

國立成功大學

114學年度碩士班招生考試試題

編 號： 69

系 所： 資源工程學系

科 目： 資源循環工程

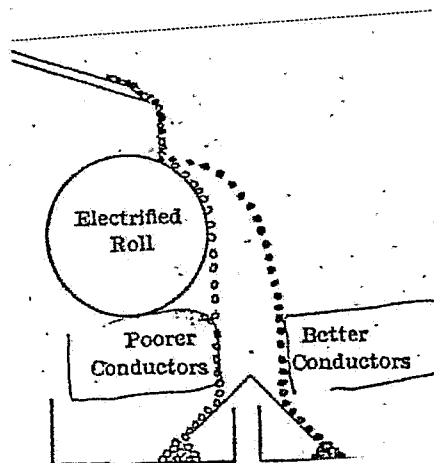
日 期： 0211

節 次： 第 3 節

注 意： 1. 可使用計算機
2. 請於答案卷(卡)作答，於
試題上作答，不予計分。

資源循環工程

1. The definition of terms : (a) Locking Factor (b) Elutriation (c) Ratio of concentration (d) Heavy-fluid separation (e) Paramagnetic. (20 points)
2. (a) The discharge gap of roll crusher is 2.5 cm and the diameters of the rolls and of the particle are 3 m and 50 cm, please calculate the angle of nip. (b) Draw the definition about the angle of nip and prove it. (10 points)
3. Please compare advantage and disadvantage with ball mills and rod mills. (10 points)
4. Please describe (a) path of a typical ball in a ball mill ,(b) zones in a ball mill. (10 points)
5. Describe three main controlling factor of shaking table in detail. (10 points)
6. In typical flotation circuits, please try to draw (a) single-pass flotation, (b) single-pass flotation with splitting of a middling. (10 points)
7. Please describe the figure about electrostatic separator. (10 points)



8. Describe the mechanism of collection. (a) collection of Pyrite by Xanthates, (b) collection of Galena by Xanthates, (c) collection of Chalcocite by Amyl Xanthate. (10 points)
9. What is the mechanism of eddy current separation? What kind of function of material is related to the magnitude of current? Please give three examples of material. (10 points)