



**APTI PLUS**

*Academy for Civil Services Pvt. Ltd.*  
CREATING CIVIL SERVANTS FOR THE NATION

# **GEOGRAPHY**

# **SECTIONAL TESTS**

# **BROCHURE**





*Join the ranks of our toppers who turned Economy into their strength using this package.*

**APTIPLUS GEOGRAPHY SECTIONAL TESTS PACKAGE**

**Master Geography for UPSC Prelims 2026 with Precision, Concept and Confidence**

**Why This Geography Test Series Matters**

Geography is one of the **most scoring yet tricky** subjects in the UPSC Prelims. Questions are no longer purely factual – they demand **deep understanding, map awareness and application of concepts** to current affairs.

The **GEO Sectional Tests Package** from APTI PLUS is **strategically designed** to address these demands. It empowers aspirants to build clarity, link static and dynamic topics and tackle questions with confidence in the exam hall.

**Salient Features:**

**Exhaustive coverage** of Physical, Indian and World Geography.

Integrated approach covering **static concepts + dynamic linkages** (climate, disasters, locations in news, etc.).

Based on NCERTs (6–12), GC Leong, Oxford Atlas and Current Affairs.

Includes **PYQ-based test modeling** and trend-mapped question framing.

Focus on **map-based and location identification questions** increasingly asked by UPSC.

**Detailed solutions** with elimination tips and conceptual clarification.

**Test Plan at a Glance:**

Test Type	Number of Tests
Standard Book-Based Concept Tests	2
Thematic Test based on maps	1
PYQs Test	1
Full-Length Geography Simulator Tests	2

**Bonus:**

Free access to **monthly current affairs magazine** 'The IAS Gazette'

**Microlisting of Syllabus:**

UNIVERSE	
	<ul style="list-style-type: none"> <li>Theories of the Development of the Universe.</li> <li>Galaxy</li> <li>Star formation</li> <li>Planet Formation</li> <li>Solar system</li> <li>Moon</li> <li>Asteroid</li> <li>Meteor</li> <li>Kuiper belt</li> <li>Comets</li> <li>Dwarf Planets</li> </ul>
Earth Evolution	<ul style="list-style-type: none"> <li>Geological History of Earth</li> <li>Evolution of the Earth-Layered Structure                             <ul style="list-style-type: none"> <li>Evolution of Lithosphere</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>◦ Evolution of Atmosphere</li> <li>◦ Evolution of Hydrosphere</li> <li>• Latitude and Longitude including important Parallels and Meridians</li> <li>• Motions of the Earth - Rotation, Revolution, and their effects</li> <li>• Inclination of the Earth's Axis and its effects</li> <li>• Time Zones, Local and Standard Time and the International Date Line, Calendar</li> <li>• Eclipses - Solar, Lunar</li> <li>• Earth's magnetic field</li> <li>• Earth's Geological time scale.</li> <li>• Origin of Life.</li> </ul>
<b>GEOMORPHOLOGY</b>	
Earth's Interior	<ul style="list-style-type: none"> <li>• Interior of the Earth <ul style="list-style-type: none"> <li>◦ Crust</li> <li>◦ Mantle</li> <li>◦ Core</li> </ul> </li> <li>• Sources of Information <ul style="list-style-type: none"> <li>◦ Direct</li> <li>◦ Indirect - Earth Quake Waves Volcanoes</li> </ul> </li> <li>• Theories</li> <li>• Suess Theory</li> </ul>
Geology and Rock System	<ul style="list-style-type: none"> <li>• Minerals</li> <li>• Major Elements of the Earth's Crust <ul style="list-style-type: none"> <li>◦ Minerals – Feldspar, Quartz, Pyroxene Amphibole, Mica , Olivine</li> <li>◦ Physical Characteristics–Crystal Form, Cleavage Fracture, Lusture, Color, Streak</li> <li>◦ Transparency, Structure, Hardness, Specific Gravity</li> <li>◦ Metallic minerals – precious Ferrous, Non Ferrous</li> <li>◦ Non-metallic Minerals – Sulphur, Phosphates, Cement</li> </ul> </li> <li>• Rocks (Aggregate of Minerals) <ul style="list-style-type: none"> <li>◦ Petrology</li> <li>◦ Rocks &amp; landforms</li> <li>◦ Rocks &amp; Soils</li> <li>◦ 3 Family of Rocks</li> <li>◦ Igneous</li> <li>◦ Sedimentary</li> <li>◦ Metamorphic</li> </ul> </li> </ul>
Geomorphic Processes	<ul style="list-style-type: none"> <li>• Earth's Surface <ul style="list-style-type: none"> <li>◦ Exogenic Forces</li> <li>◦ Endogenic Forces</li> <li>◦ Gradation , Degradation &amp;Agradation</li> </ul> </li> <li>• Endogenic Forces <ul style="list-style-type: none"> <li>◦ Diastrophism</li> <li>◦ Orogenic</li> <li>◦ Epierogenic</li> <li>◦ Earthquakes</li> <li>◦ Plate movements</li> <li>◦ Volcanism</li> </ul> </li> <li>• Exogenic Forces <ul style="list-style-type: none"> <li>◦ Denudation Processes</li> <li>◦ Weathering</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>○ Mass movements</li> <li>○ Erosion Transportation &amp; Deposition</li> </ul>
Earthquakes and Volcanism	<ul style="list-style-type: none"> <li>• Earthquakes <ul style="list-style-type: none"> <li>○ Waves: P, S, Body, Surface,</li> <li>○ Shadow Zone</li> <li>○ Types of Earthquakes</li> <li>○ Effects</li> <li>○ Frequency</li> <li>○ Locating an Epicentre</li> </ul> </li> <li>• Volcanism <ul style="list-style-type: none"> <li>○ Types <ul style="list-style-type: none"> <li>✓ Shield</li> <li>✓ Composite</li> <li>✓ Caldera</li> <li>✓ Flood Basalt</li> <li>✓ Mid Ocean Ridge</li> </ul> </li> </ul> </li> <li>• Landforms (intrusive) <ul style="list-style-type: none"> <li>○ Batholiths</li> <li>○ Lacoliths</li> <li>○ Lopoliths</li> <li>○ Phacoliths</li> <li>○ Sills</li> <li>○ Dykes</li> </ul> </li> </ul>
Distribution of Continents & Oceans	<ul style="list-style-type: none"> <li>• Theories</li> <li>• Continental Drift Theory <ul style="list-style-type: none"> <li>○ Alfred Wegner</li> <li>○ Pangea, Panthalasa</li> <li>○ Laurasia, Gondwanaland</li> </ul> </li> <li>• Evidence in support of Continental Drift Theory <ul style="list-style-type: none"> <li>○ Jigsaw Fit</li> <li>○ Rocks of Same age across oceans</li> <li>○ Tillite</li> <li>○ Placer Deposits</li> <li>○ Distribution of Fossils</li> </ul> </li> <li>• Isostasy</li> <li>• Sea Floor Spreading</li> <li>• Forces of Drifting <ul style="list-style-type: none"> <li>○ Pole Fleeing Force</li> <li>○ Tidal Force</li> </ul> </li> <li>• Post Drift Studies</li> <li>• Convectional Current Theory</li> <li>• Mapping of the Ocean Floor</li> <li>• Plate Tectonics <ul style="list-style-type: none"> <li>○ Lithospheric Plates - Major Plate - Minor Plates</li> </ul> </li> <li>• Plate Boundaries - Divergent - Convergent - Transform</li> <li>• Rates of Plate Movements</li> <li>• Force of plate movement</li> <li>• Indian Plate</li> </ul>
Landforms and their	<ul style="list-style-type: none"> <li>• Causes</li> </ul>



