

國立成功大學

114學年度碩士班招生考試試題

編 號：116

系 所：生物醫學工程學系

科 目：生理學

日 期：0210

節 次：第 1 節

注 意：1.不可使用計算機
2.請於答案卷(卡)作答，於
試題上作答，不予計分。

1. The Nobel Prize in Physiology or Medicine 2024 was awarded jointly to Victor Ambros and Gary Ruvkun "for the discovery of microRNA and its role in post-transcriptional gene regulation". Please describe what microRNA is? What are the main functions and mechanisms of microRNA? (20%)
2. Please describe the functions of complement proteins in immune responses. (20%).
3. Please explain what are tidal volume, anatomical dead space, alveolar ventilation and physiological dead space? (20%).
4. Please describe how the renin-angiotensin-aldosterone system (RAAS) regulates the reabsorption of Na^+ and H_2O ? (20%).
5. Please describe the four steps of one cross-bridge cycle. (20%)

-----End of questions-----