

5. (a) What do you understand from the change in land use pattern? Discuss various causes of change in land use pattern. (8)
- (b) Provide details of economic and environmental impacts of agricultural intensification. (7)
6. (a) Enlist the essential elements for plant growth. Explain the effect of soil organic matter on the properties of the soil. (7)
- (b) Describe the positive or negative impacts of land use change on ecosystems and society. (8)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 4116

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Unique Paper Code : 2182011202

Name of the Paper : Land and Soil : Conservation and Management

Name of the Course : **B.Sc. Hons. Environmental Sciences – Core**

Semester : II

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Answer any **four** questions. All Questions carry equal marks.

1. (a) Define the following (Any **five**) : (2×5=10)

(i) Chresard

(ii) Soil colloids

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(iii) Land salinization

(iv) Food security

(v) Composting

(vi) Organic farming

(b) Fill in the blank of the following : (1×5=5)

(i) Soil degradation occurs when soil
and fertility decline over time.

(ii) Soil loss and degradation can lead to reduced
..... and food insecurity.

(iii) Soil conservation involves adopting practices
to prevent and restore soil health.

(iv) Soil formation is a process influenced
by factors like climate and parent material.

(v) Soil architecture refers to the
arrangement of soil particles and pore spaces.

(vi) Soil water holding capacity is the of
water a soil can retain for plant use.

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2. Write short notes on the following : (3½×4=15)

(a) Land use categories

(b) Economic importance of soil

(c) Soil sampling procedure

(d) Biological phenomena in land degradation

3. Write explanatory notes on the following questions :
(5×3=15)

(a) Enlist the problems of dryland agriculture

(b) Impact of land degradation on nutrient cycles

(c) Desertification

4. (a) What is the modern concept of soil conservation?
Discuss the importance of soil conservation in the
current scenario. (8)

(b) Define soil erosion, Describe various agents of
soil erosion and classify soil erosion. (7)

P.T.O.