

Government College for Women, Mahendragarh

Department of Geography : Session- 2024-25

Name of The Assistant Professor- Bharat Kumar Soni

Class- B.A. 1st- Semester I

Lesson Plan- 18 Weeks (Jul 22 to Nov 23) : Physical Geography (CC) (24L4.5-GEO-101)

Week 01

Interior of the earth.

Week 02

Geological time scale.

Week 03

Rocks and their types.

Week 04

Theory of Isostasy,

Week 05

Continental drift.

Week 06

Plate tectonic.

Week 07

Earthquakes and Volcanoes.

Week 08

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

Atmospheric Composition & Structure.

Week 14

Temperature & Atmospheric Pressure.

Week 15

Moisture- measurement and distribution.

Week 16

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

Week 17

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

Week 18

Problem Solving...

Government College for Women, Mahendragarh

Department of Geography : Session- 2024-25

Name of The Assistant Professor- Bharat Kumar Soni

Class- M.Sc. Previous- Semester I

Lesson Plan- 15 Weeks (Aug 12 to Nov 23) : Climatology (CC) (24L6.0-GEO-102)

Week 01

Introduction to climatology and meteorology; Concepts of weather and climate.

Week 02

Origin, composition and structure of atmosphere.

Week 03

Temperature, Solar radiation, insolation and heat budget.

Week 04

Atmospheric pressure and its distribution pattern.

Week 05

Theories of general circulation and planetary winds.

Week 06

Monsoons and Jet streams.

Week 07

Walker circulation- La Nina, El Nino and ENSO.

Week 08

Humidity, evaporation, condensation; Precipitation types, formation theories & Clouds.

Week 09

Stability and instability of atmosphere, air masses.

Week 10

Fronts & Cyclones.

Week 11

Climatic classification by Koppen, Trewartha & Thornthwaite.

Week 12

Climatic change: pattern, evidences and theories of climate change.

Week 13

Global warming: theories, causes and impacts on earth systems & Greenhouse effect.

Week 14

Acid rain: causes, consequences and remedies & Glacial lake outburst.

Week 15

Repetition & Problem Solving...

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

Week 01

Measures of central tendency: mean, median, mode,

Week 02

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.

Week 05

Normal curve as a probability distribution: characteristics and area under curve. Sampling theory and chance error.

Week 06

Bivariate analysis in geographical studies: scatter diagram, correlation analysis, Spearman's rank correlation and Karl Pearson's correlation coefficient, test of significance (t test, F test), coefficient of determination.

Week 07

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

Week 08

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

Week 09

Nearest Neighbor Analysis, Residuals and their mapping, basics of multivariate and correlation matrix.

Week 10-15

Repetition & Problem Solving...

Government College for Women, Mahendragarh

Department of Geography : Session- 2024-25

Name of The Assistant Professor- Bharat Kumar Soni

Class- M.Sc. Final- Semester III

Lesson Plan- 18 Weeks (Jul 22 to Nov 23) : Political Geo. (GEOG311)

Week 01-

Nature & Scope of Political Geography,

Week 02-

Its Approaches & Recent Trends,

Week 03-

Schools of Thought- Political Economy, World Systems, Place & Globalization.

Week 04-

Concepts of Nation, State, Nation-State & Nationalism,

Week 05-

Nation- Building, Emergence & Growth of Territorial State & Globalization,

Week 06-

The Crisis of the Territorial State, Forms of Governance- Unitary & Federal,

Week 07-

Concept of Frontiers & Boundaries; Demarcation, Classification & Functions of Boundaries.

Week 08-

Rise & Demise of German Geopolitics, Global Strategic Views- Mahan & Sea Power,

Week 09-

Mackinder & Heartland, Spykman & Rimland,

Week 10-

Seversky & Air Power; Geopolitics in the Post Cold War World- S.B. Cohen's Model of Geo-Politics.

Week 11-

Emergence of India as Regional Power, Geo-Political Significance of Indian & Pacific Ocean,

Week 12-

Geo-Political Issues in India with Special Reference to Water Disputes & Riparian Claims,

Week 13-

Gerrymandering & Electoral Abuse in India; Kashmir Problem & Indo-Pak Relations,

Week 14-

Inter-State Water Disputes In India (Special Reference To SYL Canal).

Week 15-18

Repetition & Problem Solving...