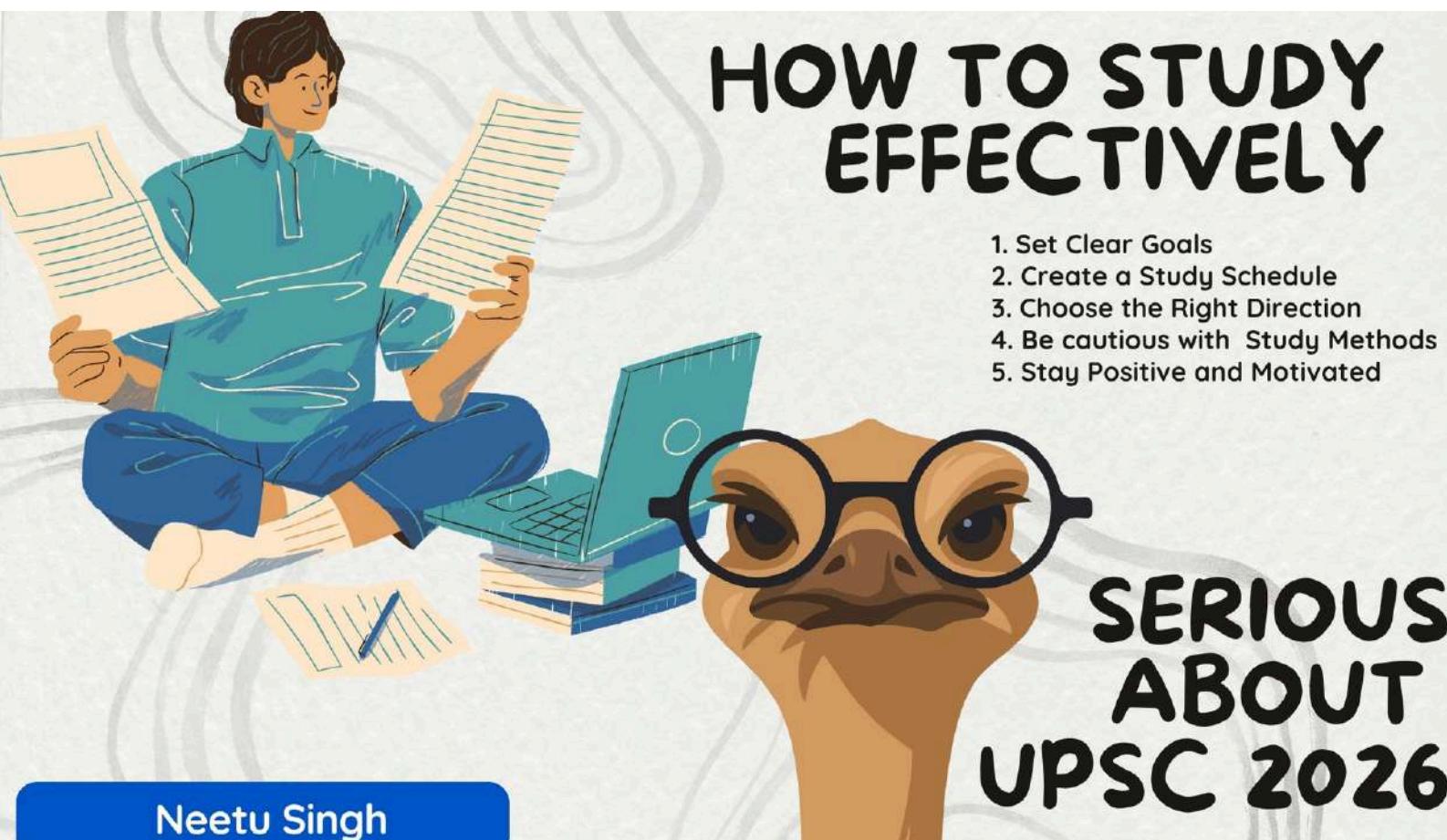


# HOW TO STUDY EFFECTIVELY

1. Set Clear Goals
2. Create a Study Schedule
3. Choose the Right Direction
4. Be cautious with Study Methods
5. Stay Positive and Motivated



**Neetu Singh**

**The journey begins by highlighting the critical importance of a well-defined strategy. With an extensive syllabus that spans physical, human, and regional geography, a clear plan is essential to maximize efficiency and ensure thorough coverage of all key areas.**

Geography has emerged as the most popular optional subject among candidates preparing for competitive examinations, particularly the UPSC Civil Services Mains.

## **Why Geography Optional is i am not from Geography Background.**

Geography Optional the study of is about more than just memorizing places on a map. It's about understanding the complexity of our world appreciating, the diversities, and in the end, it is about using all that knowledge to crack Optional and GS requirement.

**Technically the content matter of Geography has three approaches, viz.**

- Theoretical –Geographical Thought and Physical Geography build up the theoretical and ideological foundations of Geography.
- Methodological – Methods applied for Geographic studies i.e. integration of content matter to strengthen the methodological and quantitative foundations of Geography.
- Systematic Approach –Environment and Ecology, Human Geography address the contemporary issues in Geography

Geographers strive to understand Earth's surface and the processes that shape it, the links between humans and the natural environment, and the spatial linkages among humans and their activities. The geographer is concerned with the how, why, and where of these reciprocal relationships.

**Geography Optional paper**—a fact clearly reflected in the data provided in the table. The comprehensive and interdisciplinary nature of Geography makes it a powerful subject for those who approach it with a well-crafted strategy and the benefit of expert insights.

With the **right preparation**, Geography can become a strong pillar of your UPSC journey. Now, embark on our specially curated guide designed to help you master this subject and pave your way to success in the UPSC exam.



For the last **23 years Geography Optional** has proved to be the most selected and most successful optional. Our Top Ranks : 2010 (Pulkit) AIR 5th, 2011 (Sundraj) AIR 5th, 2012 (Arun) AIR 6th, 2013 (Chanchal Rana) AIR 7th, 2014 (Suharsha) AIR 5th 2015 (Vipin Garg) AIR 20th, 2016 (Samuya) AIR 4th, 2017 (Pratham) AIR 5th, 2018 (Girdhar) AIR 61th 2019 (Gunjan Singh) AIR 16th 2020 (Ashiware Verma) 2021 AIR 4th (Muskan Srivastava) AIR 98 (Shivang Srivastava) AIR 102 **Best Geography Institute for civil services examination.**



Highest Marks in this Institute in UPSC

**The Geography Optional Topper scored 306 marks out of 500(AIR 12) 2021  
YASHARTH SHEKHAR.**

**The Geography Optional Topper scored 327 marks out of 500 AIR 5 2017  
PARTHAM KAUSHIK.**

### **Nature of Questions in Geography Optional**

**The first area of inquiry is how to understand and respond to environmental change.**

- How are we changing the physical environment of Earth's surface?
- How can we best preserve biological diversity and protect endangered ecosystems?
- How are climate and other environmental changes affecting the vulnerabilities of human–environmental systems?

**The second area of inquiry is how to promote sustainability.**



- How and where will 10 billion people live?
- How will we sustainably feed everyone in the coming decade and beyond?
- How does where people live affect their health? Added to this question is how the inter connections of people affects health—particularly in the context of regional and global health epidemics.

**The third area of inquiry is how to recognize and cope with the spatial reorganization of economy and society.**

- How is the movement of people, goods, and ideas transforming the world?
- How is economic globalization affecting inequality?
- How are geopolitical shifts influencing peace and stability?

## **UPSC CHANGING TRENDS/ PATTERN IN QUESTIONS**

### **1. SUBJECT OF SYNTHESIS: INTERDISCIPLINARY NATURE**

# PHYSICAL GEOGRAPHY

01

## Geomorphology

Geomorphology is the scientific study of landforms and the processes that shape the Earth's surface. It explores how mountains, valleys, rivers, coastlines, deserts, and other features are formed and transformed over time due to natural forces.

02

## Environmental Geography

Environmental geography is a branch of geography that explores the interactions between humans and their natural environment. It bridges the gap between physical geography (the study of natural features and processes) and human geography (the study of human societies and their activities).

03

## Climatology

Climatology is the scientific study of climate, which refers to the long-term patterns and averages of weather in a particular region or across the entire planet. It involves analyzing data such as temperature, precipitation, humidity, wind, and atmospheric pressure over extended periods—typically decades or centuries—to understand trends, variations, and the factors influencing them.

04

## Oceanography

Oceanography is the scientific study of the oceans, including their physical, chemical, biological, and geological aspects. It covers everything from the movement of ocean currents to the life forms that inhabit the sea, and the composition of seawater to the structure of the ocean floor.

05

## Biogeography

Biogeography is the scientific study of the distribution of living organisms—plants, animals, and microbes—across the Earth and through geological time. It explores patterns of species distribution and the processes that result in these patterns.

