 分）。

四、試述造成下列問題發生的主要原因與解決方法。

1. 冬季梅花斫蘿蔔常在採收期發生空心。(4 分)
2. 有些萵苣品種在夏天播種卻不容易發芽。(4 分)
3. 在日本北海道的優良洋蔥品種在台灣種植卻無法結球。(3 分)
4. 花椰菜早期結蕾，即形成鈕扣花蕾。(3 分)

五、試說明 LED 在園藝作物種苗生產上的應用範圍有哪些（7 分）。

六、試舉列說明從國外進口種苗的原因為何（7 分）？

七、以京都議定書為目標，在景觀範疇我們該做甚麼？能做甚麼？（7 分）

- 八、以都市近郊釋出農地開放興建集村、農地重劃政策與都市環境劣化，說明台灣城鄉規劃的困境、問題及因應解決之道。(7分)
- 九、何謂氣調貯藏(controlled atmosphere storage) (4分)? 何謂氣變包裝(modified atmosphere package) (4分)? 並請說明它們的相同和相異之處 (7分)?
- 十、請列舉影響蔬果脫水乾燥速率之因子並說明如何影響(14分)。
- 十一、解釋名詞 (每題 1 分，共 5 分，須詳細說明否則不計分)
- (1) Short-day planting system :
 - (2) paclobutrazol :
 - (3) clonal cultivar :
 - (4) Arching culture :
 - (5) growth retardants :
- 十二、預計栽培面積 150 公頃短日週期為 8 週之大花型菊花切花，預計在 2 月 10 日採收外銷，請寫出菊花在本省切花栽培日程 (應於何時育苗? 定植? 摘心? 長日處理? 停電? 採收?) (4分)
- 十三、請翻譯成中文 (5分)

During recent years, the relationship between day and night temperatures, referred to as reverse temperatures or the difference between day and night, has been utilized to control plant height. The difference between day and night temperatures is **positive** when day temperature is higher than night temperature, **zero** when day and night temperatures are the same, and **negative** at lower day than night temperatures. The length of stems is determined by the number of internodes and the length of each individual internode. The rate and number of nodes and internodes formed on a plant are determined primarily by the average daily temperature. The lengths of the internodes are determined by DIF increases. Growing conditions with a large negative DIF may result in severe chlorosis and slow young seedling growth.