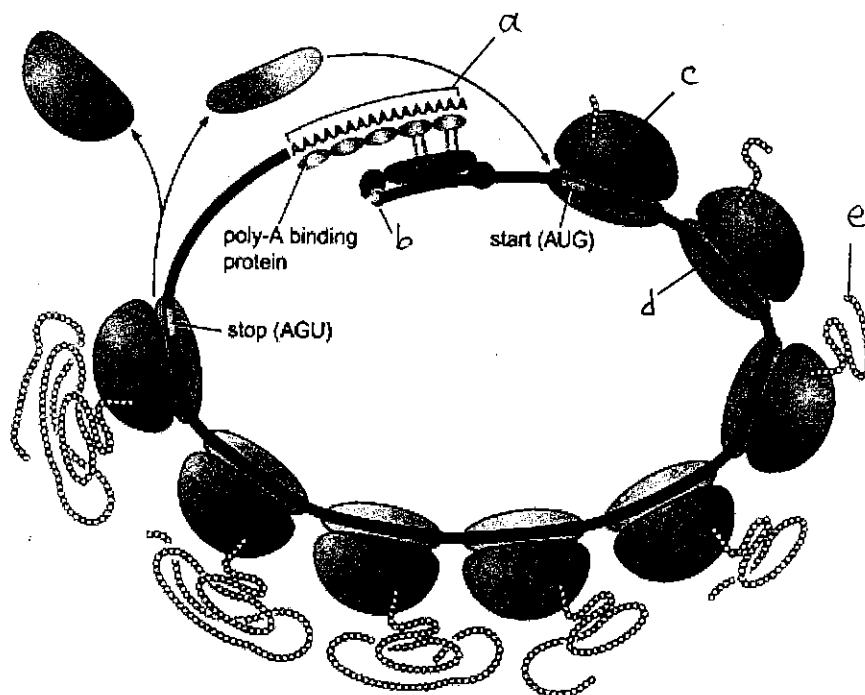


※請在答案卷內作答

1. Please draw the titration of lysine with hydroxide and mark the isoelectric point in the figure. α -COOH $pK_a=2.2$, α -NH₃⁺ $pK_a=9.0$, 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%)



參考用