## GEOGRAPHY & ENVIRONMENT INSTITUTE



ANALYSIS OF PREVIOUS YEAR QUESTIONS IN GEOGRAPHY OPTIONAL

Analyzing previous year questions (PYQs) is a crucial strategy for aspirants preparing for Geography Optional in competitive exams. Here's why this practice is so valuable:

### **1. Understanding Exam Pattern and Trends**

PYQs help identify the recurring themes, important topics, and the weightage given to different sections. This allows aspirants to prioritize their preparation and focus on high-yield areas.

### **2. Familiarity with Question Framing**

By reviewing past questions, students become familiar with the language, structure, and depth of questions asked. This reduces surprises in the actual exam and builds confidence.

### **3. Identifying Important Topics**

Certain topics are frequently repeated or rephrased over the years. Analyzing PYQs helps in recognizing these “hotspots,” ensuring that no crucial area is left uncovered.



### **4. Effective Revision and Practice**

Solving previous year questions serves as an excellent revision tool. It helps in self-assessment, time management, and refining answer-writing skills specific to Geography Optional.

### **5. Avoiding Redundant Study**

PYQ analysis prevents wastage of time on less relevant topics. It streamlines preparation by highlighting what is actually important from the exam perspective.

### **6. Developing Analytical Approach**

Geography questions often require analytical and critical thinking. Practicing with PYQs enhances the ability to interlink concepts and present balanced, well-structured answers.

## **Geography Optional Syllabus & Trends**

### **QUESTION PAPER ANALYSIS (PHYSICAL GEOGRAPHY -PAPER-I)**

**1991-2025**

### **PHYSICAL GEOGRAPHY (SYLLABUS)**

**1. Geomorphology :** Factors controlling landform development; endogenetic and exogenetic forces; Origin and evolution of the earth's crust; Fundamentals of geomagnetism; Physical conditions of the earth's interior; Geosynclines; Continental drift; Isostasy; Plate tectonics; Recent views on mountain building; Vulcanicity; Earthquakes and Tsunamis; Concepts of geomorphic cycles and Landscape development ; Denudation chronology; Channel morphology; Erosion surfaces; Slope development ; Applied Geomorphology : Geohydrology, economic geology and environment.

**2. Climatology :** Temperature and pressure belts of the world; Heat budget of the earth; Atmospheric circulation; atmospheric stability and instability. Planetary and local winds; Monsoons and jet streams; Air masses and front genesis, Temperate and tropical cyclones; Types and distribution of precipitation; Weather and Climate; Koppen's, Thornthwaite's and Trewartha's classification of world climates; Hydrological cycle; Global climatic change and role and response of man in climatic changes, Applied climatology and Urban climate.

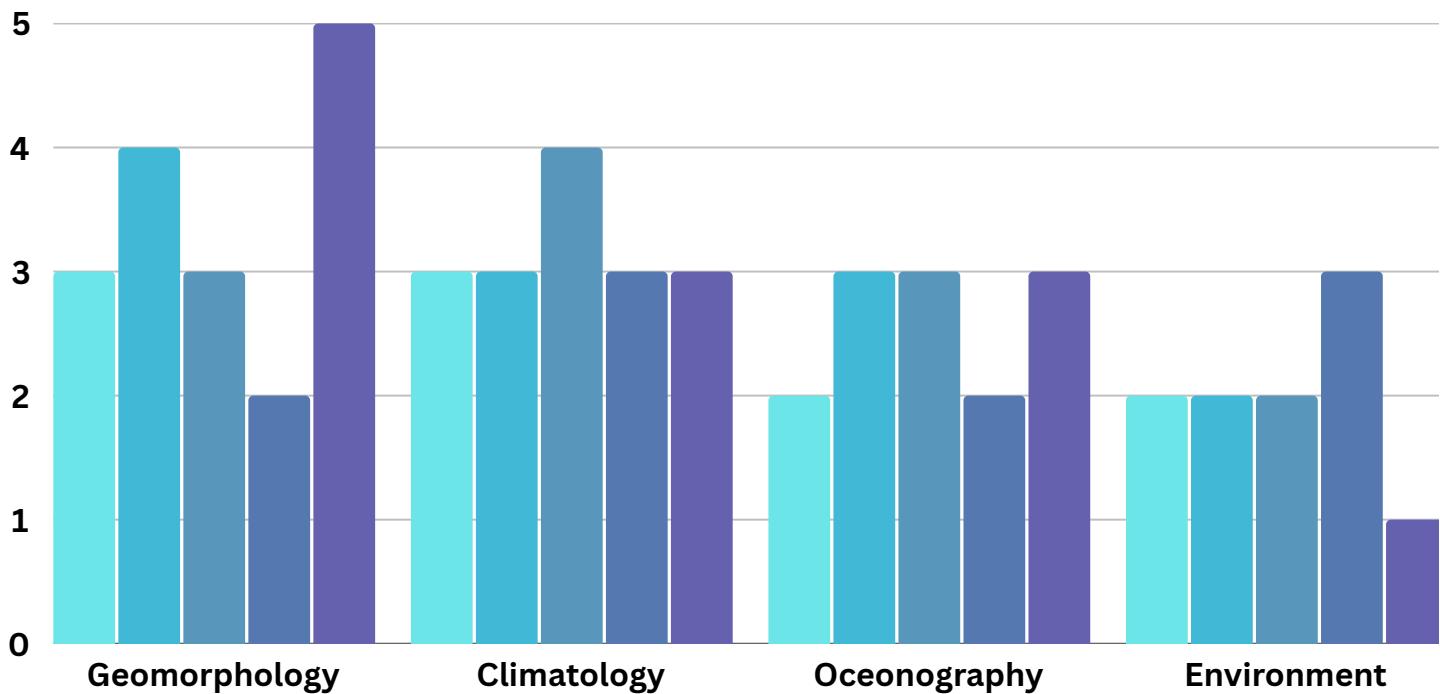
**3. Oceanography :** Bottom topography of the Atlantic, Indian and Pacific Oceans; Temperature and salinity of the oceans; Heat and salt budgets, Ocean deposits; Waves, currents and tides; Marine resources: biotic, mineral and energy resources; Coral reefs, coral bleaching; sea-level changes; law of the sea and marine pollution.

**4. Biogeography :** Genesis of soils; Classification and distribution of soils; Soil profile; Soil erosion, Degradation and conservation; Factors influencing world distribution of plants and animals; Problems of deforestation and conservation measures; Social forestry; agro-forestry; Wild life; Major gene pool centers.

**5. Environmental Geography :** Principle of ecology; Human ecological adaptations; Influence of man on ecology and environment; Global and regional ecological changes and imbalances; Ecosystem their management and conservation; Environmental degradation, management and conservation; Biodiversity and sustainable development; Environmental policy; Environmental hazards and remedial measures; Environmental education and legislation.



**QUESTION TREND (2021- 2025)**  
**Trends Last 5 Years**



Compilation of questions asked in UPSC Main Examination from 1991-2025 is to help you in comprehending the question trend and mould your answer writing skills accordingly.

**Geomorphology :** Factors controlling landform development; endogenetic and exogenetic forces; Origin and evolution of the earth's crust; Fundamentals of geomagnetism; Physical conditions of the earth's interior; Geosynclines; Continental drift; Isostasy; Plate tectonics; Recent views on mountain building; Vulcanicity; Earthquakes and Tsunamis; Concepts of geomorphic cycles and Landscape development ; Denudation chronology; Channel morphology; Erosion surfaces; Slope development ; Applied Geomorphology : Geo hydrology, economic geology and environment.

2025 : Explain the causes of glacial lake outburst flood.

2025 : What is solifluction? What are its impacts?

2025 : What geological and tectonic processes lead to the formation of nappes in orogenic belts?

2025 : How does denudation chronology help in understanding the sequential development of landscapes and landforms? Elucidate.

2025 : “The Himalaya is still rising.” Expand this statement and describe the processes involved in it with suitable sketches and diagrams.

2024 : What are **truncated spurs**? Where and how are they formed?

2024: Examine the recent views on **mountain building process** and divide the world mountains on the basis of their genesis .

2024: What is a **Yazoo stream**? Why are Yazoo basins the areas of repeated flooding? Give examples of Yazoo stream/areas from various parts of the world.

2023 : What are the **environment implication** of economic geology ? Discuss.

2023 : "Evidences from **palaeomagnetism** and sea floor spreading have validated that continents and ocean basins have never been stationary." Elucidate with suitable diagrams.

2023 : Define **Peneplains**. Describe the landscape features associated with peneplains under different geomorphic cycles.

2022 : Define '**speleotherm**'. Discuss the various forms and features of speleotherms.

2022 : Explain how various aspects of **channel morphology** are used in transportation, settlement and land use planning, flood control and flood management?

2022 : Discuss the role of **Slope, Altitude and Relief** (SAR) in the landscape development.

2022 : With the help of suitable sketches describe the **mountain genesis and mountain types**. Give suitable examples from various mountain systems of the world.

2021 : Describe the concept of **Altiplanation**.

2021 : The **concept of Plate tectonics** has been derived from the isostacy and continent drift theory. Elaborate citing suitable examples.

