

# 臺北醫學大學九十學年度研究所博士班招生考試題目卷

九十學年度博士班  
藥學研究所 物理化學

考試時間：90分鐘

題目試卷共 1 張，本試卷為第 1 張

依序將題號及答案書於答案卷本！

Q1. Term explanation (30%, @5%)

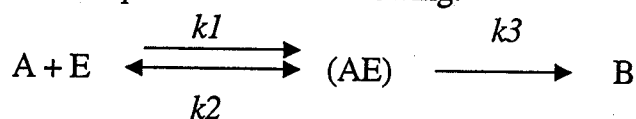
1. Polymorphism of substances
2. Zeta potential
3. Gibbs adsorption
4. Maxwell element
5. Xerogel
6. Sink condition

Q2. Rheology was usually applied in pharmaceutical industry to assess the characteristics of manufacturing process and products. Try to classify and give each definition and examples. (15%)

Q3. Please describe Henderson-Hasselbalch Equation and its application in drug absorption assessment. (15分)

Q4. Parental products must be meet the tonic requirement same as biological system. How many methods would be useful in adjusting the tonicity? Try to give each an example. (20%)

Q5. A enzymatic reaction sequence show as following.



The interaction of A with an enzyme E will yield product B. Try to derive the formation rate of B (dB/dt) under steady state condition? (20%)