

編號: E 529 系所: 細胞生物與解剖學研究所

科目: 動物學

本試題是否可以使用計算機: 可使用, 不可使用 (請命題老師勾選)

1. How does the calcium-calmodulin system function? (10%)
2. How is kin selection related to natural selection? (10%)
3. What is the usefulness of the concept of an ecological niche? (10%)
4. What mechanisms prevent fertilization of an egg by more than one sperm? Why is this important? (10%)
5. How would the inheritance pattern for an X-linked, dominant trait be different from that of an X-linked, recessive trait? (10%)
6. How do new genetic combinations arise during meiosis? (10%)
7. Why is the apoptosis (cell death) so important during embryonic development? (10%)
8. What possible advantages and disadvantage are there in the evolutionary trend toward cephalization (head formation) of the neurons system? (10%)
9. How is information encoded by hormones? How do cells "know what to do" in response to hormonal information? (10%)
10. Describe the similarity and difference between sympathetic and parasympathetic system! (10%)