

系別：水資源及環境工程學系

科目：環境科學

准帶項目請打「V」

簡單型計算機

本試題共 / 頁

1. 申論題 (本題 20 分)

The news from the National Geographic regarding to the activity of "Running the Sahara" — "the international expedition team of three men — Charlie Engle (USA), Ray Zahab (Canada), and Kevin Lin (林義傑)(Taiwan) — undertook a quest that no human being has ever fulfilled ...", depicted the humanity concern of the water deficiency in Africa. As of the problems of water resources deficiency in Taiwan, what are the key issues that result to these problems in the environmental point of view? What are the differences between Taiwan and Africa regarding to this issue?

2. 請簡單陳述下列各詞術語之含意 (每小題 10 分)

- A. PM_{10} (describe in air pollution of particulate matter...)
- B. biodiesel
- C. AOP (Advanced Oxidation Process)
- D. The Sulfur Cycle in the Nature

3. 在環境生態及規劃管理相關領域中常以統計方法作為分析的依據，以求客觀的申論。請解釋說明標準偏差 (standard deviation) 的定義及意涵？(本題 10 分)

4. 以下為永續發展 (sustainable development) 的定義(Brundtland Commission, 1987)，請翻譯成中文並評議此定義的優劣。(本題 10 分)

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and the future needs.

5. 請簡述「焚化處理法」的定義及意涵？(本題 10 分)

6. 請簡述淨水處理的流程及原理？(可舉例說明)(本題 10 分)