

國立臺北科技大學 113 學年度碩士班招生考試

系所組別：3601

化學工程與生物科技系生化與生醫工程碩士班

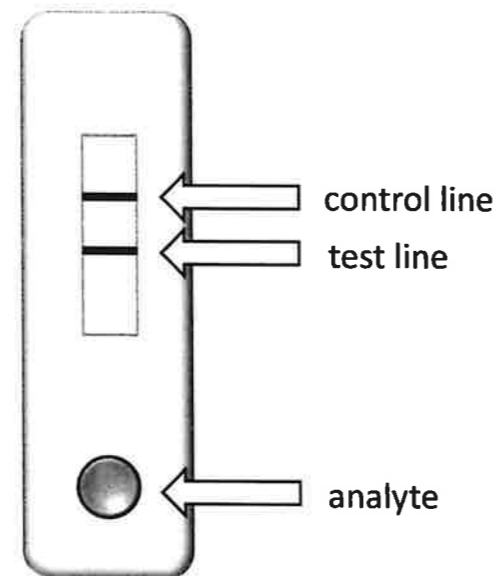
第一節 生物化學 試題 (選考)

第 1 頁 共 1 頁

注意事項：

1. 本試題共七題，總共 100 分。
2. 不必抄題，作答時請將試題題號及答案依照順序寫在答案卷上。
3. 全部答案均須在答案卷之答案欄內作答，否則不予計分。

1. Why is it necessary for us to eat food? (15 points)
2. How do refrigerators extend the shelf life of food? (15 points)
3. What is the connection between a lack of vitamin C and scurvy(壞血病) in humans? (15 points)
4. Why does a human skeleton muscle generate lactate under an anaerobic condition? (15 points)
5. Describe the detailed mechanism of a COVID-19 antigen rapid test kit, as shown in the right image. (Note: There is no need to explain how to use it.) (15 points)



6. How does an enzyme reduce its activation energy to catalyze a biochemical reaction? (15 points)
7. If there is one gram of DNA composed of 5 kb plasmids, how many plasmids are present? (10 points)