

## Geography Optional PYQs (2020 to 2023)

### Syllabus – Geography (Main)

#### PAPER – I

#### PRINCIPLES OF GEOGRAPHY

##### PHYSICAL GEOGRAPHY

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; Erosional 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 frontogenesis, 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 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, the 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; agroforestry; 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; Environmental policy; Environmental hazards and remedial measures; Environmental education and legislation.

##### HUMAN GEOGRAPHY

6. **Perspectives in Human Geography:** Areal differentiation; regional synthesis; Dichotomy and dualism; Environmentalism; Quantitative revolution and locational analysis; radical, behavioral, human and welfare approaches; Languages, religions and secularization; Cultural regions of the world; Human development index.
7. **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.
8. **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.

For any query, visit: <https://genoias.com/>  +91-9310379081,  9818114414

9. Types and pattern of rural settlements; Environmental issues in rural settlements; Hierarchy of urban settlement; 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.
10. **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.
11. **Models Theories and Laws in Human Geography:** Systems analysis in Human geography; Malthusian, Martian 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 stage of growth. Heartland and Rimland theories; Laws of international boundaries and frontiers.

## PAPER – II

### GEOGRAPHY OF INDIA

1. **Physical Setting:** Space relationship of India with neighboring countries; Structure and relief; Drainage system and watersheds; Physiographic regions; Mechanism of India monsoons and rainfall patterns, Tropical cyclones and western disturbances; Floods and droughts; Climatic regions; Natural vegetation; Soil types and their distributions.
2. **Resources:** Land, surface and ground Water, energy, minerals, biotic and marine resources, Forest and wild life resources and their conservation; Energy crisis.
3. **Agriculture:** Infrastructure, irrigation, land seeds, fertilizers, power; Institutional factors; land holdings, land tenure and land reforms; Cropping pattern; agricultural productivity, agricultural intensity, crop combination; land capability, Agro and social- forestry; Green revolution, and its socioeconomic and ecological implications; Significance of dry farming; Livestock resources and white revolution; aquaculture; sericulture, apiculture and poultry; agricultural regionalization; agroclimatic zones; agroecological regions.
4. **Industry:** Evolution of industries; Locational factors of cotton, jute, textile, iron, and steel, aluminum, fertilizer, paper, chemical and pharmaceutical, automobile, cottage and agro-based industries; Industrial houses and complexes including public sector undertaking; Industrial regionalization; New industrial policies; Multinationals and liberalization; Special Economic Zones; Tourism including eco-tourism.
5. **Transport, Communication and Trade:** Road, railway, waterway, airway and pipeline networks and their complementary roles in regional development; Growing importance of ports on national and foreign trade; Trade balance; Trade Policy; Export processing zones; Developments in communication and information technology and their impacts on economy and society; Indian space programme.
6. **Cultural Setting:** Historical Perspective of Indian Society; Racial; linguistic and ethnic diversities; religious minorities; major tribes, tribal areas and their problems; cultural regions; Growth, distribution and density of population; Demographic attributes; sex- ratio, age structure, literacy rate, work-force, dependency ratio, longevity; migration (inter-regional, intra-regional and international) and associated problems; Population problems and policies; Health indicators.
7. **Settlements:** Types, patterns and morphology of rural settlements; Urban developments; Morphology of Indian cities; Functional classification of Indian cities; Conurbations and metropolitan regions; urban sprawl; Skims and associated problems; town planning; Problems of urbanization and remedies.
8. **Regional Development and Planning:** Experience of regional planning in India; Five Year plans; Integrated rural development programmes; Panchayati Raj and decentralised planning; Command area development; Watershed management; Planning for backward area, desert, drought prone, hill, tribal area development; multi- level planning; Regional planning and development of island territories,
9. **Political Aspects:** Geographical basis of Indian federalism; State reorganization; Emergence of new states; Regional consciousness and interstate issues;

international boundary of India and related issues; Cross border terrorism; India's role in world affairs; Geopolitics of South Asia and Indian Ocean realm.

10. **Contemporary Issues:** Ecological issues; Environmental hazards, landslides, earthquakes, Tsunamis, floods and droughts, epidemics; issues relating to environmental pollution; Change in patterns of land use; Principles of environmental impact assessment and environmental management; Population 'explosion and food security, environmental degradation; Deforestation, desertification and soil erosion; Problems of agrarian and industrial unrest; Regional disparities in economic: development; Environmental awareness; Linkage rivers; Globalization and Indian economy.
11. **Note:** Candidates will be required to answer on compulsory map question pertinent to subjects covered by this paper.

