

- 一. 何謂知識管理 (Knowledge Management)? (20%)
- 二. 如何平衡理性與感性的思考? (10%)
- 三. 請闡述 Dynamic System. (20%)

(背面仍有題目,請繼續作答)

- ④. 詳細閱讀(表格一)中所描述的設計問題之後,提出一完整的設計程序規劃。其中的內容至少包括:設計問題的界定及針對所提出的問題擬定的設計策略。對設計過程的整體及其中的任一步驟,務必詳細討論及比較可採行的「方法」、「理論」、「觀念」或「技術」,且描述其預期的成果。注意:這不是設計實務的考題,務必將重點放在「設計程序」的規劃上(50%)

表格一

Garden Wheelbarrow

Requirement

To design a wheelbarrow for use in a domestic garden, to carry normal loads over typical garden surfaces without excessive effort by the user or risk of damage to vulnerable surfaces such as lawns. The design should also be robust enough to withstand occasional overloads and mishandling. The barrow should be capable of being stored in the open with minimal weather protection. It should be designed for large-batch production and be competitively priced.



Specification

The wheelbarrow should be able to carry normal loads of soil or stones up to a mass of 60 kg, with an occasional overload with a mass of 75 kg. The barrow should be designed to last at least ten years carrying 500 loads per year, 5% of which are overloads. The design should be stiff enough to avoid excessive bouncing under overload conditions, or sloshing of any semi-liquid loads such as wet concrete. The load container should be so shaped as to minimize spillage of heaped loads when moving up or down a 10% slope. The barrow should be capable of being pushed up a 30mm step without excessive effort and of standing on a 15% slope in any orientation with a full overload without toppling.