evolution

- Geomorphic Processes
- Geomorphic Agents
- Geomorphic Agent
  - Erosional or Destruction
  - Depositional or Constructional
- Agents and their Impacts - Wind, Running Water, Ground Water, Glaciers, Waves & Currents
- Winds
  - As agents in Hot deserts
  - Cause - Deflation Abrasion Impact
  - Erosional landforms
    - ✓ Pediments and Pediplains
    - ✓ Playas
    - ✓ Deflation Hollows and Caves
    - ✓ Mushroom, Table & Pedestal Rocks
- Depositional Landforms
- Barchans
- Seif
- Parabolic
- Transverse
- Longitudinal
- Running Water
- Erosional Landforms
  - ✓ Valleys
- ❖ Rills
- ❖ Gullies
- ❖ Valleys - V Shape , Gorge (Hard Rocks), Canyon (Sedimentary)
  - Potholes & Plunge pools
  - Incised or entrenched meanders
  - River Terraces - paired & unpaired
- Depositional Landforms
  - Alluvial Fans
  - Delta
  - Flood plains, Natural Levees, Point Bars
  - Meansders, Slip off bank, Under cut bank
  - Oxbow lake
  - Braided Channels
- Ground Water (Karst Topography)
  - Permeable Rocks
    - ✓ Percolation
    - ✓ Bedding Plains
- Limestone and Dolomite Regions
- Erosional Landforms
  - Pools - Swallow Hole, Valley Sinks (Uvalas), Sinkholes, Collapse sinks (Dolines), Lapies, Ridges, Limestone Pavements
  - Caves - Altering bed of Rocks (Shale sandstone quartzit, Caves and Tunnels)
- Depositional landforms
  - Stalactites
  - Stalagmites
  - Pillar Columns



