編號: 226

## 國立成功大學 107 學年度碩士班招生考試試題

系 所:工業設計學系

考試科目:人體工學

考試日期:0205,節次:2

第1頁,共1頁

※ 考生請注意:本試題不可使用計算機。 請於答案卷(卡)作答,於本試題紙上作答者,不予計分。

## Short-answer/Long-answer questions (Total 100%)

- 1. Describe the Human Factors (HFs) considerations when designing medical products. (10%)
- 2. From the HFs perspective, what must be taken into account when designing or using symbols and icons for blind people? (10%)
- 3. What are the disadvantages of using sound for feedback? (10%)
- 4. What is Fitts' Law and where does it apply? Give the equation and explain all terms. (10%)
- 5. What are two common forms of errors? Describe where each one results from. Describe their differences. (15%)
- 6. Explain the mechanism of olfactory sense. List one advantage and one disadvantage of olfactory displays. (15%)
- 7. In what situations will a digital display be preferred when compared with an analog display? (10%)
- 8. Consider the design of a usable automated teller bank machine (ATM). For this design, use your HFs knowledge to:
  - Identify three important user characteristics. (6%)
  - Plan a task analysis for a user to determine the account balance. (6%)
  - Identify two cultural constraint which will affect the design. (4%)
  - Develop and define two usability goals for testing. (4%)