

# GENERAL STUDIES

## MODULES



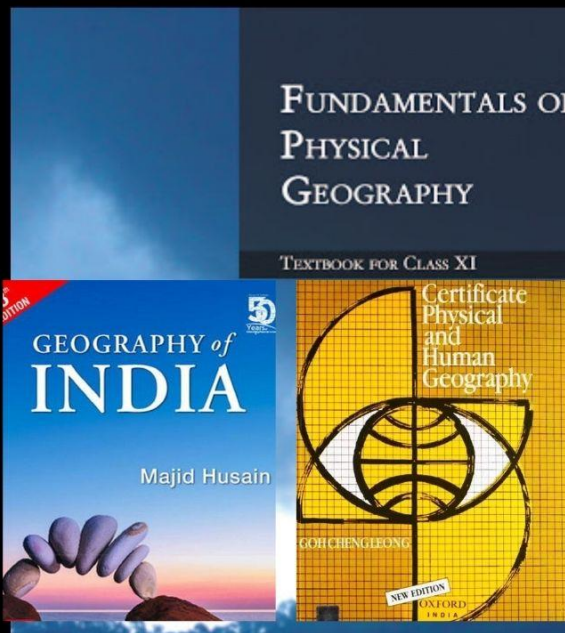
**PHYSICAL  
GEOGRAPHY**



**ENVIRONMENT  
ECOLOGY**



**SOCIAL  
ECONOMIC  
DEVELOPMENT**



**2024  
PRELIMS  
&  
MAIN**

[www.directionias.com](http://www.directionias.com)

# Geography Main /Prelims

**General Studies - MODULES**

**By : Neetu Singh**

Course Start in month of January 2024

Fee : 24000/- (each module fee : 8000/-) inc. 18% GST

**Offline / Online Live Classes : 1pm - 2.30 (Monday to Friday)**

**Course Start with NCERT & G.C LEONG**

**Physical Geography (India & World)**

**Environment /Ecology, Bio-diversity & Climate change**

**Economic and Social development**



Each modules classes will be 15 days; 1.5 hours duration; class will be held daily; each module 15 days total 45 days Live Online Classes., We provide conceptual clarity on each and every topic. modules includes 1 objective & Subjective question tests; Study material with complete coverage will be provided. Map practice as per requirement of topic

## **Biggest Role to play in your Prelims & Main Examination**

Geography in General Studies has at least 20%-30% weightage in prelims along with 50% weightage in GS PAPER 1 and 70% - 80% weightage in GS PAPER 3 in mains examination. You are required to get define and expertise training to make maximum of your attempts

## **New Pattern UPSC 28 - 35 Questions in Prelims Exam**

2023 Prelims have re-established that fundamentals of Geography cannot be ignored in GS preparations. In order to attain desired level of understanding and confidence customization is a must. Take informed decision and let it work in your favor

## **Why Join us for GS - Geography MODULES !**

We are specialized expertise in Geography training for UPSC, join in to glide through your GS. We believe each candidate's journey is unique, and there is no one-size-fits-all approach to UPSC preparation. Our perseverance provide structured guidance and help candidates stay on track for comprehensive syllabus coverage on customize training strategy accordingly to your your strengths and weaknesses

**Ultimate Learning Experience (P) Ltd.**

**Contact**



**Hari Bhawan :** 14A/103 WEA, Karol Bagh  
New Delhi - 05 (Opp Metro Pillar 112)  
**PH :** 011 - 35577975 (M) 9810382305  
Visit US : [www.directionias.com](http://www.directionias.com)