- Glaciers
  - Erosional Landforms
    - ✓ Cirque of Tarn Lakes
    - ✓ Hors and Serrated Regions – Arete
    - ✓ Glacial Valleys / Troughs – Fiords
- Depositional Landforms
  - Glacial Till
  - Moraines
  - Eskers
  - Outwash Planes
  - Drumlins
- Waves and Currents
- High Rocky Coasts & Low Sedimentary Coasts
  - Erosional Landforms
    - ✓ Cliffs
    - ✓ Terraces
    - ✓ Caves
    - ✓ Stacks
- Depositional Landforms
  - Beaches and Dunes
  - Bars, Barriers, Spits
- Weathering
  - Factors
    - ✓ Geological
    - ✓ Climatic
    - ✓ Topographic
    - ✓ Vegetative
- Major Processes
  - Chemical
  - Physical or Mechanical
  - Biological
- Chemical – Forces Chemical Action
  - Solution
  - Carbonation
  - Hydration
  - Oxidation & Reduction
- Physical Forces Gravitational, Expansion, Water Pressure
  - Unloading & Expansion
  - Temperature changes and Expansion
  - Freezing, Thawing, & Frost Wedging
  - Salt Weathering
- Biological Weathering
  - Burrowing
  - Wedging
  - Plant Roots
- Effects of Weathering
  - Exfoliation (Flakin) – Exfoliation Domes
- Significance of Weathering
  - Soil Formation
  - Biomes and Biodiversity
  - Leaching / Enrichment



OCEANOGRAPHY

- Mass Movements
  - Activating causes
  - Forms of movement – Heave Flow Slide
- Landforms across the world
  - Rivers and lakes (Factual)
  - Mountain and Peaks (Factual)
  - Plateaus (Factual)

- Hydrosphere
  - Water on the Surface of the Earth
  - Hydrological Cycle
- Component
- Processes
- Submarine Relief Features
  - Oceans
  - Relief of the Ocean floor
  - Divisions of the ocean floor
- Continental Shelf
- Continental Slope
- Deep sea plain
- Oceanic deep and Trenches
- Minor relief features
  - Mid oceanic ridges
  - Seamount
  - Submarine canyons
  - Guyouts
  - Volcanic Islands
  - Fracture Zones
  - Hotspots
  - Coral Islands
  - Atoll
- Temperature and Salinity
  - Temperature of the Ocean Water
- Vertical
- Spatial
- Factors affecting Temperature distribution
- Latitude
- Unequal distribution of land & Water
- Prevailing wind
- Ocean Currents
- Horizontal & Vertical Distribution
- Salinity of the Ocean Water
  - Factors affecting salinity
- Evaporation and precipitation
- Fresh water flow from rivers
- Ocean currents
- Horizontals distribution of salinity
- Vertical Distribution of salinity
  - Density of Ocean Waters
- Waves, Ocean Currents, Tides



- Movements of ocean Water
- Factors influencing Movement
- Temperature
- Salinity
- Density
  - Motion – Horizontal and Vertical Currents
  - Waves
- Motion of waves and water molecules
- Characteristics of wave
- Crest and Trough
- Height
- Amplitude
- Period
- Length
- Speed
- Frequency
  - Tides
- Relation between Gravitational Forces and Tides
- Tidal currents
- Types of Tides
- Based on Frequency – Semi Diurnal, Diurnal, mixed
- Based on SME position – spring and Neap Tides
- Importance of Tides
  - Ocean Currents
- Primary Force that initiates the movement
- Heating of solar energy
- Wind
- Gravity
- Coriolis force
- Secondary force that influence the currents to flow
- Types of ocean currents:
- Surface currents & Deep water currents based on Depth
- Cold and Warm Currents based on Temperature
- Major Ocean currents of the World
- Effects of Ocean Currents
- Marine Resources
  - Underground water resource
  - Surface water resources
  - Inland water resources: Utilization of inland water resources
  - Oceanic Water Resources (Marine Resource)
  - Utilization of oceans by man
  - Water consumption patterns
  - Conservation of Water Resources
  - Techniques of Water Conservation
- Ocean Deposits and Corals
  - Terrigenous Deposits
  - Volcanic Deposits
  - Biotic deposits
- Neritic
- Pelagic ( Calcereous , Siliceous )
  - Abiotic Deposits



