

1. Describe the process of cellular respiration and its significance in providing energy for cell functions. Compare and contrast it with photosynthesis.
2. Discuss the role of enzymes in biological systems. Provide examples of how enzymes contribute to various biochemical reactions within living organisms.
3. Compare mitosis and meiosis in detail, highlighting the key differences and their respective contributions to the growth and reproduction of cells.
4. Explain the structure of RNA and its role in protein synthesis. Compare and contrast RNA with DNA, emphasizing their similarities and differences.
5. Investigate the impact of genetic engineering on agriculture and medicine. Discuss the ethical considerations surrounding the manipulation of genetic material.