

# 國立交通大學試題紙

九十九學年度第二次  
博士班資格考

科目：生理學

日期：100 年 7 月 29 日 第 1 頁 共 1 頁

請“✓”明 ✓不可看書 可看書

\* 請將答案依題號順序寫入答案卷

答題時字跡需工整，否則不予計分。Write your answers legibly; otherwise you will get zero score.

1. What is cell signaling? (2 %) Please describe methods used for cell signaling. (8 %).
2. Please describe four types of glia cells in the CNS and please describe their functions? (10%)
3. Please describe the sequence events in synaptic transmission. (10%)
4. Please describe the functions of two dopamine systems in our brain and describe two diseases related to the dysfunction of the two dopamine system (10%)
5. Please draw a diagram to describe the control of blood pressure by baroreceptor reflex. (10%)
6. What is edema? (2%) Please describe four conditions to cause the edema. (8%)
7. Please describe the cardiovascular adaptations to exercise. (10%)
8. Please describe the respiratory system responses to adapt changes in high altitude (mountain). (10%)
9. Please describe the extrinsic regulation of GFR (glomerular filtration rate). (10%)
10. Please draw a diagram to explain the effect of feeding and fasting on metabolism. (10%)