

慈濟大學 103 學年度 研究所碩士班招生考試命題紙

科目：生物化學(醫技碩)

共1頁

1. Protein 蛋白質 (40%)

- (a) Please briefly describe what protein is. 請簡述何謂蛋白質?
- (b) There are four levels of protein structures, please “explain” what they are. 蛋白質有四個等級的結構 請”解釋”此四個等級的結構。
- (c) Please describe the functions of proteins. 請描述蛋白質的各種功能。
- (d) Please explain what SDS-PAGE is? 請解釋何謂 SDS-PAGE?

2. Carbohydrate 碳水化合物 (20%)

- (a) What are the main functions of carbohydrate? 請簡述碳水化合物之主要功能為何?
- (b) What is glycolysis and what is gluconeogenesis? 何謂”糖解作用”?與何謂”糖質新生作用”?

3. Lipid 脂質 (10%)

- (a) Please draw a triacylglycerol. 請畫出一”三酸甘油”。

4. Biological Membrane 生物膜 (10%)

- (a) Please draw a schematic graph of a typical biological membrane. 請畫出一典型生物膜之簡圖。

5. Molecular Biology 分子生物學 (20%)

Please explain the following terms: 請解釋下列名詞:

- (a) DNA Replication (DNA 複製)
- (b) Promoter (啟動子)
- (c) Open Reading Frame (ORF) (開放閱讀框)
- (d) Genetic Codon (遺傳密碼子)