

國立虎尾科技大學機械與機電工程研究所博士班資格考試試題

科目名稱：工程材料

2008/05

班級：_____ 學號：_____ 姓名：_____ 成績：

1. Define anisotropy. (10%)
2. What is strain hardening, and what effects does it have on metals? (10%)
3. What is a slip system, and what is its significance? (10%)
4. Distinguish between engineering stress and true stress. (10%)
5. Describe the differences between brittle and ductile fracture. (10%)
6. What factors lead to the corrosion of a metal? (10%)
7. Describe the features of a phase diagram. (10%)
8. What is the purpose of annealing? (10%)
9. How do stainless steels become stainless? (10%)
10. what are superalloys? Why are they so named? (10%)