



Section A: Multiple Choice Questions

1. **MCQ 1:** What is the pH value of a neutral substance?
 - a) 0
 - b) 7
 - c) 14
 - d) -7
2. **MCQ 2:** Which of the following is a renewable energy source?
 - a) Coal
 - b) Natural gas
 - c) Solar power
 - d) Nuclear power
3. **MCQ 3:** What is the function of the nucleus in a cell?
 - a) Energy production
 - b) Protein synthesis
 - c) Storage of genetic material
 - d) Waste elimination
4. **MCQ 4:** What type of reaction is photosynthesis?
 - a) Exothermic
 - b) Endothermic
 - c) Combustion
 - d) Decomposition

Section B: Short Answer Questions

5. **Short Answer 1:** Explain the process of cell division in eukaryotic cells.
6. **Short Answer 2:** Describe the difference between mitosis and meiosis.
7. **Short Answer 3:** Define the term "ecosystem" and provide examples.
8. **Short Answer 4:** Explain the process of digestion in the human body, including the role of enzymes.

Section C: Long Answer Questions

9. **Long Answer 1:** Describe the greenhouse effect and its impact on global climate change.
10. **Long Answer 2:** Explain the concept of genetic variation and its importance in evolution.



11. **Long Answer 3:** Discuss the structure and function of the respiratory system in humans.
12. **Long Answer 4:** Describe the stages of the water cycle and explain how human activities can impact it.

Section D: Competency Based Questions

13. **Competency Based Question 1:** You are tasked with designing a sustainable agriculture project for your community. Develop a plan that includes techniques for soil conservation, water management, and minimizing chemical inputs.
14. **Competency Based Question 2:** You are a member of a debate team discussing the use of genetically modified organisms (GMOs) in agriculture. Prepare arguments for both sides of the debate, considering factors such as food security, environmental impact, and ethical concerns.
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