2021 : Stream basins and drainage divides are important components to delineate a **watershed area**, explain.

2020 : Why is mapping important for **geo-hydrological** investigations? Explain with relevant examples.

2020 : Write an essay on **evolution of continents** and oceans using various theories and models.

2020 : Discuss the **problems of erosion surfaces** and explain the different methods to identify them with suitable diagrams.

2019 : Describe **phreatic eruptions** and their consequences.

2019 : How are **sand spits and tombolos** formed?

2019: Compare and contrast different types of **plate boundaries**.

2019 : Discuss the methods of measuring the intensity and magnitude of **earthquakes**. How are seismic zones demarcated?

2019 : The impact of **floods** on life and property can be most effectively reduced by hazard mapping. Comment.

2018 : “**Landscape is a function** of structure, process and stage.” Critique the statement.

2018 : Evaluate how far **Kober’s geosynclinals** theory explains the mountain building process.

2017 : Write a note on **pseudovolcanic** features.

2017 : “The knowledge of **slope analysis** has limited field application in the slope management”. Explain.

2017 : Discuss the **concept of Periglacial cycle** as propounded by Peltier.

2017 : “Climate, slope gradient and rock structure influence the **avulsion of channels**”. Explain.

2016 : Describe the “**Basket of eggs topography**”.

2016 : “In explaining the concept of ‘**Pediplanation**’, King combined the ideas of Davis, Penck and Wood with his own.” Elaborate.

2016 : “**Geological structure** has a dominant control on landforms and is reflected on them.” Discuss.

2015 : Attempt a classification of **geomorphic processes** from the zonal point of view.

2015 : Discuss the contributions of the American School of Sub aerial **Denudation** in geomorphology.

2015 : Explain with examples as to how channel dynamics has been responsible for the **development of alluvial fans and cones**.

2015 : “Present-day landforms bear more complexity than simplicity.” Elucidate.

2014 : Define the term ‘**meander**’ and describe the basic characteristics of entrenched meander and in grown meander.

2014 : State the **concept of plate tectonics**. How does it help in explaining the formation of the Himalayas and Appalachian Mountains?

2014 : Explain weathering and **mass wasting**, and describe their geomorphic significance.

2013 : Differences between **Normal cycle and Arid cycle of Davis**.

2013 : What is ‘**Base level**’? Explain the types of base level.

2012 : Palaeozoic glacial evidence for **Continental Drift**.

2012 : **Systems approach to landforms analysis**.

2012 : Explain how **Bosche and Haldenhang** lead to the Theory of Slope Replacement.

2012 : Characteristics of the standard **epigene cycle of erosion**.

2012 : Programmes initiated by the International Council of Science on **Earth System Studies**.

2011 : Name the **climatically controlled agents of erosion**. Explain how they differ in terms of properties of matter. Compare the landforms produced by each one of them

2011 : Explain the concept of **Isostasy** as postulated by Airy and Pratt.

2010 : **Karst Topography** ( Short Notes)

2010 : Bring out the relevance of **seismic study** in determining the structure of earth's interiors

2010 : **Weathering is a complex phenomenon** involving a number of the process and is influenced by various factors.

2009 : Highlight the **geomorphic** features essentially found in topographies under the **Second Cycle of Erosion**.

2009 : Discuss views on **slope development** provided by **L.C.King**.

2008 : Critically examine the concept of geomorphic cycle and discuss the views of **W.M.Davis and W.Penck**.

2007 : Define the concept of **isostasy** and discuss the postulations of **Airy and Pratt**.

2006 : Critically evaluate the **continental drift** hypothesis of **A.Wegener**.

2005 : " Structure is a dominant control factor in the **evolution of Landforms**" Discuss with suitable examples.

2004 : Describe the landforms which are products of **endogenetic forces**.

2003 : Explain the sequential **development of landforms** associated with the coastal areas.

2002 : Provide a critique of the '**geographical cycle**' model propounded by Davis.

2001 : Present a critical analysis of the theory of **isostasy**.

2000 : With reference to the **theory of plate tectonics**, explain the origin and growth of young fold mountain

1999 : Bring out the distinctions between the '**continental drift**' theory and the 'plate tectonics' theory.

1998 : Discuss the concept of volcanicity and show how the theory of **Plate Tectonics** explains the mechanism of volcanism and volcanic eruptions.

1997 : Discuss the concept of **polycyclic landforms** and present an analytical study of the polycyclic landforms of a selected region.

1996 : Discuss the processes of mechanical and chemical weathering and show their relationship with **soil formation**.

1995 : Discuss the limitations of the theory of **Continental Drift** and show how the theory of Plate Tectonics is an improvement over it.

1994 : Discuss the **concept of cycle of erosion** and bring out clearly the difference between the views of **Davis and Penck**.

1993 : Explain the factors causing **rejuvenation in landscape** and describe the resultant landform.

1992 : Discuss, with examples, the **influence of volcanism and diastrophism** on the evolution of landscape.

1991 : Analyze the sequential development of **landforms in either Karst or Coastal region**.

**Climatology** : *Temperature and pressure belts of the world; Heat budget of the earth; Atmospheric circulation; atmospheric stability and instability. Planetary and local winds; Monsoons and jet streams; Air masses and fronto genesis, Temperate and tropical cyclones; Types and distribution of precipitation; Weather and Climate; Koppen's, Thornthwaite's and Trewartha's classification of world climates; Hydrological cycle; Global climatic change and role and response of man in climatic changes, Applied climatology and Urban climate.*

2025 : Explain the relationship between **air masses** and local winds.

2025 : Examine the formation of **atmospheric tricellular circulation system**. Describe how this system has been created considering the Earth a living planet. 20

2025 : Examine the distribution and balance of energy in the **Earth's atmosphere system**.

2024 : **Formation of temperate cyclone** depends on the condition of axis of dilation.

2024: Describe latitudinal distribution of **Köppen's classification** of world climate.

2024: Explain **air masses** and associated weather dynamics. How do **air masses influence** the weather conditions of the Northern Hemisphere?

2023 : Explain the characteristics and weather conditions associated with '**Anticyclones**' giving suitable examples.

2023 : What are the causes of **origin of local winds**? Discuss their significance on prevailing weather and climate in various regions, with suitable examples.

2023 : How does **inversion of temperature** occur? Explain its significance on local weather with suitable examples.

2023 : What is " **Geostrophic Wind**" ? Explain the relationship between barometric slope and air circulation.

2022 : What is **pollution dome**? Discuss its formation and impacts.

2022 : With suitable examples describe the impacts of movement of **airmasses** on weather and winds in different parts of the continents.

2022 : Describe how short term **variations in temperature** are related to the processes of receiving energy from the sun to the Earth's surface and dissipating it to the atmosphere.

2021: What are important factors in **air masses** modifications?

2021: Examine major influencing factors for varied **patterns of precipitation** on the continents.

2021: Indicating **causes of lighting**, describe the threats associated with it.

2020 : Write a geographical note on **Halloween Storm**.

2020 : Explain how various factors influence the origin and development of **Indian monsoon** system.

2020: Explain the characteristic features of **Frontogenesis and Frontolysis**.

2019 : Explain the techniques to calculate potential **evapotranspiration** suggested by **Thorntwaite**.

2019 : Explain the nature of **urban climates** and their impact on global environmental change.

2019 : Discuss in detail the tri-cellular model of **atmospheric circulation**.

2018 : Explain the role of evaporation in the **hydrologic cycle**.

2018: Critically examine the basis and scheme of climatic **classification** proposed by **Trewartha**.

2018 : Explain the origin, progress and retreat of the **Indian monsoon** and discuss its impact on the Indian economy.

2017 : Discuss the impacts of ocean currents on **air mass** behaviour.

2017 : Discuss the forces which govern the **air movement on the Earth's surface**.

2016 : Differentiate between **insolation and temperature** and explain **anomalous temperature**.

2016 : Compare the origin and weather conditions associated with the **tropical and temperate cyclones**.

2015 : Discuss as to how **frontogenesis** contributes to weather instability.

2015 : What is Potential **Evapotranspiration**? Explain how it is used in assessing the water balance in an area.

2015 : Discuss the basis of **Koppen's climatic** classification. Bring out the salient characteristics of 'Cs' type of climate.

2015 : Explain the **meridional circulation** of the atmosphere and its importance in world climate.

2014 : Discuss the salient features of '**sirocco**' and '**mistral**'.

2014 : Describe the origin and development of **thunderstorms** with examples.

2014 : Discuss the nature and origin of **Indian monsoon** and recent techniques of its prediction.

2013 : Differentiate **Storm Surges and Seiches**.

2013 : With suitable examples, bring out the impact of **local winds** on the climate of an area.

2013 : Discuss **Dew point** and the various forms of condensation.

2012 : Compare and contrast **tropical cyclone and temperate cyclone**.

2012 : Classify **air mass** and explain how 'cP' air mass affects global climate.

