

1. Please describe, from low to high elevations, the vegetation zones in central Taiwan and the dominance and character plant species in each zone (20 pts).
2. What is the factors affecting photosynthesis (光合作用) of trees? Also, how the tree photosynthesis can response to higher temperature due to global changes (15 pts)?
3. What is the input of water to forested ecosystems? Furthermore, how the water circulate (循環) in the forested ecosystems? Please describe the water cycle using your own schematic representations (模式圖)(12 pts).
4. 解釋名詞 (18 pts)
Logistic Population Growth Model
Allelopathy
Co-evolution
Trophic Cascade
Meta-population
Landscape Dynamics
5. 植林是目前降低大氣二氧化碳的有效方式之一。測定植林可能增加的森林碳吸存，常使用的是”外加性 additionality” 碳蓄積量，如何定義所謂的外加性碳量？植林所增加的碳儲存量可存在那些碳庫(pools)中(15 pts)?
6. 試述植群演替過程中與野生動物之關連互動，以及野生動物在此過程中所可能扮演的腳色(10 pts)。
7. 試述不同林業經營的方法對野生動物多樣性所可能產生之正負面影響(10 pts)。

試題隨卷繳回