## Environment, Ecology, Biodiversity and Climate Change

Origin of Life forms	Ecosystem functions	Adaptation
Life on earth	Ecosystem Definitions	Homeostasis
Basic Concepts of Ecology	Functions and Properties of Ecosystem	Interaction between Species
Types of Ecology	The Structure/Components of Ecosystem	Ecotone
Ecological Hierarchy	Abiotic Components	Endemic Species
Scope of Ecology	Biotic Components	Keystone Species
Habitat & Ecological Niche	Ecosystem Dynamics	Indicator Species
Deep and Shallow Ecology	Flow of Energy in Ecosystem	Invasive Species
Ecological Principles	Trophic Levels	Speciation
Ecological Community	Food Chain	Terrestrial Ecosystems
Structure and Characteristics of a Community	Types & Significance of Food Chain	Terrestrial ecosystem
Stratification	Food Web	Forest Ecosystem in India
Ecotone	Models for Energy Flow	Grasslands
Ecological Dominance	Ecological Productivity	Tundra
Seasonal and Diurnal Fluctuation	Ecological Pyramid	Deserts
Periodicity	Biological Control	Mountains
Turnover	Population Ecology	Aquatic Ecosystem
Interdependence	Types of species	Aquatic ecosystem
Ecological Succession	Population Ecology	Factors affecting the productivity of aquatic ecosystems
Types and Process of Succession	Population Growth Models	Fresh water ecosystem
Climax Community	Methodology of Tiger census	Marine ecosystem
Range of Tolerance , Maximum Range	Methodology of Lion Census	Marine Organisms
Difference between Ecology , Environment and Ecosystem	Adaptation of Species and Interactions	Plankton
		Phytoplankton

Factors Affecting Phytoplankton Biodiversity

Importance of phytoplankton

Zooplankton

Sea-grass

Seaweeds

Human Modified Ecosystems

Nutrient Cycling

Concept of Biogeochemical Cycle

Parts of a Biogeochemical Cycle

Types of Biogeochemical Cycle

Carbon Cycle

Carbon cycle: Long term and Short term

Carbon act as Climate Buffer

Human Impact on the Carbon Cycle

Effects of high concentration of Greenhouse Gases

Hydrological Cycle

Nitrogen Cycle

Human Impact on the Nitrogen Cycle

Oxygen Cycle

Sulphur Cycle

Human Impact on the Sulphur Cycle

Phosphorus Cycle

Human Influence on Phosphorus Cycle

## BIODIVERSITY

Basics of Biodiversity

Biodiversity

Types of biodiversity

Patterns of biodiversity

Bio-geographical classification of World

Bio-geographical classification of India

Functions of biodiversity

Hotspots of biodiversity

Bio informatics

Eco Regions

Role of Traditional Knowledge in Biodiversity

Biopiracy

Animal and Plant Diversity

Plant and Animal Kingdom

Marine Mammals

Egg laying Mammals

Marsupials

Threats to biodiversity

Causes of Biodiversity losses

Effects of Loss of Bio-Diversity

Extinction of species

Mass Extinction

IUCN Red List and Classification Scheme

Biodiversity Conservation

Scheduled Animals in the Wildlife Protection Act

In-situ methods of Conservation

Protected Area Categories

Forms of Protected Areas

Biosphere reserves

Sacred forests and sacred lakes

World Heritage sites

Geo-heritage sites

Advantages of In-situ conservation

Disadvantages of In-situ conservation

Ex-situ methods of Conservation

Advantages of ex-situ preservation:

Disadvantages of Ex-situ conservation

Zoological Parks

Botanical Gardens

Seed banks

National Parks

Wildlife Sanctuaries

Biosphere Reserves

Species based conservation programmes

Project Tiger

Project Elephant	Major Estuaries in Indian coastal states	Threats to wetland ecosystems
Project Snow Leopard		Conservation of Wetlands
Vulture conservation project	Monitoring and Prediction of Health of Estuarine and Coastal Waters	About Ramsar Convention ‘
Crocodile conservation project		About Asian Water bird Census
Ganges dolphin project	Difference between Lagoon and Estuary	<b>RESOURCE DEGRADATION &amp; MANAGEMENT</b>
Indian Rhino Vision	Estuary ecosystem: Adaptations made in organisms	Land Resource
Other projects		Causes of land degradation
South Asia Wildlife Enforcement Network (SAWEN)	Conservation of Estuaries	Impact of land degradation
Important Coastal and marine Biodiversity Areas	Mangroves	Desertification
Global initiative	Mangroves in India	Sustainable Land Management
State of Protected Areas in the World	Importance of Mangroves	Forest Resource
MAB – Man and Biosphere Programme	Mangroves under threats	Definition of forests by FSI
World network of Biosphere Reserves	Legal and Regulatory Approaches for Protection	Types of Forest Cover
Biodiversity Hotspots	Community based mangrove regeneration	Forest Survey of India
CBD – Convention of Biological Diversity	Coral Reef	Types of Forests in India
Cartegana Protocol	About coral reefs	Deforestation
Nagoya Protocol	Geographical Conditions	Causes of Deforestation
Aichi Biodiversity Diversity	Types of Coral Reefs	Consequences of Deforestation on the Wildlife of India
Estuaries	Uses of coral reefs	Strategies for Reducing Deforestation
What are estuaries?	Concept of Bio-rock reefs	Government Programs for Conservation of Forests
Types of Estuaries	Threats to Coral reefs	Soil Resource
Importance of estuaries	Conservation of coral reef	Soil Characteristics and Soil formation process
Threats to estuaries	Wetlands	Factors Responsible for Soil Formation
	Types of wetlands	
	Wetlands in India	
	Importance of wetlands	

