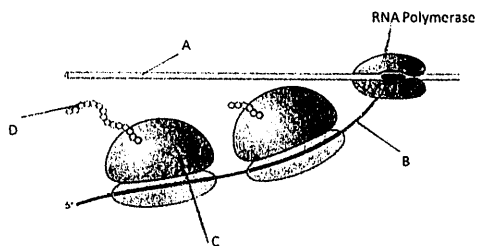


類組：化學類 科目：生物化學(1006)

※請在答案卷內作答

1. If a protein isoelectric point is 8 and its solution PH is 5, is the protein positive charge? 5%
2. Please write down three kinds of post-translational modification. 9%
3. Which non-covalent interaction does NaCl interfere? 5% Which non-covalent interaction does a detergent interfere? 5%
4. It is often to conduct cloning by making two cleavages with two different restriction enzymes. What kind of cloning is this? 5%
5. What are the three mediators of ribosome recycling in translation? 9%
6. What are the similarities and differences among DNA microarray, Northern Blot and colony hybridization? 10%
7. Below is the schematic figure showing a biological process in prokaryotic cells. What is the name of that biological process? 5% What are the names of A, B, C, D? 8%



8. What are the two kinds of ends that restriction enzymes can create? 5%
9. Please draw a eukaryotic polyribosomes. 10%
10. What kind of RNA sequence does a release factor bind in translation? 5%
11. In protein synthesis, how does a polypeptide move in the three tRNA-binding sites in ribosome? 10%
12. What is the role of salt in nucleic acid hybridization? 5% Please explain the mechanism. 4%