

Government College for Women, Mahendragarh

Department of Geography : Session- 2025-26

Name of the Assistant Professor- Bharat Kumar Soni

Class- B.A. 1st - Semester I

Lesson Plan- 18 Weeks(Aug 01 to Nov 29) : Physical Geography (CC)(24L4.5-GEO-101)

Week 01

Geological time scale.

Week 02

Interior of the earth.

Week 03

Rocks and their types.

Week 04

Theory of Isostasy,

Week 05

Continental drift.

Week 06

Plate tectonic.

Week 07

Earthquakes.

Week 08

Volcanoes, Degradational processes- Weathering.

Week 09

Mass wasting & resultant landforms.

Week 10

Landforms generated by following geomorphic agents- River & Wind.

Week 11

Landforms generated by following geomorphic agents- Glacier & Under-ground water.

Week 12

Weather and Climate.

Week 13 - Deewali Vacations

Week 14

Atmospheric Composition & Structure.

Week 15

Temperature & Atmospheric Pressure.

Week 16

Moisture- measurement and distribution.

Week 17

Surface configuration of ocean floors, Surface relief of the Pacific, Atlantic & Indian ocean.

Week 18

Circulation of oceanic waters- Current of the Pacific, Atlantic & Indian Ocean.

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Department of Geography : Session- 2025-26

Name of the Assistant Professor- Bharat Kumar Soni

Class- M.Sc. Previous- Semester I

Lesson Plan- 18 Weeks (Aug 01 to Nov 29) : Geomorphology (CC) (24L6.0-GEO-101)

Week 01

Nature and Development of Geomorphology.

Week 02

Fundamental concepts in Geomorphology (given by Thornbury).

Week 03

Geological Time Scale, Convection current theory, Geosynclines, Sea floor spreading.

Week 04

Continental drift and Plate tectonic.

Week 05

Isostasy, Endogenetic Processes: Earth quakes.

Week 06

Volcanic and Fault.

Week 07

Folds.

Week 08

Exogenetic Processes: Weathering, Mass wasting.

Week 09

Erosion: Fluvial, Glacial.

Week 10

Aeolian and Waves.

Week 11

Karst, Slope processes and Models of slope development: Davis, Penk.

Week 12

King, Wood and Strahler.

Week 13 - Deewali Vacations

Week 14

Applied Geomorphology: role of geomorphology in environmental management; accelerated erosion and sedimentation. Applications of geomorphology in Landuse, construction of large dams, and urban development.

Week 15-18

Repetition & Problem Solving...

Statistical Methods (CC) (24L6.0-GEO-105)**Week 01**

Basics of Stats.

Week 02

Measures of central tendency: mean, median, mode, Partitioned values: quartiles and percentiles, Comparison of mean, median and mode.

Week 03

Measures of dispersion: absolute measures: range, quartile deviation, mean deviation, standard deviation, relative measure of dispersion: coefficient of variation.

Week 04

Measures of inequality: location quotient, and Lorenz curve, Normal curve as a probability distribution: characteristics and area under curve. Sampling theory and chance error.

Week 05

Bivariate analysis in geographical studies: scatter diagram, correlation analysis, Spearman's rank correlation and Karl Pearson's correlation coefficient, Coefficient of determination.

Week 06

Simple linear regression model: estimation of regression equation (least square method), interpretation and significance in geographical studies, Time Series Analysis.

Week 07

Hypothesis testing and chi square: utility in geographical studies, significance test and interpretation.

Week 08

Test of significance (t test, F test), Nearest Neighbor Analysis.

Week 09

Residuals and their mapping, basics of multivariate correlation matrix.

Week 10-18

Repetition & Problem Solving...

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Department of Geography : Session- 2025-26

Name of the Assistant Professor- Bharat Kumar Soni

Class- M.Sc. Final- Semester III

Lesson Plan- 18 Weeks (Aug 01 to Nov 29) : Political Geo. (CC) (24L6.5-GEO-311)

Week 01-

Definition, scope and nature of Political Geography.

Week 02-

Development of Political Geography, Recent trends in Political Geography.

Week 03-

Recent trends in Political Geography.

Week 04-

Theoretical contributions to political geography- Ratzel, Hartshorne, Taylor and Harvey

Week 05-

Concept of nation, state and geographical bases of state; buffer state and core area.

Week 06-

Formation of frontiers and boundaries, Boundaries- classification, functions, shape, size and sovereignty.

Week 07-

Border lands and Land-locked state.

Week 08-

Laws of spatial growth of state, Concept of Geo-strategy.

Week 09-

Geostrategic ideas of Mackinder, Spykman, Severesky.

Week 10-

Geopolitics in the Post-Cold War World- S.B. Koohen's Model of Geo-Politics, Political Geography of Ocean: Maritime Boundaries, delimitations: principles and problems.

Week 11-

Mahan's Sea Power concept and International law of the sea, Geopolitics of Indian Oceans.

Week 12-

India as a regional power in the world's politics with special reference to South Asian Politics, BRICS and Quad.

Week 13 – Deewali Vacations

Week 14-

National and regional political parties in India; women as a marginalized section in Indian politics, Political Geography of India with special reference to water disputes and riparian claims.

Week 15

Indo-China and Indo-Pak relations.

Week 16-18

Repetition & Problem Solving...