Soil Forming Processes	Ocean Thermal Energy Conversion	Basics of Pollution
Soil Profiles and Horizons	Tidal Energy	Sources of pollution
Soils in India	Wave energy	Effect of Modern Agriculture on Environment
Soils in World	Fuel Cell	Effect of Housing on Environment
Soil Erosion	Microbial fuel cell	Effect of Power Generation on Environment
Problems due to excessive irrigation	Biofuels	Effect of River Valley Projects (Water Resource Projects) on Environment
Soil Conservation	Biogas	Effect of Mining on Environment
Soil health card scheme	Geothermal Energy	Effect of Transportation Activities on Environment
Organic Farming	Solar Energy	Effect of Tourism on Environment
Water Pollution	New Energy Resources	Classification of pollutants
Surface Water Resource	Renewable Energy and Development	Pollution Indicator species
Ground Water Resources	Petroleum Conservation Research Association	Mining and Pollution
Sources of Water Pollution	Atomic Energy Bill	Mining and Environment
Measurement of Water pollution	Civil Liability for Nuclear Damage Bill	Sensitivity of Select Ecosystems to Mining
Causes of Water Pollution	National Electric Mobility Mission Plan	Impact of Mining
Harmful effects of water pollution	National Policy on Biofuels	Indirect Impact of Mining
Other terms associated with water pollution	Three Stage Nuclear Power Program	International Laws on Mining
Algal Bloom	Solar Renewable purchase Obligation	Main Act or Statue to regulate the impact of
Eutrophication	Petroleum Planning & Analysis Cell	Indian Mining Sector
Biomagnifications	New Energy Policy	Sustainable Mining
Arsenic contamination of water	Energy Organisation	Air Pollution
Mercury Pollution	<b>ENVIRONMENTAL POLLUTION</b>	
Oxygen Stratification		
Energy Resources		

Causes of air pollution	Effects of Noise Pollution on human health	Pollutants and their health impacts
Harmful Effects of air pollution		
Top-ten gases in air pollution	Corrective actions	E-waste status in India
Control of Air Pollution	Biological Pollution	Importance of the E-waste management
Concepts related to Air pollution	Sources of biological pollution	Steps taken for combating mounting E-Waste
Smog and its impact	Harmful effects from biological contaminants	E-waste (Management & Handling) Rules, 2016
Ozone depletion	Corrective actions	
Acid rain	Radioactive Pollution	Biomedical Waste Management
Respirable Suspended Particulate Matter (RSPM)	Sources of Radioactive Pollution	Hazards associated with waste management
Fly Ash	Harmful effects of Radioactive Pollution	Bio-Medical Waste Management Rules, 2016
Bharat stage Norm	Corrective actions	
National Air Quality Index	Thermal Pollution	Hazardous waste and its Characteristics
Comprehensive Environmental Pollution Index	Causes of Thermal Pollution	Hazardous and Other Wastes (Management & Trans-boundary Movement) Rules, 2016
Marine Pollution	Effect of Thermal Pollution	
Sources of marine pollution	Control of Thermal Pollution	Treatments Methods in Waste Management
Effects of marine pollution	Waste Management	Methods for sewage treatment
Concept of dead zone	Solid waste management	Treatments Methods for waste management
Concept of Ocean acidification	Types of Solid Waste	Hazardous waste treatment
Oil spill	What is solid waste management?	
Trash and Other Debris in ocean	Issues in solid waste management in India	
Microplastics and its impact	Waste Management Practices	
Coastal Regulation Zone Notification, 2011	Technologies for the Generation of Energy from Waste	<b>CLIMATE CHANGE</b>
Noise Pollution	Policy on Promotion of City Compost	Climate Change Basics
Causes of Noise pollution		What is Climate Change?
Noise Levels	E-Waste Management	What is Global warming?