2012 : Impact of **Cryosphere** on global climate.

2011 : Give an account of global distribution of **precipitation**.

2011: "Contemporary global climate change is an **anthropogenic phenomenon**." Discuss

2010 : **Inversion of temperature**

2010 : What is **polar front** and How does cyclone develop along this front ? Describe the weather conditions associated with it.

2010 : Examine the various kinds of **atmospheric humidity** and their associated forms.

2009 : How does **Climate Change affect urban areas** ?

2008 : Discuss the mechanism and **origin of Monsoon** winds and explain the role of El Nino on Monsoon circulation.

2007 : Discuss the development of **local winds, and their influence** on local weather, giving three examples of the well-known local winds in the world.

2006 : Compare the structure and associated weather conditions of **tropical cyclone** with that of **temperate cyclone**.

2005 : Discuss the main features of the **climatic classification system** evolved by Koppen. Also point out its anomalies.

2004 : No question.

2003 : Discuss the mechanism and significance of **tricellular meridional circulation** of atmosphere.

2002 : Discuss the criteria which **Thornthwaite** adopted in his 1948 classification of world climates.

2001 : Discuss the concept of **air masses** and present their classification.

2000 : Discuss the distribution of **precipitation in the world**.

1999 : Make a comparative study of the **tropical and temperate cyclones**.

1998 : Discuss the nature and composition of **earth's atmosphere**.

1997 : Define **air masses**. How do they originate? Classify them and state the characteristics of any one type.

1996 : Examine critically the drawbacks of **Koppen's Classification** of climates. Explain how Thornthwaite attempted to overcome Koppen's limitations.

1995 : Explain and illustrate the life-cycle of a **temperate cyclone** and also describe the weather associated with it.

1994 : Explain the basis of **Koppen's classification** of climates. Also mention its merits and limitations.

1993 : No question.

1992 : Discuss the origin, movements and characteristics of **air masses** and explain their role in influencing world climates.

1991 : Explain the origin, distribution and characteristics of **tropical cyclones**.

**Oceanography** : *Bottom topography of the Atlantic, Indian and Pacific Oceans; Temperature and salinity of the oceans; Heat and salt budgets, Ocean deposits; Waves, currents and tides; Marine resources: biotic, mineral and energy resources; Coral reefs, coral bleaching; sea-level changes; law of the sea and marine pollution.*

2025 : What are the fundamental differences among ocean wave, **ocean current and tide**?

2025 : What is **deep-sea mining**? What are the potential benefits and risks associated with it?

2025 : Describe the process of **formation of barrier islands** and explain their significance. 15

2024 : With suitable examples explain the factors causing **sea level changes**.

2024 : With suitable sketches elaborate the **bottom topography of the Indian Ocean**.

2023 : What is **ocean ranching**? How are aqua- Cowboys related to such activities?

2023 : How are **ocean currents generated**? Discuss their effects on costal climates with special reference to the Pacific Ocean.

2023: Given an account of **marine resources** and their economic significance. How has marine pollution affected such resources?

2022 : When **corals** are affected by stress it causes them to turn completely white. Explain the reasons of such an occurrence.

2022 : What is the relationship between **ocean currents** and global surface wind systems? Explain with examples how does the gyre in the Northern Hemisphere differ from the one in the Southern Hemisphere.

2022 : Rise of **Surface temperature** brings severe consequences. Elaborate the potential changes and threats associated with it in the world.

2021: Give a detailed account of the **bottom topography** of Pacific Ocean.

2021: **Maritime security** is being neglected. Indicate the major challenges and suggest solutions in context of Laws of the seas

2020: **Marine resources** are economically very significant. Discuss citing suitable examples.

2020: Discuss the concept of **coral bleaching**, its recovery and macroalgal regime shift due to this process.

2020: Explain the currents of the **North Atlantic Ocean** and their significant role in the climate of Western Europe.

2019 : How are **ocean waves formed**? Distinguish between a wave of oscillation and a wave of translation.

2018 : Describe the causes and consequences of **sea level changes**.

2018 : Describe the potential **marine energy resources** with reference to their benefits, harvestability and environmental impacts.

2017 : Distinguish between low **energy coasts and coral coasts**.

2017 : Describe the configuration of the **Pacific Ocean floor**.

2016 : **Discuss Maritime Zones.**

2016 : “The relationship between the **winds and the currents** is best seen in the Indian Ocean.” Justify.

2016 : Bring out the various **ecological problems** associated with the exploitation and use of oceans and their resources.

2015 : Describe the characteristics of different **types of pelagic** deposits.

2014 : Illustrate the origin and nature of **Sargasso Sea and Lagoon**.

2014 : Give an account of recent observations on **coral bleaching** with reference to Clive Wilkinson’s Report.

2013 : “**Offshore Acoustic Study** helped the development of the concept of sea floor spreading.” Explain.

2013 : Compare the **Subsidence and Glacial control theories** on the formation of coral reefs.

2013 : Analyze the reasons for a comparatively poorer development of **fishing grounds** in tropical areas.

2012 : Different layers of **ocean water above abyssal plain**.

2012 : ‘**Atolls** present the most challenging explanation in the evolution of **coral reefs**. Discuss

2011 : “**Temperature, salinity** and density differences in ocean water are the prime causes of ocean water circulation.” Elaborate.

2010 : **Ocean Deposits**

2010 : Methods (Scientifically sound ) of **bathymetry** and account of bottom topography of Atlantic ocean

2009 : Examine economic significance of the resources of the **Continental shelf** of the Indian Ocean.

2009 : Comment on **marine heat budget** and the oceanic circulation system.

2008 : Describe the ideal conditions for **coral reef** formation and discuss the glacial control theory of coral reef formation.

2007 : Discuss the different bases for classifying the **ocean deposits** and give a detailed account of pelagic deposits of the oceans.

2005 : No question.

2006 : No question.

2004 : Discuss the **mid-Atlantic Ridge** in terms of its origin extent and relief.

2003 : Present a concise account of **bottom relief** of the Indian Ocean.

1999 : No question.

2000 : No question.

2001 : No question.

2002 : No question.

1998 : Explain and illustrate the **submarine relief** of the Atlantic Ocean.

1997 : Examine critically the theories of the **formation of coral reefs** and atolls.

1996 : Explain and illustrate the **ocean floor topography** and give a detailed account of the Mid- Atlantic Ridge.

1994 : No question.

1995 : No question.

1993 : Give a reasoned account of the **distribution of salinity** in the oceans and partially enclosed seas.

1992 : No question.

1991 : Draw a **hypsographic curve** to represent the major physiographic units of the ocean and comment on their permanently.

**Biogeography : Genesis of soils; Classification and distribution of soils; Soil profile; Soil erosion, Degradation and conservation; Factors influencing world distribution of plants and animals; Problems of deforestation and conservation measures; Social forestry; agro-forestry; Wild life; Major gene pool centers.**

2025 : Man and wildlife conflicts are ever increasing. Discuss its causes, consequences and remedial measures. 10

2024 : Examine the impacts of **social forestry** in socio-economic transformation of rural areas.

2024 : “**Soil erosion** is creeping death.” Explaining the statement, suggest various soil conservation measures.

2024: The latitudinal gradient in species richness is an important geographic trend in **biodiversity**.” Examine the statement.

2023 : Explain the natural processes of **soil enrichment** and its impact on food production.

2023 : Differentiated between the characteristics of organic horizons and mineral horizons in a generalised **soil profile**.

2022 : Well developed **soils typically** exhibit distinct layers in their soil profile. Elaborate.

2022 : Plants and animals that exist in a particulars **ecosystem** are those that have been successful in adjusting to their habitat and environmental conditions. Elucidate with examples.

2021: Gene Pool centers are Good Hope for **biodiversity conservation** elucidate.

2021: Describe how **ecosystem** services of Himalayas are essential for Highland-Lowland sustainability in Asia.

2020: Which factors influences the growth of **wild plants in India**? Discuss their economic significance.

2020: Explain the effects and causes of **deforestation** and its impact on pattern of agriculture in India.

2019 : Amensalism is a biotic factor that determines the geographic **limits of species**. Explain.

2019 : Why is it necessary to conserve **genetic diversity of species**? Do protected areas serve any useful purpose in this context?

2019 : How are **soil acidity and alkalinity** related to soil fertility?

2018 : Distinguish between **intraazonal and azonal soils**.

2018 : Describe in brief the characteristics and importance of **azonal soils**.

2018 : Discuss the causes of **degradation of tropical rainforests** and suggest remedial measures for their prevention, conservation and development.

2017 : Distinguish between the characteristics of **Chernozem and Sierozem soils**.

2017 : Give a classification of **plants** based on the amount of water requirement.

2016 : Bring out the ecological significance of **Tropical Rainforest Biome**.

2016 : Describe Newbigin's scheme of **Floristic regions** of the world and explain the Mediterranean Floristic region.

2015 : Explain the characteristics of **ecological succession**.

2015 : Classify **soils** based on their zonal distribution and describe the characteristics of pedocals.

