

1. Elaborate on the mechanism of photosynthesis in plants. How does this process play a crucial role in maintaining ecological balance?
2. Explore the functions of enzymes in cellular activities. Provide specific examples and elucidate their significance in biological systems.
3. Compare and discuss the phases of mitosis and meiosis. Explain their respective roles in the reproduction and development of organisms.
4. Examine the molecular structure of DNA and its functions. How does the replication of DNA ensure the continuity of genetic information across generations?
5. Evaluate the anthropogenic impact on biodiversity. Offer examples and propose effective strategies for the conservation of biological diversity.