## Geography optional PYQs (2020 to 2023)

**2023**

### PAPER- I

#### SECTION 'A'

1. Answer the following in about 150 words each:
  - a). What is "Geostrophic Wind"? Explain the relationship between barometric slope and air circulation.
  - b). What is ocean ranching? How are aqua-cowboys related to such activities?
  - c). Explain the natural processes of soil enrichment and its impact on food production.
  - d). How is 'Deep Ecology' as a concept different from "Shallow Ecology"? Explain.
  - e). What are the environmental implications of economic geology? Discuss.
2. Answer the following:
  - a). "Evidences from palaeomagnetism and sea floor spreading have validated that continents and ocean basins have never been stationary." Elucidate with suitable diagrams.
  - b). Explain the characteristics and weather conditions associated with 'Anticyclones' giving suitable examples.
  - c). How are ocean currents generated? Discuss their effects on coastal climates with special reference to the Pacific Ocean.
3. Answer the following:
  - a). What are the causes of the origin of local winds? Discuss their significance on prevailing weather and climate in various regions with suitable examples.
  - b). Define Peneplains. Describe the landscape features associated with peneplains under different geomorphic cycles.
  - c). What are the factors affecting regional ecological changes? How do these affect human Health?
4. Answer the following:
  - a). Give an account of marine resources and their economic significance. How has marine pollution affected such resources?
  - b). Differentiate between the characteristics of organic horizons and mineral horizons in a generalized soil profile.
  - c). How does inversion of temperature occur? Explain its significance on local weather with suitable examples.



## SECTION 'B'

5. Answer the following in about 150 words each:

- a). Explain the sequential development of areal differentiation as a fundamental concept in Human Geography.
- b). Discuss critically food and nutrition problems associated with the developing world.
- c). Human migration is a reflection of the balance between push and pull factors. Elaborate with reference to the most recent diaspora.
- d). Has Malthusian Theory been discredited in contemporary times? Justify your answer.
- e). Discuss the different types of polarisation induced spatial inequalities and imbalances associated with growth poles.

6. Answer the following:

- a). Explain the problems and prospects of urban expansion in the context of urban fringe in developed and developing nations.
- b). What is the relation between gender equity and human development? Provide a list of commonly used gender related indices.
- c). Explain population, resource use and development nexus in the Limits to Growth Model. Why has this model been criticized intensively?

7. Answer the following:

- a). Explain with suitable diagrams A. Losch's model of the Theory of Location related to Central Places. Why has this been criticized?
- b). How can Sustainable Land Management (SLM) harmonise the complimentary goals of environmental, economic and social opportunities. Discuss.
- c). "The stages of Demographic Transition are a reflection of uneven economic development across the globe." Explain with suitable examples.

8. Answer the following:

- a). "Rural settlements are expressions of the basic relationships between human beings and their physical and social environment." Discuss.
- b). Describe the concept of Planning Region. Explain the environmental and economic factors in the creation of such regions.
- c). "Boundaries and frontiers have different meanings in geographical literature." Substantiate your answer in the present context.

## PAPER- II

### SECTION 'A'

1. a). On the outline map of India provided to you, mark the location of all of the following. Write in your QCA Booklet the significance of these locations, whether physical/commercial/economic/ecological environmental/cultural, in not more than 30 words for each entry:
  - (i) Nathula
  - (ii) Hutti
  - (iii) Ross Island
  - (iv) Moreh
  - (v) Ramappa
  - (vi) Namdapha National Park
  - (vii) Sela Tunnel
  - (viii) Ennore Port
  - (ix) Ramagundam
  - (x) Betwa River
- b). Describe the origin, distribution and economic significance of Gondwana system of rocks in India.
- c). Examine the role of Indian Earth Observation Satellite Technology in enhancing weather forecasting and disaster management.
- d). Discuss the impact of the National Green Tribunal Act, 2010 on forest conservation in India.
2. Answer the following:
  - a). Examine the environmental challenges caused by the solid waste in metropolitan regions of India and discuss the efforts to overcome it.
  - b). Why are millets considered as 'nutri-cereals' and climate-resilient? Discuss the constraints and opportunities of millet cultivation in India.
  - c). Examine the geostrategic significance of Indian islands.
3. Answer the following:
  - a). Indian Pharma Industry has to move from 'volume' to 'value' leadership to capture global market. Discuss.
  - b). Discuss the problems of floods and their management with special reference to Indo-Gangetic Plain.
  - c). Critically examine the role of petroleum energy resources on International Geopolitics with special reference to India.
4. Answer the following:
  - a). With falling fertility rate and rising median age, how can India translate demographic dividend to economic dividend?
  - b). Poor quality of urban planning in India is a huge constraint in realizing the true economic potentials of urbanization. Critically examine.
  - c). Highlight the salient features of India's trade policy. Discuss the status of India's balance of trade with China.

