SAVITRIBAI PHULE PUNE UNIVERSITY Geography T.Y.B.Sc. (Credit System) Revised Syllabus (From June-2021) Semester VI

Course No: GG 369: Soil and Sediment Analysis (Practical Paper-3)

No. of Credits: 02

No. of hours: 30

Objectives:

- 1. To introduce students with soil and sediment analysis in geography.
- 2. To apply soil and sediment analysis techniques to understand geographical phenomena.
- 3. To make use of soil and sediment analysis to arrive at conclusions.
- 4. To acquaint students with the importance of soil and sediment analysis in geography as the scientific method.

Unit No.	Unit	Sub-Unit	No. of Hrs.
1	Concept of soil sampling	Various methods of soil sampling and at least one field sampling by using soil augur or core tubes	05
2	Study of physical properties of soils	Laboratory determination of i) Soil texture ii) Soil Moisture iii) Bulk density and Specific gravity iv) Percentage porosity	10
3	Study of chemical properties of soils	Laboratory determination of i) Soil pH ii) Soluble salts by gravimetric method iii) Soil EC iv) CaCO ₃ v) Organic carbon vi) Organic matter vii) N,P,K viii) Fe ₂ O ₃ ix) Al ₂ O ₃ x) SiO ₂	15

Each Practical batch will be comprised of 12 students

Note:

- 1. Use of map stencils, log tables, statistical tables and calculators are allowed at the time of examination.
- 2. Completion of journal and certification by Practical-in-charge and Head of the Department is must.
- 3. Candidate without certified journal should not be allowed for the practical examination.

Reference Books:

- 1. Briggs, 1979, Soils
- 2. King 1994, Techniques in geomorphology
- 3. Miller Austin, 1979, Skin of the earth
- 4. Piper, 1975, Soil chemical analysis
- 5. Wilkinson and Monkhouse 1975, Maps & Diagrams.