Diversity in Plants and Animals Around Us

A. Choose the correct answer:

1. Which of the following best describes biodiversity?

- a) The variety of plants and animals in an ecosystem
- b) The number of humans on Earth
- c) The process of making new scientific discoveries
- d) The study of the solar system

2. Which of these is an example of diversity in plants?

- a) All plants looking the same
- b) Different types of plants such as trees, shrubs, and herbs
- c) Only one type of plant growing in a forest
- d) All plants needing the same environmental conditions

3. Why is animal diversity important for the environment?

- a) It makes nature more colorful
- b) It ensures a balance in the ecosystem and food chain
- c) It helps plants grow faster
- d) It reduces the need for human intervention in nature

B. Fill in the Blanks:

1.	The variety of living organisms, including plants and animals, in a particular
	area is known as
2.	A forest ecosystem has a rich diversity of and, which
	depend on each other for survival.
3.	Birds, reptiles, mammals, and amphibians are examples of in the
	animal kingdom.

C. Case Study:

- A biologist named Dr. Arjun was studying the biodiversity of a tropical rainforest. He observed a variety of plants, such as large trees, vines, ferns, and flowering plants. He also recorded many species of insects, birds, reptiles, and mammals.
- While studying, he noticed that deforestation in some areas led to a decline in certain bird species, as they lost their natural habitat. However, areas with dense tree cover had a greater number of animal species thriving.
- Dr. Arjun concluded that biodiversity is directly influenced by environmental conditions and human activities.

Questions & Answers:

- 1. What was Dr. Arjun studying in the tropical rainforest?
- 2. How did deforestation affect bird species in the area?
- 3. What relationship did Dr. Arjun observe between tree cover and animal species?
- 4. What conclusion did Dr. Arjun draw about biodiversity and human activities?

D. Short Answer Questions:

- 1. What factors contribute to the diversity of plants and animals in an ecosystem?
- 2. How does biodiversity benefit the environment?
- 3. Why is it important to protect plant and animal diversity?

E. Long Answer Questions:

- 1. Explain the different types of plant diversity found in nature and their importance to the ecosystem.
- 2. How do different types of animals adapt to their habitats? Give examples.
- 3. Discuss the impact of deforestation on biodiversity and suggest ways to conserve plant and animal life.