

系所組別： 生理學研究所乙組

考試科目： 細胞及分子生物學

考試日期：0224，節次：2

※ 考生請注意：本試題不可使用計算機

1. Please describe the bilayer structure of biomembrane, and how to disrupt this structure when you want to extract cytosolic protein? (20%)
2. Please describe the processing of mRNA before leaving nucleus in eukaryotic cells. After the processing of mRNA, how to determine your interest mRNA is included in this mRNA pool? (20%)
3. Please describe the meiosis progression during the maturation of human oocytes. (20%)
4. Please list two important components of extracellular matrix. How to detect these two components are located in extracellular matrix? (20%)
5. Epigenetic modification is an important mechanism for gene regulation, including in DNA and histone levels. Please describe how DNA and histone modification cause the gene suppression, and how to detect DNA and histone modification you describe above? (20%)