2015 : Explain the different stages of **ecological adaptation** of man and bring out the changing balance between man and environment.

2014 : Give an account of the **nature of biosphere** as an ecosystem.

2014 : State the uniqueness of the Eurasian **Steppe Biome**.

2014 : Define **zoogeographic region**. Also describe the basic faunal makeup of the Neo-Arctic zoogeographic region.

2013 : Uniqueness of fauna in the **Notogean realm**.

2013 : Bring out the relationship between **climate and vegetation** in the Mountain Biome.

2012 : **Major components of IGBP**.

2012 : Adaptation and distribution of animals in the **Ethiopian realm**.

2011 : Define the term **biome**. List the terrestrial biomes and describe the characteristics of Savanna biome.

2010 : **Floristic kingdoms** based on their global distribution

2010 : Account of the structure of **ecosystem** and describe its functional aspect.

2009 : Give a brief account of the **principal land biomes** and their latitudinal distribution.

2008 : No question. 2007 : No question. 2006 : No question. 2005 : No question.

2004 : No question. 2003 : No question.

2002 : Write in detail on the concept of **biosphere as an ecosystem**.

2001 : Discuss the concept , components and **functioning of an ecosystem**.

2000 : No question.

1999 : Discuss the relevance of '**watershed**', as an ecosystem for the purpose of sustainable development.

1998 : No question. 1997 : No question. 1996 : No question.

1995 : 'Man must realize the importance of maximizing agricultural production without destroying the ecological basis on which our entire **food production system** rests.' Explain with examples.

1994 : Indicate the major **biotic regions** of the world and discuss the ecological aspects of the monsoon region.

1993 : Define **ecosystem and** describe briefly its various components. Also discuss how and to what extent the modern man has affected the various types of ecosystems.

1992 : Present a classification of the **soils of the world** and give their economic significance.

1991 : No question.

**Environmental Geography:** *Principle of ecology; Human ecological adaptations; Influence of man on ecology and environment; Global and regional ecological changes and imbalances; Ecosystem their management and conservation; Environmental degradation, management and conservation; Biodiversity and sustainable development; Environmental policy; Environmental hazards and remedial measures; Environmental education and legislation.*

2025: What is the 'UN Decade on Ecosystem Restoration'? How does it balance ecological goals with emerging socio-economic needs like food security and development?

2025 : What are the ecological consequences of agricultural deforestation in the Amazon and Congo Basins, particularly concerning biodiversity and climate regulation?

2024 : Mountain regions are more fragile to **ecological changes**. Elucidate.

2024 : Perception, **Attitude, Value and Emotion** (PAVE) are important components for biodiversity and sustainable environmental conservation. Elaborate.

2024: How is carbon neutrality essential for future **environmental conservation**? Describe various efforts taken by nations in this regard.

2023: How is Deep Ecology as a concept different from '**Shallow Ecology**'? Explain

2023 : What are the factors affecting regional **ecological changes** ? How do these affect human health ?

2022 : What are the high altitude **environmental hazards**? Explain with suitable examples.

2022 : Sequential changes in land use and land cover have brought global and regional **ecological changes and imbalances**. Elucidate.

2021: Discuss the **hazard** associated with rise in **sea surface temperature**.

2021: Oil erosion and **soil degradation** are threat to food supply, discuss.

2021: Explaining the **concept of carbon neutrality**, describe the measures taken by carbon positive and carbon negative nations.

2021: With suitable examples, elaborate **human ecological adaptations**. Explain its impacts on ecology and environment in various parts of the world.

2020: Discuss the problems associated with the **living environment in million plus cities in India**. How these can be managed?

2020: **Land use/ Land cover and soil type**'s influence forage quantity and quality in semi arid regions of the world. Discuss with relevant examples.

2020: Discuss the **human** response to and management of **hazards and disasters in India**.

2019 : How do **mountaineers constitute a threat to Mount Everest?**

2019 : “The web of life is seamless and the consequences of disruption to one part of the **ecosystem ripple** throughout the whole.” Elaborate.

2018 : Explain the natural and **anthropogenic causes** and mitigation measures of frequent **flooding** in Mumbai.

2018 : Discuss the objectives and principles of **environmental education**. Describe the basic concerns of formal and non-formal environmental education in India.

2018 : ‘**Geomorphologic changes** are largely responsible for environmental hazards in the Himalayan region.” Comment with relevant examples.

2018 : “**Controlling population growth** is the sustainable solution to environmental problems.” Express your views with suitable arguments.

2018 : Explain the **ecosystem approach** to environmental management and highlight its advantages and disadvantages.

2017 : Describe the characteristics of **biological deserts**.

2017 : Explain the concept of **micro carbon sink** and its relevance.

2017 : “**Climate change** is a reality”. Explain with suitable examples.

2017 : Discuss the **Perception, Attitude, Value and Emotion** (PAVE) Theory of environmental management.

2016 : Explain the **hydro-meteorological hazards** in the Himalayas.

2016 : Give a reasoned account on how the impact of **Global Warming** differs from one part of the Earth to the other.

2016 : Discuss the significance of **World Climate Research Programme** (WCRP) and its core projects in the understanding of climatic change.

2016 : Write a critical note on the tendency of “**use and throw**” in the context of economic status and environment.

2015 : Comment on the impact of **environmental education** on quality of life.

2015 : Discuss the methods of **conserving biodiversity** for sustainable development.

2015 : “**Man-induced famines** are becoming more common than nature-induced ones.” Comment.

2014 : Enumerate the major **causes of increasing degradation** of environment in hills and hill slopes, and state its down-valley impact.

2014 : Give a critical account of reasons and **consequences of marine pollution**.

2013 : Impact of Pleistocene Ice Age on the **crust of the Earth**.

2013 : Types of **endemic plants** and their degree of vulnerability to extinction.

2013 : What are the characteristics that make **CHC** a serious threat to the ecosystem? Give examples.

2013 : Explain the levels of **Noise pollution** and the legislative measures to control it.

2013 : “**Urban Solid Waste Management** poses the greatest challenge in Metropolitan planning.” Elaborate.

2012 : Discuss how different types of **mining** lead to different types of **environmental problem**

2011 : No Question

2010 : No Question

2009 : Explain factors contributing to the **Global Climate Change**.

2008 : No question.

2007 : No question.

2006 : Discuss the global **ecological imbalances** and their managements.

2005 : Bring out the major problems of **environmental pollution** at global scale and suggest measures to check it.

2004 : How would the impact of **global warming** differ from one part of the earth to another  
Give a reasoned account.

2003 : No question.

2002 : Write an essay on '**sustainable development**' from the perspective of geography.

2001 : No question.

2000 : No question.

## **QUESTION PAPER ANALYSIS (HUMAN GEOGRAPHY -PAPER - I) 1991 - 2025**

### **HUMAN GEOGRAPHY (SYLLABUS)**

**1. Perspectives in Human Geography:** Areal differentiation; regional synthesis; Dichotomy and dualism; Environmentalism; Quantitative revolution and location analysis; radical, behavioral, human and welfare approaches; Languages, religions and secularization; Cultural regions of the world; Human development index.

**2. Economic Geography:** World economic development: measurement and problems; World resources and their distribution; Energy crisis; the limits to growth; World agriculture: typology of agricultural regions; agricultural inputs and productivity; Food and nutrition problems; Food security; famine: causes, effects and remedies; World industries: location patterns and problems; patterns of world trade.

**3. Population and Settlement Geography:** Growth and distribution of world population; demographic attributes; Causes and consequences of migration; concepts of over- under-and optimum population; Population theories, world population problems and policies, Social well- being and quality of life; Population as social capital.

**\*Types and patterns of rural settlements; Environmental issues in rural settlements; Hierarchy of urban settlements; Urban morphology: Concepts of primate city and rank- size rule; Functional classification of towns; Sphere of urban influence; Rural - urban fringe; Satellite towns; Problems and remedies of urbanization; Sustainable development of cities.**

**4. Regional Planning:** Concept of a region; Types of regions and methods of regionalization; Growth centers and growth poles; Regional imbalances; regional development strategies; environmental issues in regional planning; Planning for sustainable development.

**5. Models, Theories and Laws in Human Geography:** Systems analysis in Human geography; Malthusian, Marxian and demographic transition models; Central Place theories of Chris taller and Losch; Perroux and Boudeville; Von Thunen's model of agricultural location; Weber's model of industrial location; Rostov's model of stages of growth.

