

第一部分：問答題（每題十分共六十分）

1. Please describe 4 general schemes of intracellular signaling.
2. Calcium is a critical ion for cellular functions. What is the normal range of intracellular calcium concentration and how it is maintained?
3. Please describe the On/Off switches for the activation and inactivation of GTP-binding proteins (G-proteins).
4. Please describe and draw steps of how a cell moves.
5. Please draw a cell cycle and indicate each stage and its respective function.
6. Who is the 2010 Nobel Prize Winner in Physiology or Medicine? Please describe his work and its contribution.

第二部分：解釋名詞（每題四分共四十分）

1. adenylyl cyclase
2. apoptosis
3. inositol 1,4,5-trisphosphate
4. filamentous actin
5. mesoderm
6. promoter
7. receptor tyrosin kinase
8. telomere
9. Wnt
10. zygote

試題隨卷繳回