

國立中山大學100學年度碩士班招生考試試題

科目：動物生理學【生科系碩士班甲組選考】

1. Discuss the mechanisms of Calcium in skeletal and cardiac muscle contraction. (20%)
2. Describe all you know about the Nobel Prize in physiology or medicine 2010. (15%)
3. A person is taking a drug that inhibits the tubular secretion of hydrogen ions. Discuss what effect does this drug have on the body's balance of sodium, water, and hydrogen ions? (10%)
4. Describe the sequence of events by which an action potential in a motor neuron produces an action potential in the plasma membrane of a skeletal muscle fiber. (20%)
5. Why iron, folic acid and vitamin B12 are essential for the production of erythrocytes? (15%)
6. Describe the role of the Renin-Angiotensin system in maintaining a normal arterial pressure despite wide variations in salt intake. (10%)
7. Describe the sequence of events that cause air to move into the lungs during inspiration and out of the lungs during expiration. (10%)