



Section A: Multiple Choice Questions

1. **MCQ 1:** Which of the following is a renewable energy source?
 - a) Coal
 - b) Oil
 - c) Solar
 - d) Natural Gas
2. **MCQ 2:** What is the function of chlorophyll in photosynthesis?
 - a) Absorb carbon dioxide
 - b) Absorb sunlight
 - c) Release oxygen
 - d) Break down glucose
3. **MCQ 3:** Which of the following is a vector quantity?
 - a) Mass
 - b) Volume
 - c) Speed
 - d) Velocity
4. **MCQ 4:** What is the function of red blood cells in the human body?
 - a) Fight infection
 - b) Transport oxygen
 - c) Transport nutrients
 - d) Clot blood

Section B: Short Answer Questions

5. **Short Answer 1:** Explain the difference between a plant cell and an animal cell.
6. **Short Answer 2:** Describe the process of fossilization and its importance in paleontology.
7. **Short Answer 3:** Define Newton's first law of motion and provide an example.
8. **Short Answer 4:** Explain the role of the ozone layer in protecting life on Earth.



Section C: Long Answer Questions

9. **Long Answer 1:** Discuss the causes and consequences of climate change, including both natural and human-induced factors.
10. **Long Answer 2:** Describe the structure and function of DNA, and explain how it relates to genetics.
11. **Long Answer 3:** Explain the process of cellular respiration and its significance in energy production for living organisms.
12. **Long Answer 4:** Discuss the environmental impacts of deforestation and propose solutions to mitigate its effects.

Section D: Competency Based Questions

13. **Competency Based Question 1:** You are a member of a conservation group. Develop a plan to protect a local ecosystem from human activities such as pollution and habitat destruction.
14. **Competency Based Question 2:** Imagine you are a science communicator. Create a presentation explaining the importance of biodiversity conservation to a general audience, including examples of ecosystems and species at risk
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