	<ul style="list-style-type: none"> <li>○ Coral Reefs</li> <li>○ Great Barrier Reef</li> </ul>
CLIMATOLOGY	
	<ul style="list-style-type: none"> <li>• Atmosphere <ul style="list-style-type: none"> <li>○ Composition</li> <li>○ Gases</li> <li>○ Water Vapour</li> <li>○ Dust Particles</li> <li>○ Structure</li> <li>○ Exosphere</li> <li>○ Thermosphere</li> <li>○ Mesosphere</li> <li>○ Stratosphere</li> <li>○ Troposphere</li> <li>○ Altitude vs. Temperature</li> </ul> </li> <li>• Inversion of Temperature <ul style="list-style-type: none"> <li>○ Temperature</li> <li>○ Factors controlling Temp distribution</li> <li>○ Distribution of Temp Month of January-July</li> <li>○ Range of Temp Month of January-July</li> <li>○ Inversion of Temperature</li> </ul> </li> <li>• Insolation and Heat Budget <ul style="list-style-type: none"> <li>○ Solar Radiation Heat Balance Temperature Insolation</li> <li>○ Aphelion and Perihelion</li> <li>○ Variability of Insolation at the surface of the Earth</li> </ul> </li> <li>• Day Season Year</li> <li>• Rotation on Axis, Angle of Inclination of sun rays, Length of the day</li> <li>• Transparency of Atmosphere, configuration of land in terms of its aspect. <ul style="list-style-type: none"> <li>○ Heat Balance</li> <li>○ Heating and cooling of atmosphere</li> </ul> </li> <li>• Conduction</li> <li>• Convection</li> <li>• Advection <ul style="list-style-type: none"> <li>○ Terrestrial Radiation</li> <li>○ Heat Budget of the Planet Earth</li> <li>○ Macro Budget</li> </ul> </li> <li>• Albedo</li> <li>• Shortwave Radiation</li> <li>• Long wave Earth Radiation <ul style="list-style-type: none"> <li>○ Variation in the net Heat Budget at the Earth's Surface</li> </ul> </li> <li>• Winds and Pressure belts <ul style="list-style-type: none"> <li>○ Atmospheric Circulation and Weather Systems</li> <li>○ Atmospheric Pressure</li> <li>○ Vertical variation of pressure</li> <li>○ Horizontal distribution of pressure</li> <li>○ World Distribution of Sea Level Pressure</li> <li>○ Factors affecting the velocity and direction of the Wind</li> <li>○ Pressure Gradient Force</li> </ul> </li> </ul>



- Frictional Force
- Coriolis Force
- Pressure and Wind (Cyclonic & Anticyclone Circulation)
- General Circulation of the Atmosphere – Pattern of Planetary Winds
- Latitudinal Variation of Atmospheric Heating
- Emergence of Pressure Belts
- Migration of Belts Following apparent Path of Sun
- Distribution of continents & Oceans
- Rotation of the Earth
- Circulation
- Simplified Global Circulation – Hadley Cell , Ferrel Cell
- Seasonal Wind
- Local Wind
- Land and Sea Breezes
- Mountain and Valley Winds
- Air Mass, Fronts, Cyclones and Jet Stream
  - Air mass & fronts
  - Cyclones
  - Thunderstorms
  - Tornadoes
  - Monsoons
  - Fronts
- Precipitation
  - Water in the Atmosphere
  - Water Vapour
  - Precipitation
  - Humidity – Absolute and Relative
  - Saturation – Dew Point
  - Evaporation and Condensation
  - Dew
  - Frost
  - Fog & Mist
  - Clouds
- Types – Cirrus, Cumulus, Stratus, Nimbus
- High – Cirrus, Cirrostratus, Cirrocumulus
- Middle – Altostratus, Altocumulus
- Low – Stratocumulus, Nimbostratus
  - Vertical Development – Cumulus and Cumulonimbus
  - Precipitation
  - Rainfall, Snowfall, Sleet Hail, Hailstones
  - Types of Rainfall
  - Conventional
  - Orographic
  - Cyclonic
  - World Distribution of Rainfall
- Climatic Zones of the World
  - Koppene’s Classification Climatic Zones
  - World Climate
  - The Hot, Wet Equatorial Climate
  - The Tropical Monsoon and Tropical Marine Climates
  - The Savanna or Sudan Climate



	<ul style="list-style-type: none"> <li>○ The Hot Desert and Mid-Latitude Desert Climates</li> <li>○ The Warm Temperate Western Margin (Mediterranean) Climate</li> <li>○ The Temperate Continental (Steppe Climate)</li> <li>○ The Warm Temperate Eastern Margin (China Type Climate)</li> <li>○ The Cool Temperate Western Margin (British Type Climate)</li> <li>○ The Cool Temperate Continental (Siberian) Climate</li> <li>○ The Cool Temperate Eastern Margin (Lauren-tian) Climate</li> <li>○ The Arctic or Polar Climate</li> </ul>
BIO-GEOGRAPHY	
	<ul style="list-style-type: none"> <li>• Soil Characteristics <ul style="list-style-type: none"> <li>○ Soil Characteristics</li> <li>○ Factors Responsible for Soil Formation</li> <li>○ Stages of Soil Formation</li> <li>○ Soil Forming Processes</li> <li>○ Soil Profiles and Horizons</li> <li>○ Soil Classification</li> <li>○ Soil Erosion and Conservation</li> </ul> </li> <li>• Vegetation resources <ul style="list-style-type: none"> <li>○ Types of natural vegetation</li> <li>○ Forests</li> <li>○ Significance of forests</li> <li>○ Economic significance, Ecological significance</li> <li>○ Cultural significance</li> <li>○ Factors of forest development</li> <li>○ Extent of forest cover</li> <li>○ Classification of forests</li> <li>○ Grasslands</li> <li>○ Desert vegetation</li> <li>○ Tundra Vegetation</li> <li>○ Economic utilization of forests</li> <li>○ Deforestation</li> <li>○ Deforestation in tropical forests</li> <li>○ Deforestation in temperate forests</li> <li>○ Rate and extent of deforestation</li> <li>○ Causes and factors of deforestation: Immediate causes of deforestation</li> <li>○ Indirect deforestation</li> <li>○ Underlying causes of deforestation</li> <li>○ Conservation of forests</li> <li>○ Forest conservation strategies</li> <li>○ Reforestation</li> <li>○ Monoculture plantation</li> <li>○ Afforestation</li> <li>○ Types of forestry</li> <li>○ Social forestry</li> <li>○ Agro-forestry</li> </ul> </li> </ul>



