

系所組別：微生物及免疫學研究所丙、丁組

考試科目：寄生蟲學

考試日期：0307·節次：2

※ 考生請注意：本試題 可 不可 使用計算機

Write in your answer sheet:

1. Name five diseases that you can find the causative pathogens in blood smear. (25 points).
2. A novel gene of a protozoan parasite is lethal to mammalian cells when it is transfected and expressed inside the cells. The polypeptide encoded in the gene contains three distinct domains without known enzymatic function. The protozoan parasite lives extracellularly inside mammalian host and secretes no known toxin. And yet the infected person gradually develops CNS symptoms and finally dies due to cell death in brain.  
Write experiments you design to link any domain of the protein as the causative agent to the mammalian brain cell death. (45 points)
3. Write three ways that an eukaryotic cell dies and the markers you can use to distinguish among the three ways. (30 points)