

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

Course No: GG 359: Techniques in Geomorphology-Practical Paper-3

No. of Credits: 02

No. of hours: 30

Objectives:

1. To introduce students with techniques in geomorphology.
 2. To apply geomorphic techniques to produce new insight in geomorphology.
 3. To make use of geomorphic analysis to arrive at conclusions about landforms.
 4. To acquaint students with the role of geomorphic techniques in geography as the scientific method for understanding landforms.
- **Each Practical batch will be comprised of 12 students**

Unit No.	Unit	Sub-Unit	No. of Hrs.
1	Relief analysis	1. Profiles i) Cross Profile: Drawing and description of a regional cross profile with proper vertical exaggeration ii) Longitudinal Profile: Drawing and description of longitudinal profile of a river iii) Construction of superimposed, projected and composite profiles 2. Relief analysis i) Map showing absolute and relative relief by Smith's method ii) Slope map by grid method iii) Slope map by Wentworth's method	10
2	Drainage basin analysis	1. Demarcation of drainage basin from SOI toposheet and calculation of drainage area by graphical method 2. Stream ordering by Strahler's method 3. Stream number counting according to each order 4. Measurement of basin area under each order by graphical method	10
3	Drainage network analysis	1. Measurement of stream lengths and calculation of basin mean Length of each order. 2. Calculation of drainage density, stream frequency and bifurcation ratio 3. Stream order and number relationship (Calculation and plotting) 4. Stream order and length relationship (Calculation and plotting) 5. Stream order and area relationship (Calculation and plotting)	10

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. Aackombe, R. V. and Gardiner, V. (1983): Geomorphological Field Manual
2. Chorley, R. J., Schumm, S. A. and Sugden, D.E. (1984) : Geomorphology, Methuen, London
3. Goudie, A. (1990): Geomorphological Techniques, Unwin Hyman, London
4. Hart, M. G. (1986): Geomorphology, Pune and Applied George Allen and Unwin
5. Kale, V. S. and Gupta, A. (2001): Introduction to Geomorphology, Orient Longman, Calcutta
6. King, C.A.M. (1966): Techniques in Geomorphology, Edward Arnold, London