Factors Affecting Climate Change	Impact of GM crop on environment	Carbon Sink
Causes of climate change	Emission of Methane from agricultural practices	Carbon Credit
Extra-Terrestrial Sources of Climate Change	Sustainable Agriculture Techniques	Carbon Tax
Terrestrial Sources of Climate Change	What is greenhouse effect?	<b>ENVIRONMENTAL GOVERNANCE</b>
Anthropogenic sources of Climate Change	Non green House Gases and Aerosols	Acts and Policies
Urbanization and climate change	Radioactive forcing and global warming	Constitutional Provisions related to environment
Pollution in metros and climate change	Ecological footprint	Wildlife Protection Act 1972
Real estate boom and environment degradation	Carbon footprint	Environmental Protection Act
Urban Heat Island	Global Warming Potential (GWP)	National Forest Policy
Polythene bags and pollution	Climate Change Impact	Biological Diversity Act 2002
Methane generation from waste	Impacts of the Climate Change	Schedule Tribes and Other Forest
Impact of agriculture on climate	Acid Rain	Dwellers Act 2006
Agriculture increases Carbon Dioxide Emissions	El Nino	Coastal Regulation Zone
Monoculture practice impacts biodiversity	La Nina	Wetland Rules 2010
Pollution due to use of chemical fertilizers	Ozone Depletion	National Green Tribunal
Soil-related effects	Ocean Acidification	Ozone Depleting Substance Rules
Fertilizer's Effect on the Environment	Global Warming & Health	Environment Impact Assessment (EIA)
Impact of livestock on environment	Health impacts of global warming	What is EIA?
Impact of use of Pesticides on environment	Mosquito-borne diseases	Brief History of EIA in India
	Ozone depletion and human health	EIA Process in India
	Climate change mitigation	The 8 steps of the EIA process
	Carbon Sequestration	Environmental Appraisal Process
		Drawback in EIA Process

Recommendations for Improvement	Global Environment Facility (GEF)	CAMPA
Environment Management	Agenda 21:1992	Joint Forest Management
EIA in India – Sectorial Analysis	Commission on Sustainable Development (CSD)	Social Forestry
Mining Sector	United Nations Convention to Combat Desertification (UNCCD)	National Bamboo Mission
Agricultural Sector	United Nations Framework Convention on Climate Change (UNFCCC): 1992	National Action Plan on Climate Change
Industrial Sector	Global Climate Finance Architecture	National Solar Mission
International Environmental Governance	India and Climate Change	Ganga Rejuvenation Plan
UNEP, UNDP	India's Position with regards to policy on Climate Change	Benefits of River Ganga
Centre for Biological Diversity	Observed Climate and Weather Changes in India	Facts about Ganga River Pollution and its impacts
WWF for Nature	NAPCC	Ecomark Scheme
IUCN - Red List	Indian Climate Change Assessment	Swachch Bharat Mission
Birdlife International	Indian Policy Structure Relevant to GHG Emissions	Swachch Bharat Kosh
International Conventions / Protocols & their Objectives	Environment related Institutions in India	Grants in Aid Scheme
Sustainable Development Goals	Pollution Control Boards	National Afforestation Program
Various Indices relate to Environment	National Green Tribunal	National River Conservation Plan
Climate Change Governance	National Board for Wildlife	National Mission for Clean Ganga
United Nations Conference on the Human Environment (Stockholm Conference)	Animal Welfare Board	National Air Quality Index (AQI)
United Nations Environment Programme (UNEP)	Central Zoo Authority	National Action Programme to Combat Desertification
Montreal Protocol and Kigali Agreement	National Biodiversity Authority	Pradhan Mantri Sauchalay Yojana
The Earth Summit: United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, 1992	Environmental schemes in India	UJALA Scheme
	National Wildlife Action Plan	Bharat Stage Norms
		Corporate Social Responsibility and Environment Protection
		National Parks

