

國立臺北科技大學 103 學年度碩士班招生考試

系所組別：5200 工業設計系創新設計碩士班

第二節 設計理論 試題

第一頁 共一頁

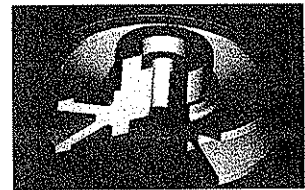
注意事項：

1. 本試題共 5 題，配分共 100 分。
2. 請標明大題、子題編號作答，不必抄題。
3. 全部答案均須在答案卷之答案欄內作答，否則不予計分。

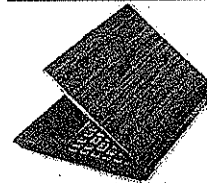
一、設計議題英翻中 (40%; 10% each)

Please translate the following paragraphs to Chinese. (Note: Quality of the pictures below has no impact on your answering.)

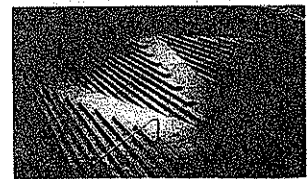
1. In 3D modeling, *Revolve* is a method to create a shape by revolving a section view by a specified angle around a central axis.



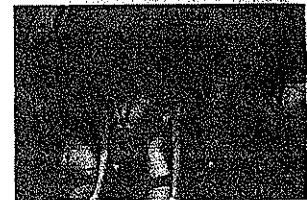
2. *Asus'* 12.1-inch bamboo notebook ranks high in energy conservation and saves 27 lb. of carbon emissions annually.



3. Is it transparent enough that without the wheel chair in sight you don't think about the fact that it is wheel chair accessible?



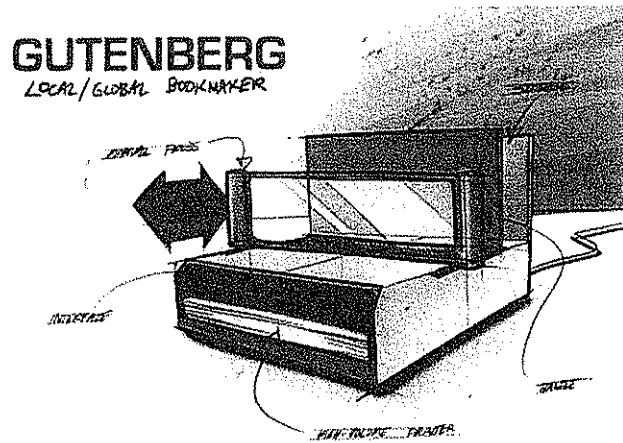
4. *Manager of User Experience* will drive Abercrombie & Fitch's global digital experience strategy and utilizes advanced interface concepts.



二、設計案例評述 (15%)

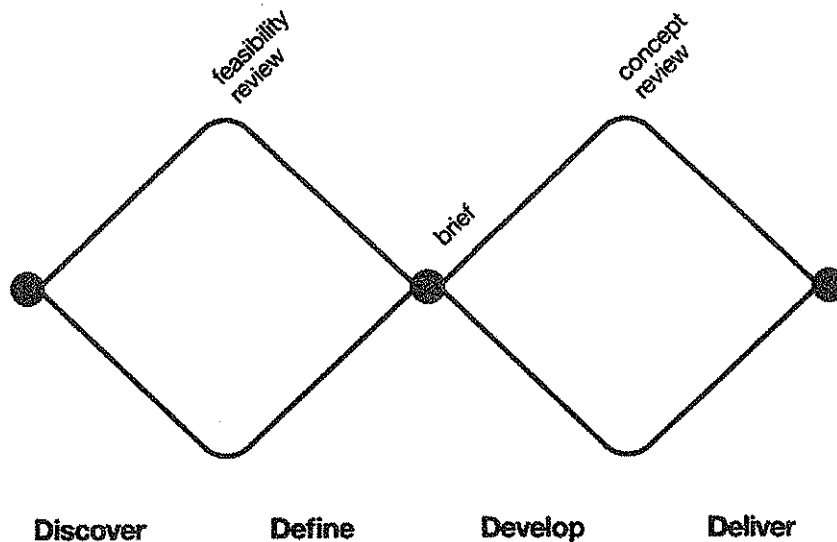
以下的案例是 2009 年獲 Core77.com One Hour Design Challenge: The Future of Digital Reading 的 Notable 榮譽之作品。請根據這些圖文資料（圖片品質和其中的文字皆不影響作答），自行選擇某一個觀點，用 300~500 字評述此案例。

Notable: Gutenberg
Design: Cameron Nielsen
 Cameron's Gutenberg Local/Global Bookmaker considered a novel solution (pun intended): at-home book-making. Companies like Blurb have sprung up to address this as a service, but could print-on-demand happen in the home? We have the technology to print *paper*, but we don't have the ability to make actual *books*. Provocative, with a sweet rendering, this entry made us think about revisiting a low-tech artifact rather than running immediately to an e-reader device.



三、設計思考與方法 (15%)

下圖是一個設計流程管控的雙鑽石設計過程模型。假設「臺北科大」要開發一款校園自行車停放架，請依據此模型列舉此案每一階段中可能的工作重點。



四、造形與幾何 (15%)

正多面體 (regular polyhedron) 是同時滿足 (1)由正多邊形構成、(2)各個頂角相等與(3)各條棱邊都相等三個條件的凸多面體。這種結構經常出現在大自然、科學模型及日常生活的人造物當中。請問正多面體總共有哪幾種 (須畫出透視圖和寫出名稱) ?

五、創意與組合 (15%)

有位慣用「SCAMPER」及「混搭」手法的設計師承接一項床頭燈設計案。他在概念發展階段將床頭燈型態簡化成由燈罩和燈柱組成，並使用 2 個燈罩和 4 根燈柱分別混搭 (即燈罩組、燈柱組分別都不必然由全部相同的組件構成)。他手邊有 5 張不同造型的燈罩照片和 6 張不同造型的燈柱照片，打算每次分別抽取 2 張和 4 張來混合出新奇的床頭燈型態。請問用這種方法最多可以組合出多少種不同的床頭燈型態？ (不須繪製床頭燈型態)