

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE  
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Agriculture

Semester : IV (New)	Term : Second	Academic Year : 2023-24
Course No. : SSAC 242	Title : Problematic Soils and their Management	
Credits : 2 (1+1)		
Day & Date : Friday, 03.05.2024	Time : 9:00 to 11:00 hrs.	Total Marks : 40

- Note :
1. Solve ANY EIGHT questions from SECTION 'A'.
  2. All questions from SECTION 'B' are compulsory.
  3. All questions carry equal marks.
  4. Draw neat diagram wherever necessary.

SECTION 'A'

- Q.1 Define Soil quality and Soil health. State the soil quality indicators.
- Q.2 What do you mean by Problem soil? Write down the classification of problem soils based on soil properties.
- Q.3 Enlist factors for the formation of salt affected soils. How is irrigation water involved in the formation of salt affected soils?
- Q.4 Define Calcareous soil. Discuss in brief nutrient management in calcareous soils.
- Q.5 Explain methods for reclamation of saline and sodic soil.
- Q.6 What do you mean by Submerged and Flooded soils? Write down in brief the management of submerged soil.
- Q.7 Define Soil and Water Pollution. State preventive measures for the control of soil and water pollution.
- Q.8 Write down the management practices for safe use of saline water for irrigation.
- Q.9 Explain in brief the land capability classification.
- Q.10 Write short notes on (Any Two):
- a) SAR                      b) Phytoremediation                      c) Soil Erosion

SECTION 'B'

- Q.11 Define the following terms:
- 1) Amendment                      2) Acid soil                      3) Bioremediation                      4) Hydric soils
- Q.12 Do as directed:
- 1) \_\_\_\_\_ is a chemical amendment used for reclamation of acid soils.
  - 2) State the rating of high RSC irrigation water.
  - 3) Central Soil Salinity Research Station is located at \_\_\_\_\_.
  - 4) Which soluble salts are present in brown saline soils?