**\*Heartland and Rim land theories; Laws of international boundaries and frontiers.\*** are topics covered with Paper II Settlement and Political Geography

## QUESTION TREND (1991-2025)

**Perspectives in Human Geography :** *Areal differentiation; regional synthesis; Dichotomy and dualism; Environmentalism; Quantitative revolution and location analysis; radical, behavioral, human and welfare approaches; Languages, religions and secularization; Cultural regions of the world; Human development index.*

**2025 : How have dichotomy and dualism affected the methodological development of Geography? Describe.**

**2025 : Analyze the role of language and religion in delineating major cultural regions of the world.**

**2025 : How do regional components make the (regional synthesis) in spatial arrangement?**

**Explain. 2025 : Why did the Welfare Approach in Human Geography emerge as a significant perspective in 1970s?**

**2024 : Critically examine the significance of Behavioural Approach in the development of human geography.**

**2024 : Explain how the physical view of geographical space has impacted the forms of spatial analysis.**

**2023 : Explain sequential development of areal differentiation as a fundamental concept in human geography.**

**2023 : What is the relation between gender equity and human development? Provide a list of commonly used gender related indices.**

**2022: Analyse the effects of Globalisation on languages.**

**2022: "Culture is a dynamic concept". Elucidate with examples.**

**2022: Critically examine the significance of the Quantitative Revolution and its influence in the development of Geography.**

**2021: The interrelationships between the social and spatial structure are complex. Explain in the context of socio-spatial dialectic.**

**2021: Suggest criteria, indicators, and techniques for delimitation of formal regions.**

**2021: Why is radicalism seen as major a paradigm shift in geography? Explain its causes, approaches, and criticism.**

**2020: "Human ecology is the study of mutual relationship of people and their environment both natural and social." Discuss in details using ecological concepts.**

2019 : “A language originates at a particular place and diffuses to other locations through the migration of its speakers.” Examine this statement in the context of language hot spots and endangered language hot spots.

2019 : Discuss the genetic classification of boundaries suggested by Hartshorne

2019 : HDI has brought a paradigm shift in the way people think about the development process. Critically examine the inherent limitations of HDI.

2018 : “Geography is a contested and multiparadigmatic discipline with a strong eurocentricity that has only recently been challenged.” Comment.

2018 : “Areal differentiation has provided the theoretical justification of studying ‘regions’ and ‘regional geography’.” Comment.

2018 : Comment upon the contributions of D.M. Smith in outlining ‘welfare’ as a key focus in the geographies of social well-being.

2018 : Provide a brief outline of ideas related to ‘sense of place’ as propounded by Yi-Fu Tuan and Relph in the humanistic geography that emerged in the 1970’s.

2018 : Elaborate upon the influence of Marxist philosophy on geographical research, outlining key themes addressed by Marxist geographers since the 1970’s.

2018 : “Welfare geography emphasizes spatial inequality and territorial justice.” Comment with reference to the main ideas and scope of the subfield.

2018 : Discuss critically the manner in which quantitative revolution provided the methodological foundation for models and modeling in geography.

2017 : Explain the concept of Time Geography.

2017 : Discuss the contemporary paradigms of Geography.

2017 : “The intensity of energy crisis varies regionally”. Explain.

2017 : Examine the causes and consequences of forced migration of population in the present context.

2017 : Define the quality of life and explain its parameters with adequate examples.

2016 : “Areal differentiation forms the core theme in Geography.” Explain.

2016 : Trace the origin and progress of Quantitative Revolution in Geography and bring out its merits and demerits.

2016 : Discuss the relevance of ‘Stop and Go Determinism’ in the present day context.

2015 : “The welfare face of geography makes it an inter- disciplinary subject.” Elaborate.

2015 : "The welfare face of geography makes it an inter- disciplinary subject." Elaborate.

2015 : "Regional synthesis is the crux of geographical studies." Elaborate

2015 : Cultural regions are the most suited units to study the diversity of an area". Comment.

2015 : Discuss the approaches to the study of behavioural geography

2015 : "There is a rejuvenation of environmentalism as a paradigm in geographical studies." Comment.

2014 : Elaborate the concept of mental map.

2014 : Critically analyze application of models in Geography.

2014 : Discuss the contribution of geographers in the development of radical geography.

2014 : Giving suitable examples, describe the importance of system analysis in geographical studies.

2013 : "Ellen Churchill Semple is an ardent supporter of Determinism."

2013 : Explain the parameters for assessment and the spatial pattern of Human Development Index in the world.

2012 : No Question

2011 : Welfare Approach in Human Geography.

2011 : Discuss the impact of positivism in paradigm shift in Geography.

2010 : Critically examine the method of deriving Human development index.

2010 : Critically examine the changing perspective of the concept of areal differences.

2009 : 'Quantitative Revolution and model building provided an empirical basis for geographical research' - Elaborate.

2009 : Provide a broad classification of world cultural regions.

2008 : No question. 2007 : No question. 2006 : No question. 2005 : No question.

2004 : Distinguish between radical and welfare approaches in geographic studies.

2003 : Present a critical analysis of human and welfare approaches in Human Geography.

2002 : No question.

2001 : Discuss the concept and application of systems analysis in human geography.

2000 : No question.

1999 : Describe the sequence of major paradigm shifts in geographic thought during the twentieth century.

1998 : What is understood by quantification in Geography? Discuss the significance of quantification in modern geographical studies with examples.

1997 : Critically examine the concept of dualism with special reference to physical versus human geography.

1996 : "The emergence of Behavioural Geography was due to the disillusionment with axioms on which models were based and the axioms were far removed from reality". Comment.

1995 : Discuss the contributions of Al Biruni towards the development of geographical knowledge.

1994 : Examine critically the concepts of 'determinism; and possibilism. Bring out the significance of regional concept.

1993 : No question.

1992 : Give a comparative assessment of the works of Humboldt and Ritter leading to the foundation of modern geographical thought.

1991 : Explain the major contribution by Arab geographers of the early medieval period in the development of geographic thought.

**Economic Geography : World economic development: measurement and problems; World resources and their distribution; Energy crisis; the limits to growth; World agriculture: typology of agricultural regions; agricultural inputs and productivity; Food and nutrition problems; Food security; famine: causes, effects and remedies; World industries: locational patterns and problems; patterns of world trade.**

**2025 : What are the key environmental and economic challenges linked to the extraction and processing of critical minerals?**

**2025 : Analyze the spatial patterns and regional specialization of plantation crops across tropical and subtropical regions. 15**

**2025 : Why is oil important for energy security? What is the role of oil in clean energy transition?**

2024 :"While scarcity of water resources are felt locally, but its causes are increasingly global." Comment.

2024 :Explain the basis of D. Whittlesey's classification of agricultural regions of the world.

2024 : Analyse the spatial changes and emerging patterns of semiconductor manufacturing in the world.

2023 : Discuss critically food and nutrition problems associated with the developing world.

2023 : Explain population resource use and development nexus in the Limits to Growth Model. Why this model is criticized intensively?

2022 : "Shifting global trade patterns create new opportunities". Examine this statement.

2022: "Automation is rapidly changing the economies of labour and will affect trade patterns in significant ways". Clarify.

2022: "Climate change is a serious problem to global food security and poverty eradication". Critically examine.

2021: How is energy transition seen as an instrument for achieving zero carbon by 2050?

2021: Protected cultivation assists in healthier and larger produce. Justify with examples.

2021: Development-induced displacement poses serious challenges. Mention its causes, consequences, and solutions.

2021: Describe the role of accessibility and affordability in the food security of the developing world.

2020: Identify the causes and effects of energy crisis, and suggest suitable measures to solve the problem.

2020: "Where economic growth is sustained over long time periods, its incidence works towards a progressive integration of space economy" elucidate.

2019 : Define stunting and wasting. Why are these more prevalent among children in developing countries.

2019 : "A large-scale global shift in manufacturing is the outcome of deindustrialization in the developed world matched by industrialization in the developing world." Analyze this statement.

2019 : Globalization can often subsume folk culture. What are its positive and negative effects?

2018 : Discuss the degree of importance of transportation costs as a factor of industrial location with respect to "footloose industries".

2018 : "Famine is a social phenomena rooted in institutional and political economic arrangements, which determine access to food by different classes and strata." Comment.

2018 : Discuss in brief the main thesis in “Limits to Growth” (1972) and also provide a critique of the same.

2017 : “Whittlesey’s agricultural regions are relevant even today”. Discuss.

2017 : Give an account on sustainable development and its components.

2017 : “The intensity of energy crisis varies regionally”. Explain.

2016 : “Linkages between resource-endowed regions and resource-utilizing regions determine the pattern of international trade.” Elaborate with suitable examples.

2015 : “Energy mix is a step towards sustainability.” Discuss.

2014 : Discuss environmental and economic problems associated with coal production.

2014 : “World is passing through a global resource dilemma.” Comment.

2013 : Role of Venezuela in the production and export of oil.

2013 : Countries most affected in case of shut-down of Nuclear power.

2013 : Discuss the changing pattern of production and export of Coffee in the world.

2013 : Analyze the causes for changes in the pattern of world trade.

2012 : Problems faced by industries which developed due to inertia.

2012 : Impact of failure of Monsoon on Gujarat Agro-climate zone.

2012 : Locational significance of Rotterdam European economy.

2011 : Mention the agriculture regions as classified by Whittlesey and discuss their relevance.

2010 : Famine to a considerable extent, is a man made Hazard. Elaborate.

