

Semester VI**Practical Geography- II (Techniques of Spatial Analysis, Surveying and Excursion /Village/ Project Report) DSE- 2 D****(No. of Credits: 04)****Workload: Six Periods per week per batch consisting of 12 Students; however the last batch needs to have more than six students.****(Examination for the course will be conducted at the end of the semester)**

| Sr. No. | Topic | Sub Topic & learning Points | No. of Lectures |
|---------|---|--|-----------------|
| 1. | Geographical Data & its Basic Analysis | a. Introduction and Types of Geographical Data: i) Spatial and Temporal data ii) Discrete and Continuous series iii) Grouped and Ungrouped data b. Basic Analysis : i) Tally marks and frequency table ii) Frequency distribution (histogram & polygon) iii) Cumulative Frequency & Ogive curve | 15 |
| 2. | Calculation of Central Tendency, & Dispersion | a. Meaning and description of central tendencies- Mean, Mode, Median b. Calculation of Mean, Mode, Median for ungrouped and grouped data (two examples each) c. Measures of Dispersion: Mean Deviation & Standard Deviation (two examples each) | 15 |
| 3. | Testing and Application of Hypothesis | a) Meaning, Definition of Hypothesis & Types of Hypothesis i) Null & Alternative hypothesis ii) Level of significance, iii) Degree of freedom b) Concept of Correlation and regression I. Concept of bivariate correlation & Regression II. Meaning of coefficient of correlation III. Parametric & Non parametric tests: i) Chi-square test (two examples each) IV. Calculation of Spearman Rank order (Min. two examples for each test) | 15 |
| 4. | Field Excursion / Village Survey / Project Report | a. One Short tour of two days duration and preparation of tour report OR b. One long Tour of more than Five days duration anywhere in the country and preparation of tour report OR c. Village / City / Area Survey and preparation of report | 15 |

Reference Books:

1. Acevedo, M. F., 2012. Data Analysis and Statistics for Geography, Environmental Science and Engineering, CRC Press.
2. Ahirrao, D. Y. and Karanjkehele, E.K., 2002. Pratyakshik Bhugol, Sudarshan Publication, Nashik.
3. Creswell J., 1994. Research Design: Qualitative and Quantitative Approaches, Sage Publications.
4. Dikshit, R. D., 2003. The Art and Science of Geography: Integrated Readings. Prentice-Hall of India, New Delhi.
5. Hammond, R. and McCullagh, P. S., 1977. Quantitative Techniques in Geography: An Introduction, Clarendon Press, Oxford.
6. Harris, R., Jarvis, C. 2011. Statistics for Geography and Environmental Science, Prentice Hall.
7. Jog. S. R. and Saptarshi, P. G., 1980. Sankhikhi Bhugol, Narendra Publication, Pune.
8. Karlekar, S. N. and Kale, M., 2006. Statistical Analysis of Geographical Data, Diamond Publication, Pune.
9. Kumbhar, A., 2000. Pratyakshik Bhugol, Sumeru Publications, Mumbai.
10. Mc Grew Jr., J. C., Lembo Jr., A. J., Monroe, C. B. 2014. An Introduction to Statistical Problem solving in Geography, 3rd ed, Waveland Press.
11. Pal. S. K., 1998. Statistical Methods for Geoscientists: Techniques and Applications, Concept Pub.co.
12. Robinson, A., 1998. "Thinking Straight and Writing That Way", in Writing Empirical Research Reports: A basic guide for students of the Social & Behavioral Sciences, eds. By F. Pryczak & R. Bruce Pryczak, Publishing, Los Angeles.
13. Rogerson, P. A., 2015. Statistical Methods for Geography: A Student's Guide, 4th ed, Sage.
14. Sarkar, A. 2015. Practical Geography: A Systematic Approach, 3rd ed, Orient Blackswan.
15. Singh R. L. and Dutt, P.K., 1968. Elements of Practical Geography, Students Friends, Allahabad.
16. Singh R. L., 2005. Elements of Practical Geography. Kalyani Pubishers, New Delhi.

17. Stoddard, R. H., 1982. Field Techniques and Research Methods in Geography, Kendall/Hunt.
18. Wokcatt, H. 1995. The Art of Fieldwork, Alta Mira Press, Walnut Creek, CA.
19. डॉ. प्रवीण सप्तर्षी, सांख्यिकी भूगोल , नीराली प्रकाशन, पुणे.
20. डॉ.काळे व्ही.बी. २०२१ 'प्रात्यक्षिक भूगोल' प्रशांत पब्लिकेशन, जळगाव.

CBCS PATTERN TYBA GEOGRAPHY