

End Semester/Reappear (Semester IV) Examination June 2024

Programme: B. Sc. (Hons.) Agriculture

Course: Problematic soils and their Management

Course Code: 13A.261

Enrolment no. _____

Full Marks: 50

Time: 2 Hrs.

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
Section I				
1	Short Answer type questions.			4 x 5 = 20
a	Illustrate the suitable strategies for improving soil quality.	CO1	Apply	
	or			
b	Define wasteland. Discuss the types of wasteland.	CO1	Remember	
	or			
	Describe the management of acid sulphate soil and calcareous soil.	CO2	Remember	
c	or			
	Tabulate comparison between Eroded and Compacted soils.	CO2	Apply	
	Describe the basic concept and components & steps of remote sensing.	CO3	Understand	
d	or			
	Enlist different type of bioremediation processes. Explain in-situ and ex-situ bioremediation process.	CO4	Remember	
	Explain multipurpose tree species and their role in managing physical and chemical properties of soil.	CO4	Remember	
Section II				
Long Answer type questions.				2 x 15 = 30
2	Reframe the distribution of Waste land and problem soils in India. Why such land are not suitable for cultivation purpose.	CO1	Evaluate	
	or			
3	Discuss the strategies of increasing crop production and productivity in acidic soils in your own words.	CO1	Analyze	
	or			
	Explain soil salinity. Discuss the causes, effect ,impact and management of soil salinity.	CO2	Analyze	
	Distinguish Saline and sodic soils. Compare the reason why we adopt different management practices for Saline and sodic soils	CO2	Analyze	

Course Outcome:

At the end of the course the student will be able to:

CO1 Understand about soil health and quality and problematic soils found in India.

CO2 Recognize reclamation and management techniques used for problematic soils and use of remote sensing and GIS for management of problematic soils.

CO3 Illustrate irrigation water quality standards and its application in agriculture fields.

CO4 Comprehend Land capability classification and apprehend the functions of MPTS in bioremediation of soils.