

Roll No.

Total No. of Pages : 02

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B.Sc. (Agriculture) (Sem.-3)

SOIL CHEMISTRY, FERTILITY & NUTRIENT MANAGEMENT

Subject Code : BSAG-307

M.Code : 72557

Date of Examination : 16-12-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

1. **Write briefly :**
 - a. Broadcasting
 - b. Indicator plant
 - c. Role of boron and molybdenum for plants
 - d. Nutrient deficiency
 - e. Essential plant nutrients
 - f. Sodic soils
 - g. Hidden hunger
 - h. Calcareous soils
 - i. Neem coated N fertilizers
 - j. Soil test for fertilizers application.

SECTION-B

2. How soil is considered as store house for plant nutrients.
3. Differentiate between mineralization and immobilization.
4. Discuss measures to overcome deficiency and toxicity of nutrients in plant and soil.
5. Explain chemical and biological methods for reclamation of salt affected soils.
6. Explain RSC (residual sodium carbonate) and ESP (exchangeable sodium percentage).

SECTION-C

7. How alkaline soils are formed? Explain methodologies for their reclamation.
8. Describe and explain different methods of soil testing. Give critical limit of Ca, Mg, S, Zn, Cu, Fe, Mn, N, P and K for soil.
9. Discuss effect of fertilizers and insecticides on nutrient availability and soil health.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.