

**Government College For Women, Mahendragarh, Haryana, 123029**

*Department of Geography*

**Name of The Assistant Professor : Bharat Kumar Soni**

*Class : M.Sc. Pre.- Semester II*

**Session : 2023-24**

**Subject Lesson Plan: 14 Weeks (Jan 15-Apr 30) : Statistical Methods in  
Geography (GEOG204)**

**Week 1**

Geography and statistics, significance of statistics in geographical studies. Nature and characteristic. Descriptive statistics: tabulation and graphical representation of data.

**Week 2**

Measures of central tendency: mean, median and mode. Partitioned values: Quartiles and deciles.

**Week 3**

Centrographic techniques- Mean center and Median center, Standard Distance. Measure of dispersion: Absolute measure; Range, quartile deviation.

**Week 4**

Mean deviation, standard deviation and Relative measure of dispersion: coefficient of variation. Measures of inequality: location quotient and Lorenz curve and Gini's coefficient.

**Week 5**

Bivariate analysis: scatter diagram, correlation analysis, Spearman's rank correlation and Karl Pearson's correlation coefficient. Simple linear regression model: regression equations, construction of regression line, computation of residuals and mapping.

**Week 6**

Test of significance: Chi-square test, student's t-test, F-test. Basis of multivariate analysis: correlation matrix partial and multiple correlations.

**Week 7-14**

Repetition with Problem Solving, Tests & Assignments...

**Government College For Women, Mahendragarh, Haryana, 123029**

*Department of Geography*

**Name of The Assistant Professor : Bharat Kumar Soni**

*Class : M.Sc. Final- Semester IV*

**Session : 2023-24**

**Subject Lesson Plan: 14 Weeks (Jan 15-Apr 30) : Research Methodology  
(GEOG401)**

**Week 1**

Meaning, Objectives, Types, and Significance of Research; Characteristics of research.

**Week 2**

The Research Process- a detailed description of steps involved; problems encountered by researchers in India.

**Week 3**

Meaning of research problem; Selection of research problem; Need for defining a research problem; Techniques involved in defining a problem; Limitations of the research problem.

**Week 4**

Definition, characteristics and types of Hypothesis.

**Week 5**

Meaning, need, and features of research design; Important concepts relating to research design; Types of research design-exploratory, descriptive and experimental.

**Week 6**

Random sampling designs and Non-random sampling designs - merits and limitations.

**Week 7**

Types of Data-Primary and Secondary; Sources of data;

**Week 8**

Methods of collecting Primary Data - Observation method, Interview method, Questionnaire and Schedule; Difference between Questionnaire and Schedule.

**Week 09-14**

Repetition with Problem Solving, Tests & Assignments...

**Government College For Women, Mahendragarh, Haryana, 123029**

*Department of Geography*

**Name of The Assistant Professor : Bharat Kumar Soni**

*Class : B.A. II Year - Semester IV*

**Session : 2023-24**

**Subject Lesson Plan: 14 Weeks (Jan 15-Apr 30) : Human Geography (203)**

**Week 1**

Nature and scope of Human Geography, Branches of Human Geography, Approaches to the study of Human Geography.

**Week 2**

Division of Mankind: Spatial distribution of race and tribes of India; concept of man-environment relation : A historical approach.

**Week 3**

Human adaptation to the environment (i) Cold region – Eskimo (ii) Hot region – Bushman.

**Week 4**

Human adaptation to the environment (iii) Plateau – Gonds (iv) Mountains – Gujjars.

**Week 5**

Meaning, nature and components of resources; Classification of resources – renewal and non-renewable ; biotic and abiotic, recyclable and non recyclable.

**Week 6**

Distribution, utilization and conservation of biotic (flora and fauna) and abiotic (water, minerals and energy) resources.

**Week 7**

Distribution and density of world population, population growth, fertility and mortality patterns.

**Week 8**

Concept of over, under and optimum population; Population theories: Malthus, Ricardo and Marx.

**Week 09**

Rural settlements: Meaning, classification and types. Urban settlements: Origin, classification and functions of towns.

**Week 10**

Population pressure, resource use and environment degradation; sustainable development.

**Week 11**

Holi Vacations...

**Week 12**

Concept of deforestation, soil erosion, air and water pollution.

**Week 13-14**

Problem Solving, Tests & Assignments...