Tiger Reserves of India	Nalanda Model of Water Conservation	New Technologies for Waste Management
Elephant Reserves in India		
Mike Sites in India	Wetland Rules, 2017	Melting of Antarctic Iceberg
Biosphere Reserves	Permaculture and Monoculture	Melting of Gangotri Glacier
Biosphere Reserves in UNESCO's Map List	Sand Mining Guidelines	Carbon Capture
Ramsar Wetland Sites	Coastal Erosion (Parali Island)	Black Carbon
Natural World Heritage Sites	Bottom Trawling to Deep Sea Fishing	30th Montreal Protocol and World Ozone Day
List of Sacred Groves	'Wadi' Model	El-Nino Caused Record CO2 Spike
Mangrove Sites in India	Re-greening of Village Commons Project	Glaciers in Asia to sink
Pollution	Warsaw International Mechanism for Loss and Damage	Tropics emit more Carbon
Key activities and Likely Associate Air Pollutants		Climate change impact on Natural Heritage Sites - Impact on Sunderbans
Respiratory Irritants and Toxic Chemicals	Namami Ganga Programme	Marine Diversity in Antarctica under threat
Recent Developments	River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016	Carbon Credit
Mobile Tower Radiation	Smart Ganga City Scheme	2nd Kyoto Protocol
Shrinking of Cauvery Delta	Ganga Task Force	Green Metro System
Use of Garbage to Construct Road	Ganga, Yamuna termed 'living persons'	Negative Emissions
Moss as Pollution Monitor	National Capacity Building Project for Waste Management	Geo-engineering Climate Change
Graded Plan for Air Pollution		Sequestering CO2
Air Quality Index	NGT Bans Plastic	Bonn Challenge
Polluter Pay Principle	Mission Innovation	COP-23
Pesticide Poisoning	Tribunal – Dumping Waste in Ganga	Air Quality Index likely to be added to 'playing condition'
Aerosols	Ease in Norms for Sewage Plants	HFCs - India to eliminate use by 2030
Anti-Smog guns		Kigali agreement
Particulate matter	Organic Waste to Make Green Fuel	

Carbon Neutrality Concept	Structure of the Earth's Interior	Mass movements & their impact
Marrakesh Climate Change Conference	Mechanical and Chemical categorization of internal structure	Erosion Transportation & Deposition
International Solar Alliance (ISA)	Geology and Rock System	Earthquakes and Volcanism
Kyoto Protocol (2nd Commitment 2013-20)	Minerals	Earthquakes: Reasons, Distribution & impact
Climate Change Performance Index	Major Elements of the Earth's Crust	Volcanism
<b>PHYSICAL GEOGRAPHY WORLD AND INDIA</b>	Physical Characteristics	Types and distribution of Volcanoes
Universe	Classification -	Volcanic Landforms (intrusive)
Theories of evolution of Universe	Rocks (Aggregate of Minerals)	Distribution of Continents & Oceans
Star Formation	Classification	Theories
Formation of planets	Igneous	Continental Drift Theory
Earth Evolution& Basics	Sedimentary	Convectional Current Theory
Evolution of Earth	Metamorphic	Mapping of the Ocean Floor
Evolution of Atmosphere	Rocks & landforms	Sea Floor Spreading
Evolution of Hydrosphere	Rocks & Soils	Plate Tectonics
Earth's Geological time scale	Geomorphic Processes	Isostasy
Origin of life	Endogenic Forces	Landforms and their evolution
The Earth's Movements- Revolution and Rotation and Seasons	Diastrophism	Causes of landform development
Inclination of the Earth's Axis and its effects	Orogenic	Geomorphic Processes
<b>GEOMORPHOLOGY</b>	Epierogenic	Geomorphic Agents
Earth's Interior	Earthquakes	Geomorphic Agents and Landforms
Sources of Information about the Interior (Direct Sources, Indirect Sources - Earth Quake Wave, Volcanoes)	Plate movements	Running Water
	Volcanism	Development of a river System
	Exogenic Forces	Erosion Landforms
	Denudation Processes	
	Weathering & its Significance	