2010 : Discuss the role of WTO in determining the pattern of World Trade.

2009 : Discuss the consequences of Climate Change on agriculture and food security, and on the Coastal Zones of the world.

2009 : Provide a geographical account of global production and distribution of food.

2008 : Discuss the views of Von Thunen on agricultural location.

2007 : Explain the concept of sustainable development and propose a model for agricultural development.

2006 : No question

2005 : Discuss Weber's theory of industrial location ,and assess its relevance in the present-day context.

2004 : No question. 2003 : No question. 2002 : No question.

2001 : Examine the spatial patterns of development disparity prevailing in the world.

2000 : No question.

1999 : How far do the patterns of economic development and those of human development correspond with each other in the world? Illustrate your answer with examples.

1998 : Explain the term resource management. Discuss its relevance in the context of global resource scarcity and the future of mankind.

1998 : Examine the impact of advanced agricultural technology on environment. Support your answer with examples.

1997 : "Water is a scarce resource in plenty". Comment and discuss its importance in the balanced habitat development. Support your answer with examples from Asia.

1996 : Examine the bases of classification of agricultural regions as proposed by Whittlesey and explain the causes for the essential difference between intensive subsistence tillage with rice dominant and without rice in the crop association.

1995 : No question. 1994 : No question.

1993 : Give an account of the agricultural typology of the world as presented by Whittlesey and critically examine the parameters used in its delineation.

1992 : No question.

1991 : Examine the world patterns of industrial development and explain the problems of industrial development at national levels.

**Population and Settlement Geography : Growth and distribution of world population; demographic attributes; Causes and consequences of migration; concepts of over- under- and optimum population; Population theories, world population problems and policies, Social well- being and quality of life; Population as social capital.**

**Types and patterns of rural settlements; Environmental issues in rural settlements; Hierarchy of urban settlements; Urban morphology: Concepts of primate city and rank-size rule; Functional classification of towns; Sphere of urban influence; Rural - urban fringe; Satellite towns; Problems and remedies of urbanization; Sustainable development of cities.**

**2025 : Why is systems analysis important in urban planning and what are its limitations?**

**2025 : Factors in internal migration are often based on perceptions rather than reality. Explain.**

**2025 : Critically evaluate the role of primate cities in dominating the urban spheres of influence in developing countries.**

**2025 : “The global demographic landscape is evolving with rapid population growth in some places and rapid ageing in others.” Elucidate with examples.**

**2025 : Analyze the role of demographic transition theory in explaining variations in fertility and mortality rates globally.**

2024 :Central Business District (CBDs) are in decline as the economic core of metropolitan cities. Critically examine.

2024 :The urbanisation process is particularly pronounced in Asia and Africa, where too many urban residents grapple with extreme poverty, exclusion, vulnerability and marginalisation.

2024 :What is complementary region? With reference to hierarchy of settlements, describe the different types of complementary regions as proposed by Christaller.

2024 : “In developed countries, migration rather than fertility will be the main driver of population dynamics over the next few decades.” Examine the statement.

2023 : Human migration is a reflection of the balance between push and pull factors. Elaborate with reference to the most recent diaspora.

2023 : Explain the problems and prospects of urban expansion in context of urban fringe in developed and developing nations.

2023 : "Rural settlements are expressions of the basic relationships between human beings and their physical and social environment" discuss.

2022: Examine the morphological factors that influence the origin and growth of towns.

2022: “Over crowding leads to chronic problems of shortage of housing in Indian cities”. Explain citing relevant examples.

2022 : How migration is affected by push and pull factors? Explain how these factors play a role in understanding new settlement patterns.

2022 : Discuss the concept of ‘Rank-Size-Rule’ given by G. K. Zipf. Is this rule relevant in Indian context?

2021: Aging population has adverse social and economic consequences. Explain with examples.

2021: Small number of mega-cities are playing a key role in organization of global economics and culture. Explain.

2020: Analyse India's food security in context of population growth.

2020: Distinguish between mobility and migration. What are the causes and consequences of rural to urban migration in India?

2020: Compare and contrast the Malthusian and Neo -Malthusian perspectives in the context of population growth, resource use and environmental impact.

2020: Discuss the concept of urban resilience in the context of planning for sustainable development with reference to towns and cities of India.

2020: Write an essay on gender equity and equality in India in the context of balanced human development.

2020: Provide an account of world population transition in the context of fertility decline and socio- economic development.

2019 : Explain the relationship between net reproductive rate (NRR) and true replacement level of population.

2019 : What do you mean by 'climatic migrants'? Suggest appropriate policies and programmes for their resettlement.

2019 : What changes in the current planning, management and governance of human settlements are needed to face the changing environment including climate change and disaster vulnerabilities in cities?

2019 : Assess the challenges for countries with the largest shares of aged populations.

2018 : Explain the concepts of "megalopolis" and "exopolis" with regard to the growth of cities indicating whether the two can and do overlap.

2018 : Citing examples from Asia and Europe, comment upon the contexts within which pronatalist population policies are advanced. What could be the implications of these policies on women's workforce participation?

2017 : Examine the causes and consequences of forced migration of population in the present context.

2017 : "There are considerable demographic similarities between West European nations and Japan". Explain.

2017 : Explain the concept of social capital in relation to India.

2016 : Discuss the major characteristics of 'CBD'.

2016 : Discuss the role of site in determining the types and patterns of rural settlements.

2016 : Describe the regional pattern of Life Expectancy in the world and bring out the challenges faced by developing countries due to increasing life expectancy.

2015 : Discuss Nelson's method of functional classification of towns.

2015 : "Marx's view on population is more humanistic." Comment.

2015 : Critically examine the theories on population migration.

2014 : Discuss the factors responsible for counter-urbanization

2014 : "Rural sustainability is necessary for urban sustainability". Discuss the statement in the backdrop of integrated development approach.

2014 : "Indo-Gangetic hearth is considered to be one of the world's richest cultural realms." Examine.

2014 : Explain the qualitative and quantitative methods of delineation of the sphere of urban influence.

2013 : What is Geriatrics? What are the problems associated with Geriatric population?

2012 : Relevance of distance decay principle in Indian cities.

2012 : Impact of migration on urban demography.

2012 : Similarities in the population distribution of southern continents and reasons for the same.

2012 : Status of infant mortality rate in the world.

2012 : Evaluate the various models on population density distribution in urban centres.

2012 : 'Though 70% of Indian population is rural urban planning is crucial to the development of India'. Discuss.

2012 : Impact of changing fertility ratio on world population distribution.

2012 : ' Colonial forces resulted in the primate pattern of urban process in most Southeast Asian Countries.' Discuss

2012 : Regional shift in the world urbanisation after 1950 and the varied characteristic of urban process.

2011 : Secondary cities in the context of urbanization in developing world.

2011 : Population and Food security.

2011 : Critically examine the salient feature of Central Place Theory propounded by Christaller and Losch.

2010 : Identify the regions affected by Chikangunya with the help of sketched map and bring out the regional pattern of the disease.

2009 : What are the causes and consequences of environmental degradation in India's industrial areas ? Give specific examples.

2008 : Discuss the social and economic theories of population growth.

2008 : Describe the laws of international boundaries and frontiers.

2007 : Give an account of functional bases to central place hierarchy.

2007 : Write a note on the parameters used to describe the demographic transitions in the developing countries like India.

2006 : In Urban geography, what are the concepts of primate city and Rank Size Rules ?

2005 : No question. 2004 : No question.

2003 : Examine the concept of sphere of urban influence and discuss the qualitative and quantitative methods used in its delimitation.

2002 : No Question.

2001 : Bring out the main points of difference between the central place theories of Christaller and Losch.

2000 : Discuss the causes and consequences of population migration.

1999 : Bring out the contrast between the internal structure of the pre-industrial and industrial cities.

1998 : No question. 1997 : No question. 1996 : No question.

1995 : Examine the theories about population control and explain the relative merits of these theories in limiting population growth.

1994 : No question.

1993 : Discuss the major international streams of migration in the world in recent times and account for the relationship that exists between population pressure areas and migration prospects.

1992 : Citing suitable examples from India, explain the role of site and other physical factors in determining the types and patterns of rural settlements.

1991 : Trace and account for the various trends of population growth in the world during the present century.

**Regional Planning : Concept of a region ; Types of regions and methods of regionalisation; Growth centers and growth poles; Regional imbalances; regional development strategies; environmental issues in regional planning; Planning for sustainable development.**

2025 : 'Regional imbalances are the product of socio-economic factors.' Elucidate with examples.

2025 : How do regional components make the (regional synthesis) in spatial arrangement? Explain.

2024 :There is a need for gender-sensitive regional development. Elaborate.

2024 :Assess the criteria required for selecting regions for developmental planning.

2023 : Discuss the differenttypes of polarization induced spatial inequalities and imbalances associated with growth poles.

2023 : How can sustainable Land Management (SLM) harmonize the complimentary goals of environmental, economic and social opportunities ? Discuss

2023 : Describe the concept of Planning Region. Explain the environmental and economic factors in the creation of such regions.

