

(橫書式)

國立中山大學八十七學年度碩博士班招生考試試題

✓ 科目：生物科學

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1. Describe in detail the complex interplay of hormones in regulating human reproductions.
2. Write a short essay integrating the roles of inheritance, mutation, and environmental factors in causing cancers.
3. Name and characterize the types of tropical forests. What are the long-term and short-term effects of tropical deforestation?
4. Define and distinguish among commensalism, predation, parasitism, amensalism, mutualism, and competition. How do mutualism and predation influence community structure?
5. Describe how the autonomic nervous system regulates the cardiac and pulmonary functions.
6. How many types of basic tissues are present in the organ systems of animals and humans. Describe their microscopic structure.
7. Discuss the following statement: "Viruses are intracellular parasitic organisms. They cause diseases to the host organisms. They are harmful and should be eradicated. Therefore place it at an evolutionary disadvantage."
8. Apoptosis is an important and interesting phenomenon. What is apoptosis? Discuss the events occurred during apoptosis and the roles it played in the maintenance of adult tissues and in embryonic development.
9. Describe that action mechanism of plant hormones.
10. Describe the defense mechanisms of plants as the pathogens invade.