題號: 231 國立臺灣大學 111 學年度碩士班招生考試試題

科目:環境科學概論(B)

節次: 8

題號: 231

共 / 頁之第 / 頁

一、(1)請定義何謂"碳匯"(Carbon Sink)",並任舉出三種自然界碳匯
(Natural Carbon Sink)與其固碳的基本原理與方式(15%);

(2)請定義何謂"淨零(Net Zero)碳排"(5%);

(3)另任舉出三種可行之人工固碳方法(可包含捕捉、利用或封存技術,並評論你所提出方法的優缺點(15%)。

- 二、請任舉出"聯合國永續發展目標(Sustainable Development Goals; SDGs) "17項中 4項,並解釋其意涵與達成指標(20%)。
- 三、請分別說明汽油車與柴油車所產生的主要空氣污染物種類(5%),以及針對此二類車種可採取的污染防治技術(10%)。
- 四、請定義(1)基因多樣性 genetic diversity, (2)物種多樣性 species diversity, (3)生態多樣性 ecological diversity, and (4)功能多樣性 functional diversity for biodiversity (15%)。
- 五、2021年5月,歐洲聯盟委員會 (European Commission) 提出了"Zero Pollution Action Plan",以下為此計畫之訴求與主要目標:
  The zero pollution vision for 2050 is for air, water and soil pollution to be reduced to levels no longer considered harmful to health and natural ecosystems, that respect the boundaries with which our planet can cope, thereby creating a toxic-free environment. This is translated into key 2030 targets to speed up reducing pollution at source. These targets include:
  - improving air quality to reduce the number of premature deaths caused by air pollution by 55%;
  - improving water quality by reducing waste, plastic litter at sea (by 50%) and microplastics released into the environment (by 30%);
  - improving soil quality by reducing nutrient losses and chemical pesticides' use by 50%;
  - reducing by 25% the EU ecosystems where air pollution threatens biodiversity;
  - reducing the share of people chronically disturbed by transport noise by 30%,
  - significantly reducing waste generation and by 50% residual municipal waste.

請針對以上所提的六項目標,任選一項,並闡述你欲規劃採行的方法與策略(15%)

## 試題隨卷繳回