## SECTION 'B'

5. Answer the following in about 150 words each:
- Identify the jute-producing areas and discuss the major causes of decline of jute mill industry in India.
  - Urban built environment in big cities of India creates key changes in biophysical character of the landscape- Discuss.
  - Explain the geological characteristics and ecological significance of the Eastern Ghats.
  - Explain the cultural regions of India based on their cultural attributes.
  - Why are critical minerals essential for the economic development and national security in India?
6. Answer the following:
- A large number of Indian cities have a complex morphological characteristics due to their historical evolution. Elucidate.
  - Discuss the significance of organic farming for sustainable agricultural development in India.
  - Examine the geopolitical impact of bilateral relationship between India and Sri Lanka.
7. Answer the following:
- Discuss the green energy initiatives of India as a signatory nation to the Paris Agreement.
  - India's poultry sector has become one of the fastest growing areas of the country's agricultural sector. Examine its opportunities and challenges.
  - Critically examine the ecological and economic impact of Indira Gandhi Canal Command Area development.
8. Answer the following:
- Why India lags behind many other countries in agricultural productivity? Suggest suitable measures to raise productivity across the regions in a sustainable manner.
  - Assess the ecotourism potential of Andaman and Nicobar, Lakshadweep islands and highlight the challenges associated with the sustainable development of island territories.
  - Describe the regional variations of health indicators among the Indian States.



**2022**

**PAPER- I**

**SECTION 'A'**

1. Answer the following in about 150 words each:
  - a). Define 'speleothem'. Discuss the various forms and features of speleothems.
  - b). What are the high altitude environmental hazards? Explain with suitable examples.
  - c). What is pollution dome? Discuss its formation and impacts.
  - d). When corals are affected by stress it causes them to turn completely white. Explain the reasons of such an occurrence
  - e). Well developed soils typically exhibit distinct layers in their soil profile. Elaborate.
2. Answer the following:
  - a). Sequential changes in land use and land cover have brought global and regional ecological changes and imbalances. Elucidate.
  - b). Explain how various aspects of channel morphology are used in transportation, settlement and land use planning, flood control and flood management
  - c). 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.
3. Answer the following:
  - a). Plants and animals that exist in a particular ecosystem are those that have been successful in adjusting to their habitat and environmental conditions. Elucidate with examples.
  - b). With suitable examples describe the impacts of movement of airmasses on weather and winds in different parts of the continents.
  - c). Discuss the role of Slope, Altitude and Relief (SAR) in landscape development.
4. Answer the following:
  - a). Rise of surface temperature brings severe consequences. Elaborate the potential changes and threats associated with it in the world.
  - b). 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.
  - c). With the help of suitable sketches describe the mountain genesis and mountain types. Give suitable examples from various mountain systems of the world.

## SECTION 'B'

5. Answer the following in about 150 words each:
- Analyse the effects of Globalisation on languages.
  - "Shifting global trade patterns create new opportunities". Examine this statement.
  - Examine the morphological factors that influence the origin and growth of towns.
  - Discuss the role of transportation accessibility in regional development.
  - Explain the geometrical boundaries with examples.
6. Answer the following:
- "Culture is a dynamic concept". Elucidate with examples.
  - "Automation is rapidly changing the economies of labour and will affect trade patterns in significant ways". Clarify.
  - "Over crowding leads to chronic problem of shortage of housing in Indian cities". Explain citing relevant examples.
7. Answer the following:
- "Climate change is a serious problem to global food security and poverty eradication". Critically examine.
  - Critically examine the significance of the Quantitative Revolution and its influence in the development of Geography.
  - Explain in detail the impact of regional disparities on economic development.
8. Answer the following:
- How migration is affected by push and pull factors? Explain how these factors play a role in understanding new settlement patterns.
  - Explain the relevance and applicability of Von Thunen theory of Agriculture-location in today's world.
  - Discuss the concept of 'Rank-Size-Rule' given by G. K. Zipf. Is this rule relevant in Indian context?