Depositional Landforms	Factors affecting Temperature distribution	Oceanic Water Resources (Marine Resource)
Ground Water (Karst Topography)	Horizontal and Vertical Distribution	Utilization of oceans by man
Erosion Landforms	Salinity of the Ocean Water	Water consumption patterns
Depositional landforms	Factors affecting salinity	Water Conservation and Management (Techniques)
Glaciers	Horizontals distribution of salinity	Ocean Deposits and Corals
Erosion Landforms	Vertical Distribution of salinity	Terrigenous Deposits
Depositional Landforms	Density of Ocean Waters	Volcanic Deposits
Waves and Currents	Movements of Ocean Water	Biotic deposits
Winds	Factors influencing Movement	Abiotic Deposits
Erosion Landforms	Waves	Coral Reefs
Depositional Landforms	Motion of waves	Probable origin of Coral Reef
Landforms across the world	Characteristics of wave	Types and significance of Coral Reef
Rivers and lakes	Tides	Issue of Coral Bleaching
Mountain and Peaks	Types of Tides	<b>CLIMATOLOGY</b>
Plateaus	Importance of Tides	Atmosphere
<b>OCEANOGRAPHY</b>	Ocean Currents	Composition of the Atmosphere
Hydrosphere	Characteristics of Ocean Currents	Structure of the Atmosphere
Water on the Surface of the Earth	Types of ocean currents:	Solar Radiation, Heat Balance and Temperature
Hydrological Cycle	Major Ocean currents of the World	Solar Radiation and Isolation
Submarine Relief Features	Effects of Ocean Currents	Heating and cooling of atmosphere
Relief of the Ocean floor	Marine Resources	Terrestrial Radiation
Divisions of the ocean floor	Surface water resources	Heat Budget of the Planet Earth
Minor relief features	Ground water resources	Temperature
Temperature and Salinity	Inland water resources	
Temperature of the Ocean Water		

Factors Controlling Temperature Distribution	Tornadoes	Geological Divisions
Distribution of Temperature	Water in the Atmosphere	The Peninsular Block
Atmospheric Circulation and Weather Systems	Water Vapour	The Himalayas and other Peninsular Mountains
Atmospheric Pressure	Humidity – Absolute and Relative	Indo-Ganga-Brahmaputra Plain
Vertical variation of pressure	Saturation – Dew Point	Physiographic Divisions
Horizontal distribution of pressure	Evaporation and Condensation	Drainage System
World Distribution of Sea Level Pressure	Dew	Drainage Patterns
Factors affecting the velocity and direction of the Wind	Frost	Drainage System of India
General Circulation of the Atmosphere – Pattern of Planetary Winds	Fog & Mist	Himalayan Drainage System
Latitudinal Variation of Atmospheric	Clouds	River Systems of Himalayan Drainage
Heating	Precipitation	Indus river system
Emergence of Pressure Belts	Rainfall	Ganga River System
Hadley Cell , Ferrel Cell, Polar Cell	Snowfall	Brahmaputra river system
Seasonal Wind	Sleet Hail	Peninsular Drainage System
Local Wind	Hailstones	River Systems of Peninsular Drainage
Land and Sea Breezes	Types of Rainfall	Small Rivers Flowing Towards East and West
Mountain and Valley Winds	World Distribution of Rainfall	Climate
Air Mass, Fronts, Cyclones and Jet Stream	Climatic Zones of the World	Factors influencing the climate of India
Air mass & fronts	World Climate	Monsoon
Cyclones	Koeppen’s Scheme of Classification of Climate	Mechanism of the Monsoon
Thunderstorms	Climatic Zones of World	Classical Theory
	<b>PHYSICAL GEOGRAPHY OF INDIA</b>	Modern theory
	Physiography of India	Air mass theory
	Location	Jet stream theory
	Geopolitical Significance of India	

EL NINO and LA NINA & their impact

The rhythm of Seasons

The cold weather season

The hot weather season

The southwest monsoon season

The retreating monsoon season

Climatic Regions of India

Soils in India

Classification of Soils

Soil textures

Issue of Soil degradation & Soil Erosion

Soil Conservation

Natural Vegetation

Types of Forests in India

Forest Cover in India

Forest Conservation

Forest Problems in India

## **SOCIAL- ECONOMIC DEVELOPMENT**

Land Resource

Land-use Pattern and changes

Problems of Land Resources:

Land Degradation: Causes and Impact

Concept of Land Degradation Neutrality

Land Use Planning and Policy

Water Resources

Extent of Water Resources

Water Resource Potential of India

Utilization and related problems (Pollution)

