

系所組別： 臨床醫學研究所

考試科目： 分子與細胞生物學

考試日期： 0308, 節次： 2

※ 考生請注意：本試題 可 不可 使用計算機

- (1) Please give an example of human disease associated with the dysfunctional ion channel. (15%)
- (2) Please briefly describe a human disease resulting from the abnormal regulation of cytoskeleton. (15%)
- (3) Please give an example to discuss the important role of apoptosis in human disease. (15%)
- (4) Please describe the molecular basis of the resting potential and the action potential. (15%)
- (5) Please discuss the mechanisms by which intracellular signals induce changes in cellular functions. (10%)
- (6) Draw a mitochondrion. Label the locations of the major enzymes involved in the degradation of pyruvate. (10%)
- (7) Describe an electrophoretic technique which can be used to investigate the protein composition of biological membranes. (10%)
- (8) What are the main components of extracellular matrices? (10%)