

**CURRICULUM PLAN 2022-23****B.A. (H) Geography**Semester – III (Practical)  
(LOCF)

Name of the Teacher: Shalini Shikha

**Paper Name & Paper Code- Statistical Methods in Geography**

Unit No.	Name of Topic	Tutorial/Assignment/Presentation etc.	Allocation of Lectures	Assessment Tasks	Teaching and Learning Activity
I	<b>Use of Data in Geography: Geographical Data Matrix, Significance of Statistical Methods in Geography; Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval, Ratio)</b>	<ul style="list-style-type: none"> <li>• Significance of Statistical Methods in Geography:</li> <li>• Types and Sources of Data</li> <li>• Descriptive and Inferential Statistics</li> <li>• Geographical Data Matrix</li> <li>• Scales of Measurement</li> </ul>	27 <sup>th</sup> August, 2022-12 <sup>th</sup> September 2022  10 Lectures	Project File and Assignment	<ul style="list-style-type: none"> <li>• Lectures</li> <li>• Demonstration Method</li> <li>• Using Inductive Method</li> <li>• Classroom Exercise</li> </ul>
II	<b>Tabulation and Descriptive Statistics: Frequency Distribution Table, Cross Tabulation, Graphical Presentation of Data ( Bar diagram, Histograms, Frequency Curve and Cumulative Frequency Curves), Measurement of Central Tendencies (Mean, Median and Mode), Measurement of Partitions (Deciles, Quartiles and Percentiles), Dispersion (Standard</b>	<ul style="list-style-type: none"> <li>• Frequencies distribution tables ( Simple, Cumulative and Cross-table, with 2 variables)</li> <li>• Graphical Representation- Bar Diagram, Histogram, frequency curve, frequency polygon and Ogive.</li> <li>• Measures of Central Tendency: Arithmetic Mean, Median, Mode.</li> <li>• Measures of Partition: Deciles, Quartiles and Percentiles.</li> </ul>	13 <sup>th</sup> Septembert, 2022– 3 <sup>rd</sup> October, 2022  18 Lectures	Project File And Mock Test	<ul style="list-style-type: none"> <li>• Demonstration Method (through blackboard teaching)</li> <li>• Using Inductive Method</li> <li>• Classroom Exercise</li> </ul>

	<b>Deviation, Variance and Coefficient of Variation). Centro-graphic Techniques (Geographic Centre, Mean Centre of Population, Median points and Median Centre (based on Minimum Aggregate Distance Traveled), and Distance Deviation from the Mean Centre. Sampling: Purposive, Random, Systematic and Stratified.</b>	<ul style="list-style-type: none"> <li>Measures of Dispersion: Standard Deviation, Variance, Coefficient of Variation</li> <li>Centro Graphic Techniques: Mean Centre, Median Point and Median Center</li> </ul>			
III	<b>Sampling: Purposive, Random, Systematic and Stratified</b>	<ul style="list-style-type: none"> <li>Data Sampling</li> <li>Purposive Sampling</li> <li>Systematic Sampling</li> <li>Stratified Sampling</li> </ul>	4 <sup>th</sup> October 2022 -15 <sup>th</sup> October 2022  4 lectures	Project File	<ul style="list-style-type: none"> <li>Classroom lecture using suitable illustrations</li> <li>Classroom Exercise</li> </ul>
IV	<b>Theoretical Distribution: Probability and Normal Distribution</b>	<ul style="list-style-type: none"> <li>Concept of Probability</li> <li>Normal Distribution <ul style="list-style-type: none"> <li>a. Concept and properties of Normal curve</li> <li>b. Find the probability/Area under Normal Curve.</li> <li>c. Fit the data under Normal</li> </ul> </li> </ul>	16 <sup>th</sup> October 2022- 5 <sup>th</sup> November 2022  14 lectures	Project file and class test	<ul style="list-style-type: none"> <li>Demonstration Method</li> <li>Classroom Exercise</li> </ul>

		Curve (only areas method) d. Plot frequency curves with observed and expected frequencies.			
V	<b>Correlation: Rank Correlation and Product Moment Correlation, Simple Regression and Mapping of Residuals from Regression</b>	<ul style="list-style-type: none"> <li>• Spearman's Method of Correlation</li> <li>• Product Moment Correlation</li> <li>• Regression</li> </ul>	6 <sup>th</sup> November, 2020 – 12 <sup>th</sup> December, 2020  16 lectures	Project file submission and Mock tests	<ul style="list-style-type: none"> <li>• Demonstration Method</li> <li>• Using Inductive Method</li> <li>• Classroom Exercise</li> </ul>

#### E-Resources

Rogerson, P.A., Statistics in Geography, Retrieved from:

<https://www.ebooksdownloads.xyz/search/statistical-methods-for-geography>

Souch, C., et.al., Skills in Mathematics and Statistics in Geography and tackling transition, Retrieved from: [https://www.heacademy.ac.uk/system/files/resources/tt\\_maths\\_geography.pdf](https://www.heacademy.ac.uk/system/files/resources/tt_maths_geography.pdf)

Geography and Statistics. (1975). *Area*, 7(2), 82-82. Retrieved from <http://www.jstor.org/stable/20000965>

Taylor, P., & Goddard, J. (1974). Geography and Statistics: An Introduction. *Journal of the Royal Statistical Society. Series D (The Statistician)*, 23(3/4), 149-155. doi:10.2307/2987578