Inter- state water disputes in India

Water management, conservation and Development

National Water Policy

Mineral Resources

Types of Mineral Resources

Distribution Pattern of Minerals in World

Major Mineral Belts of India

Problems related to mining

Conservation of Mineral Resources

National Mineral Policy, 2019

Energy resources

Classification of Energy Resources

Distribution and production trend of major energy Resources

Coal

Petroleum

Natural gas

Strategic Oil Reserves

Exploration of Coal Bed Methane

Non-Conventional Energy Resources

Solar Energy

Wind Energy

Geothermal

Nuclear Energy Resources: Challenges and prospects in India

Recent Debates on Resources

Geopolitics of Natural Resources

Globalisation and Unsustainable exploitation of natural resources

Depletion of natural resources versus Economic Growth

Changing Pattern of Land Use and Causes

Water Crisis: Causes, Conflicts and Resolution

Energy Crisis

Challenges and constraints faced by coal sector

Challenges in Hydropower sector

Renewable Energy: way toward sustainability

Energy Security: Energy Policy and strategy in India

## **AGRICULTURE**

Agriculture Basic Terminologies

Cropping pattern	Agriculture Market Produce Committees: Issues	Efforts and Remedies to ensure food security
Agriculture Productivity		
Agriculture Intensity	National Agriculture Market (NAM)	Agricultural in Discussion
Land capability	Agricultural Produce and Livestock Marketing (Promotion and Facilitating) Act (APLM)	Controversy over GM Crops: Benefits and Issues
Location of agriculture		Impact of climate Change on Agriculture
World Agriculture Typologies	National Livestock Mission	
Salient features of Indian Agriculture	National Programme for Bovine Breeding and Dairy Development (NPBBD)	Evergreen Green Revolution for Sustainable Livelihood
Problems of Indian Agriculture		Rainbow Revolution
Factor Affecting Agriculture	Rashtriya Gokul Mission	Blue Revolution: Impact on Rural Economy
Geographical factors	Agriculture Export Policy, 2018	Climate Smart Agriculture
Institutional factors	Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)	Need of Agriculture Diversification
Technological factors	Pradhan Mantri Annadataaay Sanrakshan Abhiyan (Pm-Aasha)	Mixed farming: Hedging Agriculture Risks
Major Crops and conditions for growth	Operation Greens	
Regionalization of Agriculture	Dairy Processing & Infrastructure Development Fund (DIDF)	Problems and Prospects of dry-zone agriculture
Various Revolutions in Agriculture Sector	Fisheries and Aquaculture Infrastructure Development Fund (FIDF).	Plantation Agriculture: Issues involved
Green Revolution		Challenges of increasing Agriculture Productivity and Production
Impact of Green Revolution	Agriculture Census	
Evergreen Revolution	Food Security	New 'White Revolution': Need, Scope and Challenges
White Revolution		
Operation Flood	Nature of Food Insecurity: Duration, Severity and types	Contract Farming: Benefits and Challenges
Blue Revolution		
Agricultural Policies and Initiatives	Trend and Pattern in Food Insecurity	Role of infrastructural and institutional factors in the recent transformation of Indian agriculture
Minimum Support Price: Benefits and Challenges	Causes and Geography of famine	
	Key Dimension of food security	

Impact of advanced agricultural technologies on the Environment

Soil Health Card scheme and rationalisation of fertilizer subsidies

Food Security: India's Vulnerability and way-out

## **INDUSTRY**

Classification of Industries

Factors affecting location of Industries

Weber's Model of Industrial Location

Losch theory of Profit Maximization

Various Industries: Location, Prospects and Challenges

Iron and Steel Industry

Textile Industry

Jute Industry

Auto Mobile Industry

Fertilizer Industry

Agro-based Industries

Other Industries

Industrial Regions and its Characteristics

Major Industrial Regions of the World

Industrial Regions of India

Industrial Policies and Development

A Scheme for Promotion of Innovation, Rural Industry and Entrepreneurship

Scheme of Fund for Regeneration of Traditional Industries

Stand Up India

Fourth Industrial Revolution

Role of Industrial development in minimizing regional inequalities

Problems of Industrial regions

Factors behind the growth and present location pattern of automobile industry in India

