

所別：企業管理學系碩士班 一般類組(丙組) 科目：生物化學 (含分子生物學)

I. 是非題 (2 points each)

1. Proteins absorb UV light.
2. DNA absorbs UV light.
3. RNA absorbs UV light.
4. Glycolysis only occurs only at aerobic condition.
5.  $\beta$ -oxidation occurs only at aerobic condition.
6. Respiration occurs only at aerobic condition.
7. photosynthesis is involved in oxidative phosphorylation.
8. Fermentation is involved in oxidative phosphorylation.

II. 解釋名詞: (6 points each)

1. Enzyme cofactor
2. Catabolism
3. Anabolism
4. Glycolysis
5. Phospholipid
6. Transposable element
7. Genetic code
8. RNA splicing
9. Citric acid cycle
10.  $\beta$ -oxidation

III. Please describe the function of the following enzymes: (4 points each)

1. DNA polymerase
2. RNA polymerase
3. Restriction enzyme
4. DNA ligase
5. Telomerase
6. Lysozyme