

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Agriculture

Semester	: IV (New)	Term	: Second	Academic Year	: 2021-22
Course No.	: SSAC 242	Title	: Problematic Soils and their Management		
Credits	: 2 (1+1)	Time	: 14:00 to 16:00 hrs	Total Marks	: 40
Day & Date	: Friday, 23.09.2022				

- 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. Discuss in brief soil quality indicators.
- Q.2 Explain in brief how acid soils are formed.
- Q.3 State different characteristics that determine quality of irrigation water.
- Q.4 Describe land capability classification.
- Q.5 Give the salient characteristics of saline soil and alkali soil. Mention factors responsible for formation of saline soil.
- Q.6 What do you mean by soil pollution? Enlist soil pollutants. Suggest preventive measures for soil pollution.
- Q.7 Define submerged soil. Explain changes occurring in soil during submergence.
- Q.8 What are the sources of water pollution? Suggest remedial measures to control water pollution.
- Q.9 Define calcareous soil. State its effect on plant growth.
- Q.10 Elaborate the characteristics of healthy soils.

SECTION 'B'

- Q.11 Define the following terms:

- | | |
|-----------------------|-----------------------|
| 1) Soil degradation | 2) Problematic soil |
| 3) Gypsum requirement | 4) Acid sulphate soil |

- Q.12 Fill in the blanks:

- 1) _____ is a predominant cation in the formation of acid soil.
- 2) Low salinity water class (C_1) contains _____ salt concentration.
- 3) The non-arable classes in the land capability classification are _____ to _____.
- 4) Compaction and sealing of soil is _____ type of soil degradation.