## PAPER- II

### SECTION 'A'

1. Answer the following:

a). On the outline map of India provided to you, mark the location of all the following. Write in your QCA Booklet the significance of these locations whether physical / commercial / economic / ecological / environmental / cultural, in not more than 30 words for each entry.

(i) Tarangambadi

(ii) Mahe

(iii) Bomdila

(iv) Dhola Sadiya Bridge

(v) Talakaveri

(vi) Satkosia

(vii) Dholavira

(viii) Sonamarg

(ix) Maliku Atoll

(x) Gangasagar

b). Why has extreme particulate pollution remained a festering issue in Delhi NCR region?

c). How do physiography and climate of India explain the biological diversity of the country?

d). The process of desertification leads to soil desiccation and soil loss. Explain.

2. Answer the following:

a). Critically examine the factors affecting the unpredictability of South-West Monsoon system in India.

b). The peninsular location of India provides scope for harnessing non-conventional energy resources. Discuss with examples.

c). Groundwater contamination in the fast expanding urban landscape of India appears to have become a major public health issue. Discuss.

3. Answer the following:

a). Discuss the recent changes brought about in institutional frameworks of agriculture in India. Evaluate its impact on the agrarian economy of the country.

b). Discuss the continuing disputes on water sharing between the riparian states of North-West India.

c). Soils of India, are clear reflections of the structure and process. Comment.

4. Answer the following:

a). India is bestowed with rich mineral resources due to its geological structure. Correlate the above statement with large mineral belts of India.

b). Discuss the importance of 'Dry-land' farming in the drought-prone regions of India.

c). Incidence of extreme rainfall events and flash floods in recent times have led to devastating consequences for people living in low-lying areas and flood plains of the country. Discuss.

## SECTION 'B'

5. Answer the following in about 150 words each:
- a). Discuss the impact of Forest Rights Act, 2006 on the local forest communities in India.
  - b). Can the Panchayat Raj institutions play a role in grassroot level planning in India? If yes, discuss how.
  - c). Discuss the significance of new ports on the Western Coast of India on the external trade of the country.
  - d). How would decline in Total Fertility Rate (TFR) below the replacement level, in many states of India affect the future population structure of the country?
  - e). Kalapani dispute has opened a new front on the India-Nepal international border. Explain.
6. Answer the following:
- a). Why do disparities in development and incomes between regions persist in large countries like India? How does the recent ADP plan address the issue?
  - b). Critically examine the role of IRNSS-NavIC programme on the satellite navigation system of India.
  - c). Examine the role of high population concentration in Indian slums in making them more vulnerable during pandemic conditions like the COVID-19.
7. Answer the following:
- a). Discuss the salient characteristics of industrial complexes of Western India. Examine the impact of SEZ policy on the region.
  - b). Discuss the emergence of linguistic regions and states in India.
  - c). What are the drivers of urban sprawl around the major cities of the country? How have new investments in transport projects supported sprawl development?
8. Answer the following:
- a). How do agro-climatic and land capability indicators assist in macro-agricultural regionalisation of India? illustrate with an appropriate map.
  - b). Discuss the geopolitical significance of Quad in the Indo-Pacific realm with reference to marine trade in the region.
  - c). Evaluate the role of the National Food Security Act, 2013 in providing access of food to the poor in India.

**2021**

**PAPER- I**

**SECTION 'A'**

1. Answer the following in about 150 words each:
  - a). Describe the concept of 'Altiplanation'.
  - b). What are the important factors responsible for air mass modifications?
  - c). Discuss the hazards associated with rise of sea-surface temperature,
  - d). Gene pool centres are 'Good Hope' for biodiversity conservation. Elucidate.
  - e). Describe how ecosystem services of Himalayas are essential for Highland-Lowland sustainability in Asia.
2. Answer the following:
  - a). The concept of Plate tectonics has been derived from the isostasy and continental drift theory. Elaborate citing suitable examples.
  - b). Give a detailed account of the bottom topography of the Pacific Ocean.
  - c). Soil erosion and soil degradation are threat to food supply. Discuss.
3. Answer the following:
  - a). Examine major influencing factors for varied patterns of precipitations on the continents.
  - b). Maritime security is being neglected. Indicate the major challenges and suggest solutions in the context of Law of the Sea.
  - c). Explaining the concept of carbon neutrality, describe the measures taken by carbon positive and negative nations.
4. Answer the following:
  - a). With suitable examples, elaborate human ecological adaptations. Explain its impacts on ecology and environment in various parts of the world.
  - b). Stream basins and drainage divides are important components to delineate a watershed area. Explain.
  - c). Indicating the causes of lightning, describe the threats associated with it.