**HUMAN AND ECONOMIC GEOGRAPHY OF THE WORLD**

- **Demography and Census**
  - Concept of human resources
  - Factors affecting the distribution of Population
- **Geographical Factors**
- **Availability of water**
- **Landforms**
- **Climate**
- **Soils**
- **Economic Factors**
- **Minerals**
- **Urbanisation**
- **Industrialisation**
- **Socio-cultural factors**
  - Population Growth
- **Growth of Population**
- **Growth Rate of Population**
- **Natural growth of Population**
- **Positive Growth of Population**
- **Negative Growth of Population**
  - Components of Population change
- **Crude Birth Rate**
- **Crude Death Rate**
- **Migration – Place of Origin and Place of Destination**
- **Immigration**
- **Emigration**
- **Push Factors and Pull Factors**
  - Trends in Population Growth
  - Doubling time of world population
  - Spatial pattern of Population change
  - Impact of Population Change
  - Demographic Transition
- **Demographic Transition Theory**
- **Demographic Cycle**
  - Theories of population growth
- **Malthusian theory**
- **Marxian theory**
- **Demographic Transition Theory**
- **Optimum population**
- **Over-population**
- **Under-population**
  - Population Control Measures
  - World population distribution, Density and Growth
- **Continent-wide distribution of population**
- **Pattern of population density globally**
- **Population increase in the world**
  - Population Composition
- **Sex composition**
- **Sex Ratio**
- **Natural Advantage vs Social Advantage**
- **Age Structure**



- Age – sex Pyramid
- Expanding Populations
- Constant Population
- Declining Popoulation
- Literacy – literacy Rate
- Rural Urban Composition
- Occupational Structure
- Religion based Composition
  - Population problems
- Population problems of developing countries
- Population problems of developed countries
- Population Policies: of China, of India
  - Census 2011
- Census Terminologies
- Census of India important information
- Human Development
  - Growth vs Development
  - The four pillars of Development
- Equity
- Sustainability
- Productivity
- Empowerment
  - Approaches to Human Development
  - Measuring Human Development
- Income Approach
- Welfare Approach
- Basic Needs Approach
- Capability Approach
  - Internation Comparisions of Human Development
- Economic Activities
  - Primary Activities
- Hunting and Gathering Pastoralism
- Nomadic Herding
- Commercial livestock Rearing
- Agriculture
- Subsistence Agriculture
- Primitive Subsistence Agriculture
- Intensive Subsistence Agriculture
- Planation Agriculture
- Extensive Commercial Grain Cultivation
- Mixed Farming
- Dairy Farming
- Mediterranean Agriculture
- Viticulture
- Market Gardening and Horticulture – Truck Farming
- Cooperative Farming
- Collective Farming
- Mining
- Factors affecting Mining
- Methods of Mining – Open Cast and underground mining
  - Secondary Activities



- **Manufacturing**
- **Characteristics of Modern large scale Manufacturing**
- **Specialisation of Skills/ methods of Production, Mechanisation - Technological Innovation**
- **Access to market, Access to labour Supply, Access to Sources of Energy, Access to Transportaion and communication Facilities**
- **Government Policy**
  - **Classification of Manufacturing Industries**
- **Industries based on size**
- **Small Scale manufacturing**
- **Large Scale manufacturing**
- **Industries based on Inputs/Raw Materials**
- **Agro Based industries**
- **Mineral Based Industries**
- **Chemical based Industries**
- **Forest based Raw material using industries**
- **Animal Based industries**
- **Industries based on Output/Product**
- **Industries based on ownership**
- **Tertiary, Quaternary and Quinary Activities**
- **Types of Tertiary Activities**
- **Retail trading**
- **Trade and commerce**
- **Wholesale Trading**
- **Transport**
- **Communication**
- **Services**
- **People engaged in tertiary Activities**
- **Tourism**
- **Medical Services**
- **Quaternary Activities**
- **Quinary Activities**
- **Concept of Digital Divide**
- **Transport and Communication**
  - **Transport**
- **Modes of Transportation**
- **Land Transport**
- **Roads**
- **Railways**
- **Water Transport**
- **Sea Routes**
- **Inland Waterways**
- **Air Transport**
- **Pipelines**
  - **Communications**
- **Satellite communication**
- **Cyber space internet**
- **International Trade**
  - **History of international Trade**
  - **Basis of International Trade**
- **Difference in national resources**



