

淡江大學 97 學年度碩士班招生考試試題

64

系別：機械與機電工程學系

科目：機 械 製 造

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1. Please list the advantages and limitations of “die casting”. [10 points]
2. Please explain the process of “injection molding”. [10 points]
3. What is “microforming”? What is its significance in the modern manufacturing? [10 points]
4. Please describe “(silicon) bulk micromachining” and “(silicon) surface micromachining”. [10 points]
5. What is CMP (chemical mechanical planarization / polishing)? What is its function and importance in the standard IC (integrated circuit) process? [10 points]
6. Please describe the difference between PVD (physical vapor deposition) and CVD (chemical vapor deposition). [10 points]
7. Please explain the working principles of EDM (electrical discharge machining) and electrochemical machining schematically. [10 points]
8. Please explain the working principle of RP (rapid prototyping). [10 points]
9. Please explain “sand blasting” process. [10 points]
10. Please explain “diffusion bonding” process. [10 points]