**Class…B.A.I (Ist Sem)**

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| **Sr.No.** | **Months** | **Topic** |
| **1** | **August** | 1. Geological history and regions of India.2. Physiographic divisions of India.Practical-Drawing of Isopleth lines on map of India (2 exercise)  |
| **2** | **September** | Theory-3. Drainage System and Soils of India.4. Climate and Natural Vegetation of India.Practical-Landuse pattern of India (pie chart-2 exercise) |
| **3** | **October** | Theory- 5. Population: distribution, density and growth.6. Population composition: sex ratio, rural and urban, literacy, work force, language and religion.Practical-Population distribution and density map of India (choropleth and dot method- 2 exercise) Occupational structure, Sex ratio, Literacy, Population of selected metro cities of India (any 2 exercise) |
| **4** | **November** | Theory- 7. Resources: Production and distribution of iron ore, coal, petroleum, hydro power, solar and thermal power8. Industries: iron and steel, sugar and cotton textile; transport and communicationPractical-  Rainfall deviation diagram of at least 20 years (1 exercise) Cropping intensity and irrigation intensity (mono and bi-variate- any 2 exercise) |

**Class…MDC (Ist Sem)**

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| **Sr.No.** | **Months** | **Topic** |
| **1** | **August** | Theory- 1. Solar System: location, shape and uniqueness of earth.2. Formation of Day/night, Seasons and Various movements of Earth.Practical- 1. Solar System (1 exercises)2. Solstices and Equinoxes (2 exercise) |
| **2** | **September** | Theory- 3. Continents and Oceans on Earth.4. Latitude, Longitude, Times zones and International dateline. Practical- 3. Antipodal arrangement of land and water (1 exercise)4. Drawing of latitudes and longitudes (2 exercise) |
| **3** | **October** | Theory- **5. Atmosphere: structure and composition.****6. Elements of weather and climate.**Practical- 5. Time zones of World (1 exercise)6. Calculation of time in eastern and western hemisphere (2 exercise) |
| **4** | **November** | Theory- 7. Types of Vegetation.8. Climate change and human being. Practical- 7. International Date Line (advancement/reduction of day (2 exercise) |

**Class…M.Sc(F)**

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| **Sr.No.** | **Months** | **Topic** |
| **1** | **August** | Economic Indices: i. Indicators of Economic Development ii. Gravity Model iii. Cost benefit Analysis |
| **2** | **September** | Population and Development Indices: i. Population Projection methods a. Arithmetic Increase Method, b. Geometric Increase Method ii. Calculation of Arithmetic Density, Physiological Density and Agricultural Density. |
| **3** | **October** | Measures of Settlement i. Rank Size Rule ii. Nearest neighbor analysis. |
| **4** | **November** | Calculation of Crop Concentration Index: Locational quotient method. Measure of inequality: lorenez curve, ginni coefficient. Calculation of agricutlral productivity. |

**Class…B.A.III**

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| **Sr.No.** | **Months** | **Topic** |
| **1** | **August** |  Type of Data and descriptive statistics: Histograms, ogives.Measures of Central tendency: Mean, Median, Mode |
| **2** | **September** | Measures of Dispersions: Quartile deviation, mean deviation and standard deviation. 4. Measures of inequalities: Lorenz curve.Simple and Polyline graph (2 exercise).. Plotting of data through scatter plot (lexcercise). |
| **3** | **October** | 5. Sampling: its types and application in Geography. .6. Probability distribution and models |
| **4** | **November** | 7. Correlation: Scatter diagram, rank correlation and correlation coefficient.8. Properties of Normal distribution. |

**Class…M.SC (F)**

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| **Sr.No.** | **Months** | **Topic** |
| **1** | **August** | Introduction to Atmospheric Sciences: Aerology, Meteorology and Climatology. Nature and Scope of climatology.Origin of atmosphere.Solar Radiation: Heat budget of Earth and Atmosphere. Temperature:factor affecting and its horizontal and vertical distribution. |
| **2** | **September** | Atmospheric pressure, its relation with temperature and other atmospheric factors, world pressure belts and global distribution pattern of pressure.Atmospheric circulation: Major wind belts of earth |
| **3** | **October** | Walker circulation; El Nino, La Nina ENSO, Monsoon: theories of its origincharacteristics of Indian monsoonPrecipitation: process, forms, and theories. Types and world distribution of rainfall. |
| **4** | **November** | Stability and instability of atmosphere: air masses, fronts, origin and characteristics of extra tropical and tropical cyclones.Climatic classification of world by KoeppenClimatic classification of world by Thornthwaite.Climatic change: reconstruction of past climate (Dendrochronology and Pollen studies) Theories of climate change |

**Class…M.SC (P)**

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| **Sr.No.** | **Months** | **Topic** |
| **1** | **August** | Nature, scope and historical development of population geography Population Data: sources, Quality, Reliability and data problems in mapping of population data.Concepts of Population Concepts, Determinants and World Pattern of the following attributes of population: Growth, |
| **2** | **September** | Distribution, Density of population, birth rate and death rate.Population composition: Age, Sex, Literacy, Occupation. Migration: Theories, causes and consequences.Population and Resource: Population Resource Regions, Over Population, Under Population and Optimum Population. |
| **3** | **October** | Theories of Population: Malthus. Demographic transition theory.Ricardo population theoryMarx population theoryMeaning and Definition of population policy.A review of Population Policy of India |
| **4** | **November** | A review of Population Policy of India, China,A review of Population Policy of India, China, and Japan.Population Problems and Environmental Implications. |

**Class…M.SC (P)**

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| **Sr.No.** | **Months** | **Topic** |
| **1** | **August** | Definition, Nature, Scope, Importance, Recent Trends and Approaches in Economic Geography.Relationship of Economic Geography with Other Social Sciences.Spatial Organization of Economic Activities and their Classification.Measures of Network Structure and Economic Activities, Impact of Transport on Economic Activities. |
| **2** | **September** | Geographic Fixity and Mobility- Typology of Distance-Spatial Interaction: Edward Ullman's Spatial Interaction Model and M.E. Hurst's diffusion model.Application of Industrial Location Theories: WeberApplication of Industrial Location Theories: Isard, Hoover, |
| **3** | **October** | Application of Industrial Location Theories: A. Pred Application of Industrial Location Theories: D.M. Smith.World Economies: Bases of Classification, Patterns and Characteristics of Developed Developing Economies of the World.Dynamics of World Economy and Time Space, Matrix of World Economy. |
| **4** | **November** | World Energy Resources: Coal, Petroleum and Nuclear, their characteristic,Distribution and Utilization.Globalization and Recent Trends in Pattern of International Trade.Geo-Economy of E- Commerce with Special Reference to India.Major Regional Trade Blocks of The World, Free Trade Initiatives (GATT, UNCTAD, WTO). |