- Population Factors
- Stage of Economic Development
- Extent of Foreign Investment
- Transport
  - Important aspects of International Trade
- Volume of Trade
- Composition of Trade
- Direction of Trade
- Balance of Trade
  - Types of International Trade
  - Case of Free Trade
  - WTO - World Trade Organisation and Regional Trade Blocs
  - Gateways of International Trade
- Ports
- Industrial Ports
- Commercial Ports
- Comprehensive Ports
- Inland Ports
- Out Ports
- Oil Ports
- Port of call
- Packet station
- Entrepot Ports
- Naval Ports
- Settlement
  - Types and Patterns of settlements
- Compact of Nucleated Settlements
- Dispersed settlement
  - Rural Settlements
- Factors affecting location of rural settlements
- Patterns of Rural settlements
  - Urban Settlements
- Classification of Urban Settlements
- Factors affecting location of rural settlements
- Functions of Urban Centre
- Classification of Towns on the basis of Forms
- Types of Urban Settlements
- Town, City, Conurbation, Megalopolis, Million City
  - Issues of Urbanization in India
  - Rural Urban Migration
  - Emergence of Slums
  - Inclusive Cities/Smart cities

## INDIAN GEOGRAPHY

- Physiography of India
  - Geological Region
  - Location
  - Physiographic Sub-Units
- Himalayans
- Northern Plains



- **Peninsular Plateau**
- **Thar Desert**
- **Coastal Plain**
- **The Islands**
  - **Mountain System**
- **Classification of The Himalayan System**
- **Regional Division of the Himalaya**
  - **The Peninsular - Peninsular Plateaus**
  - **Plains - Northern Plains of India**
  - **Lakes**
  - **Deserts**
  - **Indian Coasts and Islands**
- **Drainage System**
  - **Classification of Drainage**
  - **Himalayan Drainage**
  - **Indus river system**
  - **Indus drainage system**
  - **Ganga River System**
  - **Brahmaputra river system**
  - **Peninsular River System**
  - **East flowing Rivers**
  - **West flowing Rivers**
  - **Mains Rivers and their tributaries**
  - **Famous cities and river banks**
- **Climate**
  - **Factors influencing the climate of India**
  - **Monsoon**
  - **Mechanism of the Monsoon**
- **Classical Theory**
- **Modern theory**
- **Air mass theory**
- **Jet stream theory**
  - **EL NINO and LA NINA**
  - **Seasonal rhythm**
  - **Koppen's Climatic classification**
  - **Indian Droughts and Floods**
- **Soils in India**
  - **Soil Acidity**
  - **Soil textures**
  - **Minerals of Soil**
  - **Soil Erosion**
  - **Soil Conservation**
- **Natural Vegetation**
  - **Vegetation**
  - **Mangroves**
  - **Distribution of Forest Area**
  - **Forest Problems in India**
- **Population**
  - **Size, growth rate and distribution of population**
  - **India in World Population**
  - **Demographic transition**



- Census in India
- Ranking of States and Union
- Territories by population: 2001 & 2011
- Population Growth Rates
- Population: States and UT
- Decadal growth rate
- National Population Policy
- Density of population
- Literacy
- Literacy in major states
- Literacy rate in India: 1951-2011
- Ranking of States and UTs by 206 literacy rate: 2011
- Gender composition of the Population
- Trends in Sex Ratio in India
- Child sex ratio in age group 0-6 yrs
- Sex ratio of age 7 years and above population
- Old Age People
- Health Indicators
- Settlements and Urbanization
  - Rural Settlements
  - Factors affecting settlement patterns
  - Settlement types
  - Urbanization
  - Urban Agglomeration / Cities
- Land Resource
  - Land-use
  - Land capability classification
  - Causes of Land Degradation
  - Impact of Land Degradation
  - Steps taken by GOI
  - Sustainable Land Management
- Mineral Resource
  - Types of minerals: Metallic minerals
  - Non-metallic mineral
  - Distribution of minerals and mining regions
  - Distribution, production and international trade of Metallic minerals:  
Ferrous metals: Iron ore
  - Ferro-alloys and non-ferrous
  - Manganese
  - Chromium
  - Nickel
  - Tungsten
  - Antimony
  - Copper
  - Bauxite and Aluminium
  - Zinc; Lead
  - Tin
  - Gold
  - Silver
  - Platinum
  - Mineral chemicals



