

類組：化學類 科目：生物化學(1006)

※請在答案卷內作答

1. If a protein isoelectric point is 7 and its solution pH are 10, is the protein negative charge? 5%
2. How does pH value affect protein solubility? 3% Please also explain the mechanism. 7%
3. Which non-covalent interaction does NaCl break? 5% Which non-covalent interaction does a detergent break? 5%
4. Please draw a typical map for a shuttle vector. 6%
5. What are the similarities and differences among Western Blot, Southern Blot and Northern Blot? 10%
6. What is the binding site of a release factor in translation? 5%
7. Which DNA sequence do we usually use to bind eukaryotic RNA for purification? 5% Why? 2% What kind of buffer do we usually use to elute the eukaryotic RNA after the binding and washes? 5% Why? 2%
8. What is the influence of salt concentration on protein solubility and DNA hybridization? 5% Please also explain the mechanism. 10%
9. Please define protein tertiary structure. 5%
10. Please name two nucleic acids and describe their differences. 20%

參考用

