

Answer all questions

Time: Two hours

1. a) Giving examples, classify the layer silicate clays.
b) Explain how the charges are created in organic soil colloids.

2. a) Discuss the factors controlling soil reaction.
b) Briefly explain the formation of Kaolinite clay.

3. a) "Soil organic matter content largely depends on the soil nitrogen level" – Critically comment on this statement.
b) Briefly discuss the common pollutants that reach the soil.

4. Write short notes on the followings;
 - i. Oxidation and reduction reactions in rice soils.
 - ii. Formation and Management of acid soils.
 - iii. Cation Exchange Capacity (CEC) of soils.
