

Month-wise Lesson Plan - Nisha Malik

Name of Teacher: Nisha Malik

Class: B.A. III Semester

Paper: Weather Forecasting (Theory)

Sr. No.	Month	Topics
1	August	Theory: Weather and Climate; Elements of Weather and Climate and their Measurement. Practical: Weather map symbols and inventory.
2	September	Theory: Isohyets, Isobars, Isotherms, Isoneph, Isohume; High and Low Pressure Systems. Practical: General weather forecasting; precipitation and cloudiness.
3	October	Theory: Prevailing, Seasonal and Local Winds; Weather Map of India. Practical: Interpretation of pressure phenomena.
4	November	Theory: Interpretation of Weather Maps. Practical: Wind Direction and Speed Interpretation; Record Completion, Viva & Internal Assessment.

Name of Teacher: Nisha Malik

Class: M.Sc. I Semester

Paper: Computer-Based Data Management in Geography (Practical)

Sr. No.	Month	Topics
1	August	Computer System, Hardware, Software and MS Office.
2	September	Spreadsheet Data Entry, Data Management and Basic Statistical Tools.
3	October	Representation of Geospatial Data; Line Graphs, Bar Graphs, Pie Charts, Scatter Plots and Trend Line.
4	November	MS PowerPoint, MS Word, Report Writing, Record Completion and Viva.

Name of Teacher: Nisha Malik

Class: M.Sc. I Semester

Paper: World Economic Geography (Theory)

Sr. No.	Month	Topics
1	August	Definition, Scope and Approaches of Economic Geography; Factors of Location.
2	September	World Economies; Classification; Economic Development and Rostow's Models.
3	October	World Economy, Capitalist Mode of Production, Dynamics and Spatial Structure of World Economy.
4	November	Globalization, GATT, WTO, Human Development Index, Global Hunger Index; Revision & Internal Assessment.

Month-wise Lesson Plan - Mohit Boora

Name of Teacher: Mohit Boora

Class: B.A. I Semester

Paper: Geography in Everyday Life (Theory)

Sr. No.	Month	Topics
1	August	Theory: Solar System; Formation of Day/Night, Seasons and Earth's Movements. Practical: Solar System; Solstices & Equinoxes.
2	September	Theory: Continents & Oceans; Latitude, Longitude, Time Zones & International Date Line. Practical: Antipodal Arrangement; Drawing Latitudes & Longitudes.
3	October	Theory: Atmosphere; Elements of Weather & Climate. Practical: World Time Zones; Time Calculation in Eastern & Western Hemisphere.
4	November	Theory: Types of Vegetation; Climate Change and Human Being. Practical: International Date Line; Record Completion, Revision & Internal Assessment.

Name of Teacher: Mohit Boora

Class: B.A. III Semester

Paper: Fundamentals of Human Geography (Theory)

Sr. No.	Month	Topics
1	August	Theory: Nature, Scope and Development of Human Geography. Practical: Composition of Major Religions and Languages of the World.
2	September	Theory: Human Race; Religion and Global Distribution. Practical: Methods of Representing Population Distribution and Density.
3	October	Theory: Organization of Space; Population Distribution, Density and Growth. Practical: Flow Diagram of Migration; Spatial and Temporal Growth of Population.
4	November	Theory: World Pattern of Development; World Migration. Practical: World Literacy Mapping; Record Completion, Revision & Internal Assessment.

Name of Teacher: Mohit Boora

Class: M.Sc. I Semester

Paper: Climatology (Theory)

Sr. No.	Month	Topics
1	August	Nature and Scope of Climatology; Atmosphere; Solar Radiation, Heat Budget and Temperature.
2	September	Atmospheric Pressure; Global Pressure Belts; Atmospheric Circulation; ENSO; Monsoon.
3	October	Precipitation; Air Masses; Fronts; Cyclones; Climatic Classification.
4	November	Climate Change; Global Warming; Impacts; Revision & Internal Assessment.

