

科目：環境工程 適用：土木所環工組

編號：462

考生注意：

1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

本試題

共 / 頁

第 / 頁

- 一、空氣污染處理設備有哪些？請說明其用途與原理。(15%)
- 二、請說明將廚餘回收再利用製成有機肥之做法與步驟及其相關理論，以及應注意事項與原因？(15%)
- 三、何謂 *sanitary landfill*？標準做法應該注意哪些事項？為甚麼？(15%)
- 四、請說明溫暖化、臭氧層破洞環境問題之成因、影響及預防策略。(15%)
- 五、請先完整翻譯下列文章，接著請對其內容提出您的專業看法。(40%)

Emerging pathogens in drinking water have become increasingly important during the decade. These include newly-recognized pathogens from fecal sources such as *Cryptosporidium parvum*, *Campylobacter* spp., and rotavirus, as well as pathogens that are able to grow in water distribution systems, like *Legionella* spp., mycobacteria, and aeromonads. To perform a risk analysis for the pathogens in drinking water, it is necessary to understand the ecology of these organisms. The ecology of the drinking-water distribution system has to be evaluated in detail, especially the diversity and physiological properties of water bacteria. The interactions between water bacteria and (potential) pathogens in such diverse habitats as free water and biofilms are essential for the survival or growth of hygienically relevant organisms in drinking water. Results of epidemiological studies together with ecological data are the basis for effective resource protection, water treatment, and risk assessment.