

**School of Agriculture****Bachelor of Science Honours in Agriculture  
Semester End Examination - Jun 2024****Duration : 180 Minutes  
Max Marks : 100****Sem IV - A1UA410T - AGRI2013 Problematic Soils and their Management***General Instructions**Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

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| 1)  | Compare soil fertility and Soil productivity.  | K1(2)  |
| 2)  | Explain, how water logging causes problems in soil.  | K2(4)  |
| 3)  | Outline the sources of the acidity in the soil.  | K2(6)  |
| 4)  | How would you solve the problem of salinity of the soil? Explain.  | K3(9)  |
| 5)  | How would you solve the problem soil erosion by water?   | K3(9)  |
| 6)  | What is your opinion to replace chemical fertilizers with bio-fertilizers for the management of soil health?   | K5(10) |
| 7)  | What conclusion can be drawn about the effect of submergence on the availability of essential nutrients for plant growth?  | K4(12) |
| 8)  | Criticise the impacts of agro-chemicals on soil properties and give details of their alternatives.   | K5(15) |
| 9)  | How would you judge the economic impacts of soil erosion on agricultural yields, input costs, soil health, and farm profitability?   | K5(15) |
| 10) | Compose guidelines for the assessment of irrigation water quality and standards, incorporating parameters such as salinity hazards, sodium hazard, chloride concentration, magnesium hazard and nitrate concentration. | K6(18) |