

※請在答案卷內作答

1. Please draw the titration of lysine with hydroxide and mark the isoelectric point in the figure. $\alpha\text{-COOH } pK_a=2.2$, $\alpha\text{-NH}_3^+ pK_a=9.0$, R group $pK_a=10.5$ (15%)
2. Please list the non-covalent interactions.(15%)
3. Please compare the difference between RNA polymerase and DNA polymerase (10%)
4. What are the differences among nucleosides, nucleotides and nucleic acid? (10%)
5. Please give a definition of a protein tertiary structure.(5%)
6. How was a peptide bond formed?(5%)
7. What is a protein domain?(5%)
8. What is the purpose of blocking step in Western Blot?(5%)
9. What is the name of DNA region that RNA Polymerase binding to in the beginning?(5%)
10. What is open reading frame?(5%)
11. Below is the schematic figure of polyribosomes. Is it a prokaryotic polyribosomes?(5%)Why?(5%)What are the names of a, b, c, d, e?(10%)

