

國立成功大學

112學年度碩士班招生考試試題

編 號：315

系 所：口腔醫學研究所

科 目：材料科學

日 期：0207

節 次：第 3 節

備 註：不可使用計算機

※ 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。

1. Explain: (a) transgranular fracture, (b) whiteware, (c) true strain, (d) thermal shock, (e) superheating, (f) standard half-cell, (g) spheroidizing, (h) Schottky defect, (i) sacrificial anode, (j) plasticizer, (k) pitting, (l) pearlite, (m) molarity, (n) metallic bond, (o) glass ceramic, (p) doping, (q) brazing, (r) bainite. (90%)
2. Zirconia toughened alumina (ZTA) bioceramics are promising load-bearing materials for biomedical applications. ZTA is only composed of zirconia and alumina. If you desing the low temperature sintering ZTA. Which composition you will choose? Please also explain the reasons. (10%)

