國立嘉義大學九十七學年度
食品科學系碩士班招生考試試題

科目：專業英文

I. Translate the following terms into Chinese (20%)

1. dextrin	2. melanoidin	3. retrogradation	4. nitrosodimethylamine
5. hysteresis	6. tetrodotoxin	7. gastreotitis	8. hyaluronic acid
9. irradiation	10. mutagenicity	11. active compound	12. consistency coefficient
13. metabolomics	14. avian influenza	15. aseptic bulk storage	16. analysis of variance
17. acute toxicity	18. food allergen	19. heterofermentation	20. cardiovascular disease

II. Translate the following terms into English (20%)

1. 寡醣	2. 食物中毒	3. 焦糖化作用	4. 人造奶油
5. 牛頓流体	6. 膠原蛋白	7. 死後僵直	8. 肉毒毒素
9. 類胡蘿蔔素	10. 發酵	11. 反式脂肪酸	12. 飲食補充劑
13. 代謝症候群	14. 褐變反應	15. 噴霧乾燥	16. 益生菌
17. 聚合反應	18. 食品添加物	19. 固定化酵素	20. 基因改造食品

III. Translate the following sentences into Chinese (60 %)

1. The total potential energy of a food as determined by calorimetry may not be quite equal to the energy that can be derived from it by an animal or human. If a food or food constituent is not totally digestible, or if the food is not completely oxidized within the body, then its caloric value in metabolism will be less than its theoretical total energy content.

2. Even dead cells retain varying degrees of elasticity and will stretch or shrink under stress. If the stress is excessive, then their elastic limit is exceeded and they will not return to their original shape on removal of the stress. One of the most obvious changed during dehydration of cellular, as well as noncellular food is shrinkage.

3. The interest in nutraceuticals and functional foods continues to grow, powered by progressive research efforts to identify properties and potential applications of nutraceutical substances, and couple with public interest and consumer demand. Nuraceutical is defined as any substance that may be considered a food or part of a food and provide medical or health befits, including the prevention and treatment of disease.

4. Osteoporosis is a major public health threat for an estimated 55% of people ages 50 and older. Prevention of osteoporosis later in life starts during childhood and adolescence when bone development occurs. Calcium and vitamin D are key nutrients in developing and maintaining strong bones, and other healthy ingredients, such as phosphorus, magnesium, inulin and soy isoflavones, also play roles in optimizing bone health.