

國立成功大學

114學年度碩士班招生考試試題

編 號：191

系 所：微生物及免疫學研究所

科 目：分子生物學

日 期：0211

節 次：第 3 節

注 意：1.不可使用計算機
2.請於答案卷(卡)作答，於
試題上作答，不予計分。

1. Please describe the molecular mechanism underlying the process from a gene expression to a protein synthesis in eukaryotic cells. (20 points)
2. What is "MicroRNA" and its biological role? (20 points)
3. Please give an example of post-translational modifications to regulate protein function. (20 points)
4. If you have found a protein called X, which is a potential transcriptional factor for regulating the expression of gene Y. Please design experiments to prove your idea. (20 points)
5. Please briefly describe or define the following terms: (1) Cell cycle; (2) Heterochromatin; (3) Autophagy; (4) Telomere. (Total 20 points, 5 points for each)