

# 國立彰化師範大學 102 學年度碩士班招生考試試題

系所：生物學系

組別：乙組

科目：分子生物學

☆☆請在答案紙上作答☆☆

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一、名詞解釋 (每題 5 % ; 共 50%)

1. site-directed mutagenesis
2. genetically modified organism
3. small nuclear RNA (snRNA)
4. peptide mass fingerprinting
5. spliceosome
6. RNA interference (RNAi)
7. proprotein convertase
8. DNA-binding protein
9. G protein-coupled receptor
10. human genome project

二、What is the “Central Dogma” of molecular biology proposed by Crick (1956)? However, it should be modified according to today’s concept. What is it? (20%)

三、List the difference between DNA and RNA. (15%)

四、What are the three major RNA polymerases in eukaryotes? And what are their categories of target genes for each polymerase? (15%)