

國立中山大學八十八學年度碩博士班招生考試試題
科目：環境工程與科學 (環工所)

共壹頁 第 / 頁

1. 揮發性有機物(VOCs)對環境之影響為何? 試舉二項(8%); 排氣中 VOCs 之處理或回收方法為何? 試舉五項(15%)

2. 若干工業廢水含生物難分解之有機物, 一般二級處理無法將其去除, 以技術及經濟為考量基點, 為去除此等有機物, 請您建議三種可行處理方法並略作說明。(12%)

3. Briefly define the following terms related to hazardous waste site investigation and remediation: (20 points)

- (1) soil vapor extraction
- (2) natural attenuation
- (3) non-aqueous phase liquid
- (4) soil/water partition coefficient
- (4) bioremediation
- (5) Darcy's law
- (6) porosity
- (7) hydraulic conductivity
- (8) pump-and-treat technology
- (9) Superfund
- (10) hazardous waste

4. The following two questions are related to wastewater treatment.

- (1) What are the primary and secondary wastewater treatment processes? (10 points)
- (2) What are the technologies for nitrogen removal? (5 points)

5. 廢棄物焚化處理為一中間處理抑或是最終處置法, 請說明之(7%)。又一般廢棄物在焚化處理後, 可能仍會遭遇到的後續處理問題為何? 請簡述之(8%)。

6. 試簡述高氣壓和低氣壓的特性, 並以流線及上昇或下降箭頭來說明之(10%); 又何種較有利於空氣污染物之擴散(5%)。