Pharmaceutical industry: Locational pattern and reasons

Sugar industry: Problems and challenges of current pattern

Food Processing Industry: Untapped Potential

Agro based Industries: Problems and Prospects

Impact of agro-based industries on cropping pattern

Tourism: Prospects and Impact on Environment

## **TRANSPORT AND COMMUNICATION**

Land Transport

Roads

Classification of roads

National Highway Grid

Problems and Prospects

Bharatmala Pariyojana

Railways

Significance and Problems of Indian Railways

Dedicated Freight Corridors

Privatisation of Railways

Pipelines

Significance, Distribution and Challenges

Water Transport

Inland: National Waterways

Factors affecting Inland waterways

Significance and Challenges

Jal Marg Vikas Project

Seaways and Oceanic Route

Shipping

Major Ports of World and India

Challenges in Port Development

Sagarmala Project

Air Transport

National Airways

National Civil Aviation Policy

Regional Connectivity Scheme (UDAN)

International Airways

Communications

Communication Infrastructure

National Telecom Policy	Various Organisation Related to International Trade	Components of Population growth
Major Issues in Transport and Communication	Regional Trade Blocks	Demographic Dividend
Role of Transport in Regional Development	Foreign Trade: India	Demographic Window of Opportunity
Need for holistic transport planning to improve the city's mobility	Trends in India's Foreign Trade	Components of Population change
Carbon footprint of the transport sector	Composition Indian Trade	Birth Rate
Road Transport: Investment Challenges	Direction of India's Foreign Trade	Death Rate (Mortality Rate)
Inland Waterways: Development challenges and prospects	Trade Pattern and Policies	Migration
Sea Ports	Changing Pattern of India's foreign trade	Factors responsible for migration
Problem of Port Development	Challenges and prospects of foreign trade of India	Type of Migration
Analysis of Sagarmala Project	Impact of trade liberalisation on the geographical distribution of industries	Issues related to migration
Environmental issues of maritime shipping	Neo-liberal reforms in Africa: Race of India and China	Migration pattern in world and India
Role of Transport in Regional Development	<b>DEMOGRAPHY AND CENSUS WORLD &amp; INDIA</b>	World Migration Report, 2023
Eco Tourism: Way toward Responsible Tourism	Concept of human resources	Population Composition
Trade	Factors affecting the distribution of Population	Age Sex Pyramids & their significance
World Trade Pattern	Population growth	Trends and Pattern in Sex Ratio
Major Oceanic Trade Routes	Theories of Population Growth	Initiatives to improve Sex ratio
Basis of Overseas Trade	Malthusian Theory	Trends and Patterns in Literacy
Types of International Trade	Marxian Theory	Government's Efforts
Bilateral Trade	Demographic transition theory	Fertility Rate
Multilateral Trade	Optimum Population Theory	Impact of Population Change
	Size, growth rate and distribution of population	Population Policies
		Need for revision of National Population Policy
		Population problems

Global Nutrition Report, 2023

Global Hunger Index

### **HUMAN DEVELOPMENT**

Growth v/s Development

Approaches to Human Development

Human Development Index

International comparisons of Human Development

World Development Report, 2023

Human Development Report

### **MAIN FEATURES OF INDUSTRIAL DEVELOPMENT IN INDIA**

Roles of private sector and public sector, Investment in the industrial sector, employment, productivity, profit etc.

Strategies for disinvestment and privatization

Role of Small, Medium and Micro enterprises, Government Policy, main problems, effects of globalization

New Manufacturing Policy

Industrial disbursal and Industrial corridors

SEZs- Main issues like land use, relocation of same industries that exist, exports earnings vs loss of tax income

Industrial sickness, institutional mechanism to support the sick industries, exit policy issues

Main constraints in the industrial development of India

Effects of globalization on industries, Sub-prime crisis and sovereign debt crisis on Industry in India

Industrial Finance in India: Role of development banking, commercial banking, venture capital, angel capital in industrialization and promotion of entrepreneurship

Make in India achievements

### **AGRICULTURAL REVOLUTIONS IN INDIA**

Green Revolution

White Revolution – Operation Flood

Yellow Revolution

Blue Revolution

Golden Fibre Revolution: Jute

**These are the topics that will be covered in the three parts of GS geography as we cover.**

**Do note that Map items as per the topics will be also covered**