

Answer all questions.

Time allowed : 3 Hrs.

Answers should be written in English.

1. a. Briefly discuss the different types of acidity in soils.
b. "The pH of the soil solution is only the tip of the iceberg in determining how much lime is needed to neutralize an acid soil". - Comment.
2. a. Enumerate the possible electrochemical changes that could occur in a flooded soil.
* b. Briefly explain how these changes could influence the nutrient availability of the submerged soil.
3. Write an account on the environmental pollution caused by the modern agricultural practices and give suitable remedial measures to counteract them.
4. a. What do you understand by the term Cation Exchange Capacity (CEC) of a soil and explain the factors affecting it.
b. "Higher the exchange capacity of a soil, the greater its buffer capacity, other factors being equal". Interpret the above statement.
5. Write short notes on the following.
 - a. Significance of C:N ratio in soil fertility.
 - b. Role of soil in green house effect.
 - c. Reclamation of alkaline soils.
6. "Productivity of the soil is largely influenced by its micro fauna and micro flora". Critically analyze the above statement.