

[第一題] 解釋名詞 (20%)

density dependent mortality
beta(β) diversity
epiphyte
ecological guild
detritus food chain
productivity pyramid
patch-corridor-matrix model
landscape heterogeneity
the shifting mosaic steady-state concept
spatial autocorrelation

[第二題] 臺灣雖為位居東亞一隅的蕞爾小島，卻擁有相當高的維管束植物物種多樣性及植群多樣性。請由低至高海拔敘述臺灣中部主要植群類型、其海拔分布、特徵物種及優勢物種，並申論歸納是哪些因素讓臺灣擁有如此豐富的植物多樣性 (20%) ?

[第三題] 列舉並簡要說明影響演替變化速率的因子。(20%)

[第四題] Please answer following questions: (20%)

- 1.1. What is the Net Primary Production (NPP)?
- 1.2. Please explain green house gases and how the green house gases impact on thermal environment (溫度環境)?
- 1.3. Please discuss how the increases in temperature can affect on NPP in forested ecosystem.

[第五題] 說明下列養分循環過程的意義與可能造成的影響(20%)

- (a) Nitrogen deposition
- (b) Denitrification
- (c) Nitrification
- (d) Mineralization
- (e) Nitrogen fixation

試題隨卷繳回