

銘傳大學 98 學年度轉學生招生考試

生物科技學系

7 月 23 日第四節

生物化學試題

(第 1 頁共 1 頁) (限用答案本作答)

可使用計算機  不可使用計算機

問答題 (可用中文或英文回答)

1. Explain these terms: (20%)
  - a. Purine
  - b. Eicosanoids
  - c.  $K_m$
  - d. DNA polymerase
  - e. Chaperones
2. Protein structure is described in four levels of organization. What are the primary, secondary, tertiary and quaternary structures in proteins? (10%)
3. What are the structures and functions of: (10%)
  - a. Starch
  - b. Cellulose
  - c. Glycogen
  - d. Chitin?
4. Explain the chain termination or dideoxy method of DNA sequencing. (10%)
5. How are fatty acid palmitate (16:0) broken down to produce energy? (10%)
6. How are fatty acid palmitate (16:0) synthesized? (10%)
7. Describe the functions and metabolic pathways of these cycles: (20%)
  - a. Urea cycle
  - b. TCA cycle
  - c. Calvin cycle
8. What are the structures and functions of glycoproteins and proteoglycans? (10%)

試題完