

系所組別：醫學工程研究所丙、丁組

考試科目：生物化學

考試日期：0307，節次：2

※ 考生請注意：本試題 可 不可 使用計算機

1. Please show the α and β anomer of glucose. (10%)
2. What are the differences in composition between glycoproteins and proteoglycans? Please also name an example for each category. (10%)
3. Please write the process of glucose phosphorylation and its meaning in a live cell. (10%)
4. How to play the enzyme activity of a dehydrogenase and how to estimate it? (10%)
5. Please describe the difference between gram positive and negative bacteria in detail. (10%)
6. What is the differences between cytochrome and iron-sulfur protein? (10%)
7. Please describe the electron transport chain. (10%)
8. Hemoglobin and myoglobin are oxygen-binding proteins, please describe their roles and the cooperation in our body. (10 %)
9. Please describe the following analytical techniques. (10%)
 - (1) High performance liquid chromatography
 - (2) Affinity chromatography
10. Please give an example to explain what is isoelectric point. (10%)