

國立成功大學

113學年度碩士班招生考試試題

編 號：253

系 所：生理學研究所

科 目：生命科學

日 期：0202

節 次：第 1 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. (a) What is “metabolic syndrome”? (b) Please take two examples, and (c) explain the effects of these metabolic syndromes on the related cells (“cellular level”). (25%)
2. (a) What are “genetic diseases”? (b) Please take two examples, and (c) provide potential therapy to cure each disease. (25%)
3. (a) What is “microbiota”? (b) Please take two examples to describe “effects of microbiota on different physiological systems”. (25%)
4. (a) 500-mL water contains 0.2 mol of sugar. What is the molar concentration of sugar in the beverage? (b) We assume the molecular weight of sugar is 200. How many grams of sugar are in this beverage? (c) If you want to adjust this beverage to 1M (molar concentration) of sugar, what will you do? (25%)