

1218

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- (b) Describe the principles of watershed management. (7)
6. (a) What is sustainable land management? How do sustainable land management practices affect ecosystem services and biodiversity? (8)
- (b) Discuss different types of soil degradation. Examine the impact of soil degradation on agriculture and food security. (7)

(500)

2/8/23 (Mon)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 1218 F

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) Mulching
 - (ii) Wind breaks

P.T.O.

(iii) Soil texture

(iv) Hollard

(v) Micronutrients

(vi) Land use

(b) Fill in the blanks : (1×5=5)

(i) _____ leads to sheet erosion on hilly slopes.

(ii) _____ layer of the soil profile is known as the zone of accumulation.

(iii) _____ is the placing of trees and shrubs into crop and animal farming systems to create environmental benefits.

(iv) _____ is the best type of soil that is used to plant seeds.

(v) The scientific study of soil in its natural environment is called _____.

2. Write short notes on the following : (2½×4=15)

(a) Soil profile

(b) Land salinization

(c) Water holding capacity of soil

(d) Shifting cultivation

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

(a) Principles of sustainable land management

(b) Role of databases in land use planning

(c) Pedogenesis

4. (a) What is land degradation assessment? Discuss how can land degradation assessment help in conservation. (8)

(b) How can climate change-induced desertification be reduced or reversed? (7)

5. (a) What is a watershed? Explain the concept of watershed management. (8)