- Mica
- Potash
- Phosphate
- Nitrates
- Sulphur
- Conservation of mineral resources
- **Energy Resources**
  - Classification of energy
  - Production of conventional energy
  - General trends of energy production and consumption
  - Reserves and sources of energy
  - Coal
  - Nature and origin of coal
  - Constituents and kinds of coal
  - Coal fields and coal production
  - Byproducts of coal
  - Conservation of Coal
  - Petroleum
  - Nature and properties of petroleum
  - Origin and recovery
  - Exploration
  - Petroleum refining
  - Petroleum reserves
  - Producing areas
  - Consumption of petroleum
  - International trade
  - OPEC and its role in oil trade
  - Natural gas: Reserves and Production
  - Hydro-electricity
  - Advantages of hydro-electricity
  - Ideal conditions for generation of hydro-electricity
  - Distribution of potential hydro-power
  - Hydro-electric power generation in India
  - Atomic (nuclear) energy
  - Atomic: source minerals: Uranium
  - World distribution of Uranium
  - Production of Uranium
  - Thorium
  - Production of Atomic (Nuclear) Energy
  - Nuclear Energy
  - Alternative (non-conventional) sources of energy
  - Solar energy
  - Wind energy
  - Geothermal power
  - Tidal energy
  - Wave energy
  - Biomass energy
- **Agriculture Basic Terminologies**
  - Performance of the agriculture sector
  - Types of farming in India
  - Dry zone farming



- Organic farming
- Cropping seasons in India
- Cropping Pattern in India
- Agriculture regionalization
- Infrastructure factors: Seeds; Fertilizers; Irrigation
- Land use pattern in India
- Institutional Factors as land reform
- Horticulture sector in India
- Agricultural revolutions
- Agricultural labours
- Price Policy for Agriculture
- Agricultural marketing
- Agricultural Insurance
- Agricultural Census
- Major schemes in agricultural sector
- National Policy for farmers
- Impact of climate change on agriculture
- What is sustainable agriculture?
- Use of IT in agriculture
- Agriculture Issues and Challenges
- **Recent Developments in Agriculture Field**
  - NITI Aayog proposed the idea of taxation of agricultural income
  - Removing agricultural commodities from the essential commodities Act: NITI Aayog
  - Feminization of Agriculture
  - e-auction portal : e-Rakam for selling agricultural produce
  - “AGRI-UDAAN” – Food and agri-business acceleration 2.0 to bring startup revolution
  - APEDA (Agricultural and Processed Food Products Export Development Authority Act)
  - SMAM (Sub-Mission on Agricultural Mechanization)
  - Jute-ICARE Project
  - Project CHAMAN
  - Doubling the farmers income: Ashok Dalwai Committee
  - RKVY-RAFTAAR
  - Agro Irradiation Centers
  - Agricultural Marketing and Farm Friendly Reforms Index
  - National Food Security Act
  - Digitization and Agriculture
  - Direct Benefit Transfer in Fertilizer Sector
  - Draft Regulation on Fortification of Foods
  - Law Commission Recommendation on Food Laws
  - Concept of Modern Terminal Markets
  - Animal Husbandry, Dairying and Fisheries
  - e-Pashuhaat Portal
  - Schemes of Bio-Tech Kisan and Cattle Genomics
  - RashtriyaGokul Mission
  - Mission Fingerling
  - Ornamental Fishing
  - Agricultural Science Congress
  - RubSiS



- Ethanol Blending
- National Bureau of Plant Genetic Resources
- Amendments to the NABARD Act, 1981
- Revenue Insurance Scheme for Plantation Crops
- Neem Coating of Urea
- National Agriculture Market
- Productivity of Crops and conditions for growth
  - Wheat
- Conditions of growth
- Varieties
- Types of cultivation
- Production pattern
- International trade
  - Rice
- Conditions of growth
- Varieties
- Methods of cultivation
- Production pattern
- International trade
  - Maize (Corn)
- Conditions of growth
- Production pattern
- International trade
  - Barley
- Conditions of growth
- Production pattern
- International trade
  - Oats
  - Rye
  - Beverages
  - Tea
- Condition of growth
- Production pattern
- International trade
  - Coffee
- Types of coffee
- Conditions of growth
- Production pattern
- International trade
  - Cocoa
- Conditions of growth
- Production pattern
- International trade
  - Tobacco
- Conditions of growth
- Production pattern
- International trade
  - Fibre Crops
  - Cotton
- Varieties of cotton
- Conditions of growth