Name of Teacher: Mohit Boora

Class: M.Sc. III Semester

Paper: Practical in Human Geography

Sr. No.	Month	Topics
1	August	Economic Indices; Gravity Model; Cost-Benefit Analysis.
2	September	Population Projection Methods; Density Calculations.
3	October	Settlement Measures; Rank Size Rule; Nearest Neighbour Analysis.
4	November	Crop Concentration Index; Lorenz Curve; Gini Coefficient; Agricultural Productivity; Record Completion & Viva.

Month-wise Lesson Plan - Akshay Kumar

Name of Teacher: Akshay Kumar

Class: B.A. V Semester

Paper: Statistical Methods in Geography (Theory)

Sr. No.	Month	Topics
1	August	Theory: Types of Data, Descriptive Statistics (Histogram, Ogive), Mean, Median, Mode. Practical: Preparation of Bar Diagrams.
2	September	Theory: Measures of Dispersion; Lorenz Curve. Practical: Simple & Polyline Graphs; Scatter Plot.
3	October	Theory: Sampling and Probability Distribution. Practical: Maps using Statistical Diagrams.
4	November	Theory: Correlation, Rank Correlation, Normal Distribution. Practical: Record Completion, Revision & Internal Assessment.

Name of Teacher: Akshay Kumar

Class: M.Sc. I Semester

Paper: Quantitative Methods in Geography (Practical)

Sr. No.	Month	Topics
1	August	Data Measurement; Measures of Central Tendency; Dispersion.
2	September	Sampling Theory; Probability Distribution; Normal Curve.
3	October	Correlation Analysis; Spearman Rank; Karl Pearson; Regression.
4	November	Z-test, t-test, Chi-square, ANOVA, Residual Mapping; Record & Viva.

Name of Teacher: Akshay Kumar

Class: M.Sc. III Semester

Paper: Geographical Information System and GPS (Theory)

Sr. No.	Month	Topics
1	August	GIS: Definition, Scope, Development, Components, Hardware, Software, ArcGIS, SAGA GIS, QGIS.
2	September	Spatial & Non-spatial Data; Raster & Vector; DBMS; Coordinate Projection Systems.
3	October	Data Input, Scanning, Digitization, Editing, Cleaning; Overlay, Neighborhood, Proximity, Queries.
4	November	GPS: Segments, Signals, Errors, DGPS, NAVSTAR, GALILEO, IRNSS, Applications; Revision.

Name of Teacher: Akshay Kumar

Class: M.Sc. III Semester

Paper: Digital Image Processing Techniques (Practical)

Sr. No.	Month	Topics
1	August	Satellite Data Download, Layer Stack, Mosaic, Subset, Digital Image Visualization.
2	September	Georeferencing, NCC/FCC Preparation, Resolution Merge.
3	October	Filters, Contrast Stretch, Supervised & Unsupervised Classification.
4	November	Accuracy Assessment, Change Detection, Record Completion & Viva.

Month-wise Lesson Plan - Aritra Mondal

Name of Teacher: Aritra Mondal

Class: B.A. III Semester

Paper: Exploration of Geographical Landscapes (Theory)

Sr. No.	Month	Topics
1	August	Theory: Landscape concept, definition and classification. Practical: Selection of field study area and identification of landscape type.
2	September	Theory: Major land surface features; Continents and Oceans. Practical: Field survey and identification of factors transforming landscapes.
3	October	Theory: Natural landscapes and Cultural landscapes with formation processes. Practical: Project report preparation and field observations.
4	November	Theory: Urban and Rural landscapes and their formation processes. Practical: Project completion, Viva preparation and Internal Assessment.

Name of Teacher: Aritra Mondal

Class: M.Sc. III Semester

Paper: Digital Image Processing Techniques (Practical)

Sr. No.	Month	Topics
1	August	Satellite data download, Layer Stack, Mosaic, Subset and DN visualization.
2	September	Georeferencing, NCC/FCC preparation, Resolution Merge.
3	October	Filters, Contrast Stretch, Supervised and Unsupervised Classification.
4	November	Accuracy Assessment, Change Detection, File Record and Viva Preparation.

Name of Teacher: Aritra Mondal

Class: M.Sc. III Semester

Paper: Urban Geography (Theory)

Sr. No.	Month	Topics
1	August	Definition, Nature, Scope, Urban Settlement Concept, Urbanization and Growth.
2	September	Urban Morphology, Concentric Zone, Sector and Multiple Nuclei Models; Urban Fringe.
3	October	Functional Classification of Towns, Central Place Theory, Rank-Size Rule and Primate City.
4	November	Contemporary Urban Issues, Pollution, Slums, Urban Policies, Sustainable Development; Revision & Internal Assessment.

