

銘傳大學 96 學年度轉學生招生考試

生物科技學系

7 月 26 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

1. Draw structure and give the one-letter and three-letter abbreviations for Arginine, Tyrosine, Tryptophan, Asparagine, Lysine, Glutamic acid? (18%)
2. What is the structure and chemistry of Acetyl-CoA ? (5%)
3. Please describe the differences between peptide bond and glycosidic bond ? (5%)
4. Define cloning of DNA ? (5%)
5. Define the following terms: (20%)
 - (a) isoenzyme
 - (b) ubiquitin
 - (c) plasmid
 - (d) in vivo
 - (e) trypsin
 - (f) chromosome
 - (g) RNA interference (RNAi)
 - (h) nucleoside
 - (i) ribosome
 - (j) exon
6. Draw the following structures: (10%)
 - (a) glucose
 - (b) maltose
 - (c) sucrose
 - (d) lactose
 - (e) fatty acid
7. Differences between DNA and RNA ? (5%)
8. Which of amino acids is the essential amino acid in adult?(8%)
9. What is the "Central Dogma" proposed by Francis and Crick in 1950 ? (4%)
10. What role does the amino acid sequence play in protein structure?(5%)
11. Compare the properties of the α -helix and β -turn in secondary protein structure (10%)
12. What is "Polymerase Chain Reaction (PCR)? (5%)

試題完