

B.Sc. 3rd Semester (Honour's) Examination-2021
FORESTRY

Course ID: 33503

Course Code: **SH/FST/ NR 2106**

Course Title: Soil Biology & Fertility

Time: 2 Hours

Full Marks: 50

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

- I. Write a definition or one sentence answer any 10 of the following 1x10=10
1. Soil profile
 2. Bio fertilizer
 3. Ammonification
 4. Soil erosion
 5. Soil horizon
 6. Complex fertilizer
 7. Microclimate
 8. Soil fertility
 9. Rhizosphere
 10. Immobilization
 11. Urea contain nitrogen in the form of.....
 12. Full form of IISS.....
 13. Soil pH
 14. Illuviation
 15. Fixation
- II. Write short note/ define any 10 of the following 2x10 =20
1. Essential nutrient elements
 2. Macro nutrient
 3. Soil composition
 4. Carbon cycling
 5. Soil macro nutrient
 6. Nitrogen fixation
 7. Difference between symbiosis and asymbiosis
 8. Bio-fertilizers – their importance
 9. Role of microorganisms in soil fertility
 10. Write down the significance of “O” horizon of soil

11. Types of essential nutrient present in soil with name
12. Soil Temperature
13. Define Integrated nutrient management
14. Micronutrient
15. Stratification

III. Write down in brief any four (4) of the following

5x4=20

1. Define bio-fertilizer. Write their classification and advantages.
2. Describe nitrogen cycle.
3. Explain the function and deficiency symptoms of nitrogen.
4. Define soil biology. Write down the type of macro-organism present in soil and its function in brief?
5. Integrated nutrient management in plantation forestry.
6. Discuss soil profile