

**Savitribai Phule Pune University, Pune**

**T.Y.B.Sc. Geography Syllabus**

**(Credit System, 2019 Pattern)**

**Revised Syllabus (From June-2021)**

**Semester-VI**

**Gg: 364: Geography of Soil-II**

**No. of Credits: 02**

**No. of Periods: 3**

**Objectives:**

1. To acquaint the students with concepts in Soil Science.
2. To familiarize the students with the importance of soil science in Geography.
3. To develop an understanding of the management and conservation of soils.

| <b>Sr. No.</b> | <b>Topic</b>                          | <b>Sub topic</b>                           | <b>Learning Points</b>  | <b>Periods</b> |
|----------------|---------------------------------------|--|---|----------------|
| <b>1</b>       | Soil Classification and Soil Types    | Classification and Types                   | A) Classification of Tropical soils<br>B) Basis of classification, Zonal, Intrazonal and Azonal Soils<br>C) Types of Soil   | 07             |
| <b>2</b>       | Soil organic matter and Soil Dynamics | Organic Composition of Soil, Soil Dynamics | A) Meaning and Determination of Organic carbon and matter.<br>B) Fractionation of organic matter<br>C) Carbon cycle C:N ratio<br>Organic Colloids– Soil Organic Matter<br>D) Factors Affecting Soil Organic Matter<br>E) Decomposition of Soil Organic Matter<br>F) Soil Dynamics | 08             |
| <b>3</b>       | Soil Degradation                      | Soil Degradation Types, Causes and Effects | A) Meaning of Soil degradation.<br>B) Types of Soil degradation<br>C) Causes of Soil degradation<br>D) Effects of Soil degradation<br>E) Soil degradation control measures  | 08             |
| <b>4</b>       | Soil conservation And                 | Soil Conservation & Soil                   | A) Meaning and Definition of Soil Conservation.<br>B) Methods of soil conservation  | 07             |

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|  | Management | management | C) Need of soil conservation<br>D) Soil resource management in India |  |
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### Reference Books:

1. Ecology and Environment, P.D.Sharma, Rastogi Publications, Meerut.
2. Watershed management, Madan Mohan Das, PHI Private LTD. New Delhi.
3. Soil Science Simplified, Khonke and Franzmeier, Waveland Press, Pune.
4. Weathering Pedology and Geo-morphological Research, Birkland P., OxfordUniversity Press, New York.
5. Hydrology, Madan Mohan Das, PHI Private LTD. New Delhi.
6. Fundamentals of Soil Science, Foth, Henry.D., Wiley Books.
7. A text book of Soil Science: Biswas T.D.&Mukharji ; Tata Mc Grow Hill Mumbai
8. A Text Book of Soil Science: Daji J.A. ; Tata Mc Grow Hill, Mumbai
9. Soil Geography: Sarkar Himanshu; (Nikhil) K.D. Kolkata.
10. Soil Geography, Vinayak Kale, Himalayan Publ. House, Mumbai.