- Production pattern
- International trade
  - Jute
- Conditions of growth
- Production pattern
- International trade
- Substitutes of Jute: Flax, Hemp
- Raw Silk
- Production pattern
  - States
  - Natural Rubber
- Other sources of rubber
- Plantations in South-east Asia
- Production pattern
  - Sugarcane
- Conditions of growth
- Production pattern
- International trade
- Sugarbeet – Conditions of growth
- Production pattern
- Sugar industry
- Sugar consumption
- International trade.
- Industry
- Industrial development
- Iron and Steel Industry
- Location of iron and steel industry
- Development of iron manufacture
- Distribution of iron and steel industry
- Global steel production
- International trade in Steel
- Textile Industry
- Cotton Textile Industry: Location of the industry
- Recent trends in localization
- Distribution and production of cotton textiles
- Woollen textile industry: Location of the industry
- Silk textile industry: Raw silk manufacture
- Silk textile manufacturing
- Synthetic (artificial) silk industry
- Distribution of man-made fibre and fabrics
- Engineering Industries
- Machine tools and machines: Areas of production
- Industrial machinery: Textile machinery
- Agricultural machinery
- Manufacturing of transport equipment
- Automobile industry
- Shipbuilding
- Aircrafts Industry
- Fertilizer industry: Nitrogen fertilizers
- Phosphate fertilizers
- Potash fertilizers



- Agro-industries
- Synthetic rubber industry
- Pulp and paper industry: Essential conditions for pulp production
- Production of paper and paper board
- Newsprint
- Cement industry
- Distribution of cement industry
- Recent trends: Main global competitors
- Petroleum refining industry: Localization
- Site selection of petroleum refineries
- History of oil refineries
- World pattern of oil refining
- Petroleum products
- Industrial Regions
- Characteristics of industrial regions
- Delimitation of an industrial region
- Principal industrial regions of the world
- Industrial regions of Anglo America – USA, Canada, Western Europe and Central Britain, Germany, Belgium, Netherlands, France, Italy, Eastern Europe, Poland, Former USSR
- Eastern Asia – Japan, China, the 'Dragons', India, High tech patterns.
- Transport
- Importance and development of transport
- Means of transport
- Transport costs and economic distance
- Operating costs in transport
- Relative importance of means of transport: Railways, Roads, Pipeline, Oceans, Air transport
- Profits and freight rates
- Government's transport policy
- Ocean transport routes
- Inland waterways
- Main regions of inland waterways
- Railways: Factors affecting the railroads
- Distribution of railroads in the world
- Air transport: Factors influencing air transport
- Air transport in various continents
- Pipeline transport
- Petroleum (oil) pipelines
- Gas pipelines
- Recent Development in Transport Sector
- Rural electrification corporation: First green bond
- Time and costs over runs of infrastructure projects
- India's First Mega Coastal Economic Zone (CEZ) to come up in Maharashtra
- Logistic sector gets infrastructure status
- AIIB approves \$150 million for India infrastructure fund
- Ro-Ro Ferry service
- Bharatmala project for construction of 24,000 km of highway connecting Western and Eastern part
- Union Ministry of shipping is planning to expand Logistics Data Bank (LDB)



- Railways India Development Fund
- National Infrastructure Investment Fund
- Defence Innovation Fund
- Flexi Fare Method in Railway
- Rail Cadre Management
- TRI-NETRA in Railways
- National Rail Plan 2030
- India's First Caterpillar Train
- Green corridor concept
- Made in India 'Medha' train
- Antyodaya Express
- Smart Railway Station
- Yatri Mitra Seva
- National Highways Interconnectivity
- Vehicle Fleet Modernization Programme
- Transit Oriented Development Policy
- Logistic Efficiency Enhancement Programme
- Indian Bridge Management System
- National Road Safety Policy
- TARANG
- E-trans
- DEEP (Discovery of Efficient Electricity Price)
- GARV II APP
- Trading of Energy Saving Certificates
- Powers for all 24x7
- Draft National Electricity Plan
- Habitat Commitment Index
- Recent developments in Industrial Sector
- Disinvestment of PSUs
- Report titled "India's Labor Market: A New Emphasis on Gainful Employment"
- Wage code Bill in line of recommendations of 2nd National Commission on Labor
- CAR for the operation of Drones in India.
- Draft Evaluation template for the star rating of Minor Minerals
- Online database containing GIS-Enabled portal Maps and related information
- Chennai-Bangalore Industrial Corridor
- Apex Corridor Developmental Authority
- Tamra Portal
- Mining Surveillance System
- Coal Mitra
- M-SIPS for Electronic Sector
- Indian Enterprise Development Service
- Trade Receivables Discounting System
- SME Business Environment Index



**WORLD GEOGRAPHY**

- Continents Countries and Cities
  - Continents and Important Cities of the World
  - Important Cities Situated on the Banks of Rivers
  - Changed Names of Some Cities, States, and Countries
  - Distinctive Names of Countries/Towns – Geographical Epithets
  - Regional Grouping of Countries of the World
  - Economic Classification of Countries of the World