2022 : What are the high altitude environmental hazards? Explain with suitable examples.

2022: Discuss the role of transportation accessibility in regional development.

2022: Explain in detail the impact of regional disparities on economic development.

2021: Explain the processes of contagion and hierarchical diffusion in addressing regional imbalances.

2021: The environmental issues are not adequately addressed in the regional planning. Comment.

2020: " Land degradation is a threat to productivity and sustainable resource management." Explain with suitable examples from India.

2020: Analyse the dynamics of industrial location in the metropolitan cities of India.

2019 : What are natural regions? How are they different from planning regions?

2019 : "Growth is not uniform in different places." Critically examine this statement in the context of the growth pole theory.

2018 : No question.

2017 : Examine the role of small towns in the regional development process.

2016 : Elaborate the idea of 'Compage'.

2016 : What is a 'region'? Describe 'Thiessen' polygon method of regional delimitation.

2016 : In what ways can geographers contribute towards optimal land use planning in a region?

2015 : "Development planning has a component of environmental cost." Discuss.

2015 : "Geographical traits lead to regional imbalances." Examine.

2015 : "Vital statistics are necessary ingredients for development planning." Elaborate.

2014 : Explain the relevance of bottom-up and top-down approaches in the development of agrarian economy.

2014 : Explain the necessary conditions of takeoff and subsequent stages of development of a nation as propounded by Rostow.

2013 : Misra's theoretical stages of Rural-Urban Process.

2012 : Salient feature of watershed planning and its advantages and disadvantages,.

2011 : Ingredients of Sustainable Development.

2010 : Enumerate alternative strategies of planning for backward regions.

2009 : Highlight the significance of environmental issues in Regional Planning.

2008 : No question. 2007 : No question.

2006 : What is the concept of region ? Discuss the types of regions.

2005 : What is a region ? Discuss the methods of regionalisation.

2004 : Discuss various strategies for correcting regional imbalances.

2003 : No question.

2002 : To what extent do the regional patterns of economics development and human development in the world correspond with each other ? Highlight situations of departure, in particular.

2001 : Critically examine the role of growth centres and growth poles in regional development process.

2000 : What is a region? Discuss the types of regions and methods of regionalization.

1999 : No question. 1998 : No question. 1997 : No question.

1996 : "Without the Mediterranean Europe could not be held, without the Middle East the Mediterranean could not be held". Discuss.

1995 : No question.

1994 : Oil has placed in the hands of Arab nations a tremendous geopolitical weapon with which to wield power. Comment.

1993 : No question.

1992 : No question.

1991 : No question.

**Models, Theories and Laws in Human Geography :** *Systems analysis in Human geography; Malthusian, Marxian and demographic transition models; Central Place theories of Christaller and Losch; Perroux and Boudeville; Von Thunen's model of agricultural location; Weber's model of industrial location; Ostov's model of stages of growth. Heartland and Rimland theories; Laws of international boundaries and frontiers.*

**2025 : Why has P. Perroux's theory of growth pole as a model of regional growth been criticized? Explain with examples.**

2024 : Explain the theoretical framework and stages of economic growth proposed by Rostow's model.

2024 : Explain the Heartland theory with reference to contemporary geopolitical scenario of the world.

2024 : What is Trans nationalism? Why has the scale and scope of transnational linkages of diaspora multiplied in recent times

2023 : Has Malthusian Theory been discredited in contemporary times? Justify your answer.

2023 : "The stages of Demographic Transition are a reflection of uneven economic development across the globe." Explain with suitable examples.

2023 : Explain with suitable diagrams **A.Losch's model** of the Theory of Location related to Central Places. Why has this been criticized?

2023 : "Boundaries and frontiers have different meanings in geographic literature" Substantiate your answer in the present context.

2022 : Explain the relevance and applicability of **Von Thunen theory** of Agriculture-location in today's world.

2021: Examine the relevance of the Central Place Theory of Christaller in the present context.

2021: Boundaries are important in geopolitics. Explain. What issues develop from the inclusionary and exclusionary aspects of borders?

2021: Present a critical account of Alfred Weber Theory of Industrial location.

2020: Write note on the relevance of Von Thunen's agriculture location theory in present context.

2020: In modern world most of the frontiers have been replaced by boundaries. Explain with reasons.

2020: Discuss how and why Mackinder modified his concept of Pivot Area after World Wars?

2019 : Distinguish between 'isodapanes' and 'isotims'. Critically examine the least cost theory of industrial location given by Alfred Weber.

2019 : Examine the relevance of the 'rim land theory' in the contemporary world.

2018 : Write a note on "forward and backward linkages" in Perroux's thesis of economic growth and regional development.

2018 : Outline briefly the "age of mass consumption" as ` described by Rostov in his 'multi-stage theory of growth'.

2017 : Write an explanatory note on geographical systems.

2017 : Discuss the applicability of Christaller's Central Place Theory.

2017 : "The Heartland Theory is gaining importance once again". Comment.

2016 : Explain 'Isodapane'.

2016 : Discuss the application of Gravity model in Geographical studies.

2016 : Define and differentiate between boundaries and frontiers. Describe the geometrical boundaries with suitable examples.

2016 : Give a critical account of Losch's theory of central places.

2015 : Discuss the relevance of Von Thunen's model on agricultural location in the contemporary context.

2014 : No Question.

2013 : What are the basic postulates in the Central Place Model of Christaller?

2012 : No Question.

2011 : Isodapne in the Theory of Industrial Location.

2011 : Distinguish between boundaries and frontiers. Identify different types of boundaries.

2011 : Discuss Systems Approach and its applicability in Geography.

2010 : No question.

2009 : No question.

2008 : No question.

2007: No question.

2006 : Write down main agriculture types and their associated features with special reference to Whittlesey. Show these regions on the World map provided to you.

2005 : Examine the Heart -Land theory , and assess its merits and demerits.

2004 : To what extent are the Heartland and Rimland theories helpful in understanding the world political situation today ? Express your opinion clearly.

2003 : Critically examine the stages of Economic Growth Model propounded by Rostov. Illustrate your answer with suitable examples.

2002 : No question. 2001 : No question.

2000 : Explain the basis and applicability of Christallar's Central place theory. Bring out the recent modification.

1999 : No question. 1998 : No question.

1997 : Critically examine Alfred Weber's Theory of the Location of Industries.

1996 : No question.

1995 : Explain and illustrate the models of internal structure of cities as proposed by Burgess and Hoyt. Mention also the limitations of these models.

1994 : Discuss Van Thunen's model of agricultural land use and examine if the model is applicable to India.

1993 : Define umland and discuss, with specific examples, the criteria for its delimitation.

1992 : Discuss on the theories of Industrial location propounded by any two of the following :Weber : Hoover and Smith.

1991 : No question.

**Book List 4 : Geography Foundation**

India Physical Environment , (11th class N.C.E.R.T)

Fundamental of Physical Geography (11th class N.C.E.R.T)

Physical Geography - Goh-Cheng Leong

Human geography by Charles Farro

Economic Geography- Made simple part - 1 & 2

India People and Economy (12th class N.C.E.R.T)

Resources and Development (8th class N.C.E.R.T)

Fundamental Of Human Geography (New) - 12th class (N.C.E.R.T.)

### **Advance Books**

Savindra Singh for Physical Geography or Physical Geography by Strahler

Human Geography : Majid Husain (Original book)

Indian Geography : D.R. Khullar

**Admission Link : [✉ Geography Optional 2026 | TSP](#)**

 **CONTACT US**

**Website :** [www.directionias.com](http://www.directionias.com) | **Email :** [info@directionias.com](mailto:info@directionias.com) | **Mobile :** 9810382305

**Address :** DIRECTION IAS 14A/103 WEA Karol Bagh N. Delhi | **Landmark :** Karol Bagh Metro Pillar 112

**Social Media :** [YouTube](#) | [Instagram](#) | [Facebook](#)

**How effective result in UPSC as my Optional Geography**

### **Toppers Recommendation**

#### **Key to Success with Geography Optional:**

- **Conceptual Clarity:** Understand the basic principles thoroughly.
- **Interlinking Topics:** Connect different parts of the syllabus, both within Geography and with GS papers.
- **Diagrams and Maps:** Practice drawing neat and accurate diagrams and maps to illustrate your points.
- **Current Affairs:** Stay updated on current geographical events, environmental issues, and socio-economic developments.
- **Answer Writing:** Regular practice of writing answers within the word limit, focusing on structure, content, and presentation.



**Saumya Pandey**  
4th rank (2016)



**Pratham Kaushik**  
5th rank (2017)



**Girdhar**  
62th rank (2018)



**Gunjan Singh**  
16th rank (2019)



**Divyanshi Singh**  
34th rank (2020)



**Yasharth Shekhar**  
12th rank(2021)



**Shubham Kumar**  
41th rank (2022)



**Muskan Srivastava**  
98th rank (2023)