LESSON PLAN

Name of Teacher: Hitesh Singh

Class: B.A. I (1st Semester)

Subject: Introduction to Geography of India

Sr. No.	Month	Topics
1	August	Theory: Geological history & regions of India; Physiographic divisions of India. Practical: Isopleth lines (2 exercises).
2	September	Theory: Drainage system, Soils, Climate & Natural Vegetation. Practical: Landuse pattern (Pie chart – 2 exercises).
3	October	Theory: Population distribution, density, growth; Population composition. Practical: Choropleth & Dot maps; Occupational structure exercises.
4	November	Theory: Resources, Industries, Transport & Communication. Practical: Population pyramid, Rainfall deviation, Cropping & Irrigation intensity.

LESSON PLAN

Name of Teacher: Hitesh Singh

Class: M.Sc. I Semester

Subject: Geomorphology

Sr. No.	Month	Topics
1	August	Nature, scope, concepts, geological time scale and approaches.
2	September	Weathering, mass wasting, geomorphic processes and plate tectonics.
3	October	Slope development theories; Fluvial, Karst, Aeolian & Glacial landforms.
4	November	Regional geomorphology; Himalaya, Plateau, Desert, Islands & Applied Geomorphology.

LESSON PLAN

Name of Teacher: Hitesh Singh

Class: M.Sc. III Semester

Subject: Ecology & Conservation

Sr. No.	Month	Topics
1	August	Evolutionary biogeography, evolution, adaptation and speciation.
2	September	Ecosystem concepts and Population ecology.
3	October	Community ecology, biodiversity and ecological succession.
4	November	Conservation of flora & fauna, IUCN, Red List and biodiversity loss.

LESSON PLAN

Name of Teacher: Hitesh Singh

Class: M.Sc. III Semester

Subject: Practical in Human Geography

Sr. No.	Month	Topics
1	August	Economic indices, Gravity model and Cost-benefit analysis.
2	September	Population projection; Arithmetic, Physiological & Agricultural density.
3	October	Rank-size rule and Nearest neighbour analysis.
4	November	Location quotient, Lorenz curve, Gini coefficient and Agricultural productivity.

LESSON PLAN

Name of Teacher: Sh. Sandeep

Class: M.Sc. I Semester

Subject: Geography of India

Sr. No.	Month	Topics
1	August	Unit I: Physiographic divisions of India; drainage systems; mechanism of Indian monsoons and climatic regions of India; types of soils and natural vegetation.
2	September	Unit II: Growth of population; distribution and density of population; demographic attributes—sex ratio, literacy rate and work force; population problems and policies.
3	October	Unit III: Characteristics of Indian agriculture and its development since independence; agricultural regions of India; major industrial regions of India; domestic and international trade patterns; transportation network.
4	November	Unit IV: Evolution of administrative map of India since independence; river-water sharing disputes among states with reference to SYL; inter-linking of rivers; terrorism and problems of internal security; population explosion and food security; Revision & Internal Assessment.

LESSON PLAN

Name of Teacher: Sh. Sandeep

Class: M.Sc. II Semester

Subject: Population Geography

Sr. No.	Month	Topics
1	August	Unit I: Concepts, scope and methodology of Population Geography; demography and Population Geography; sources of population data; population dynamics—growth, fertility and mortality measurement; factors affecting population distribution, density and growth.
2	September	Unit II: Theories of population growth—Malthusian Theory, Social Capillarity and Demographic Transition Theory; Optimum Theory of Population—Carr-Saunders and its criticism; migration—types, determinants and consequences; theories of migration—Zelinsky, Ravenstein and Lee's Laws.
3	October	Unit III: Population planning—population distribution and characteristics; population policy in developed and developing countries; India's population policy; demographic dividend.
4	November	Unit IV: Population issues—ageing, disability and women; population and resources; digital divide and inequality; population in the context of environmental crises; Revision & Internal Assessment.