## SECTION 'B'

5. Answer the following in about 150 words each:
- The interrelationships between social and spatial structure are complex. Explain in the context of socio-spatial dialectic.
  - How is energy transition seen as an instrument for achieving zero carbon by 2050?
  - Protected cultivation assists in healthier and a larger produce. Justify with examples.
  - Explain the processes of contagion and hierarchical diffusion in addressing regional imbalances.
  - Examine the relevance of Central Place Theory of Christaller in the present context.
6. Answer the following:
- Development-induced displacement poses serious challenges. Mention its causes, consequences, and solutions.
  - Describe the role of accessibility and affordability in food security of developing world.
  - The environmental issues are not adequately addressed in the regional planning. Comment.
7. Answer the following:
- Suggest criteria, indicators and techniques for delimitation of formal regions.
  - Boundaries are important in geopolitics. Explain. What issues develop from the inclusionary and exclusionary aspects of borders?
  - Small number of mega cities are playing key role in organisation of global economics and culture. Explain.
8. Answer the following:
- Why is radicalism seen as a major paradigm shift in geography? Explain its causes, approaches and criticism.
  - Aging population has adverse social and economic consequences. Explain with examples.
  - Present a critical account of Alfred Weber Theory of industrial location.

## PAPER-II

### SECTION 'A'

1. Answer the following:

a). On the outline map of India provided to you, mark the location of all the following. Write in your QCA Booklet the significance of these locations whether physical / commercial / economic / ecological / environmental / cultural, in not more than 30 words for each entry.

(i) Ziro Valley

(ii) Khecheopalri Lake

(iii) Toranmal

(iv) Subarnarekha River

(v) Koderma

(vi) Sir Creek

(vii) Periyar Wildlife Sanctuary

(viii) Peechi Dam

(ix) Digha Beach

(x) Pamban Island

b). Discuss the geo-political impact of bilateral relationship between India and Bhutan.

c). Discuss the economic significance of volcanic soils of India.

d). Give a reasoned account of difference between sugar industry of North and Peninsular India.

2. Answer the following:

a). Landslide is a major problem in Himalayan region. Discuss its causes and mitigation measures.

b). Appraise why drought is one of the most common climatic extremes in India.

c). Discuss the ecological and economic challenges of river linking in India.

3. Answer the following:

a). Discuss the importance of solar energy in future economic development of India.

b). Critically examine the importance of Smart Cities Programme for solving urban problems in India.

c). Examine the significance of ecotourism in relation to socio-economic development and biodiversity conservation in India.

4. Answer the following:

a). Discuss the reserves, distribution and production of all varieties of coal in India.

b). Describe the salient features of east-flowing rivers of India.

c). Critically examine the problems of inter-State border disputes in India.

## SECTION 'B'

5. Answer the following in about 150 words each:
  - a). Discuss the salient features of Project Tiger in India.
  - b). Describe the problems of cloud burst in India giving suitable examples.
  - c). Discuss the role of watershed management for soil and water conservation in hilly regions of India.
  - d). Critically examine the relevance of Ravenstein's law of population migration with reference to India.
  - e). Discuss Ashok Mitra's classification method of Indian cities.
6. Answer the following:
  - a). Explain the impact of tropical cyclones and western disturbances on the climate of India.
  - b). Examine the critical issues of groundwater resources in India.
  - c). Describe the structure and relief features of Deccan Plateau.
7. Answer the following:
  - a). Critically examine how Panchayati Raj system is catalyst in decentralized planning in India.
  - b). Identify the major industrial corridors of India and discuss the characteristics of Bengaluru—Mumbai Corridor.
  - c). Assess the growth of multinational corporations in liberalized economic environment of India.
8. Answer the following:
  - a). Examine how information and communication technology has boosted the development of certain regions of India.
  - b). Discuss the Command Area Development Programme and its impact on eliminating regional inequalities in India.
  - c). Critically assess the status of balance of trade in India and suggest some measures to combat the issues.

**2020**

**PAPER- I**

**SECTION 'A'**

1. Answer the following in about 150 words each:
  - a). Write a geographical note on Halloween Storm.
  - b). Why is mapping important for analysing geo-hydrological investigations? Explain with relevant examples.
  - c). Marine resources are economically very significant. Discuss citing suitable examples.
  - d). Which factors influence the growth of wild plants in India? Discuss their economic significance.
  - e). Discuss the problems associated with the living environment in million plus cities in India. How can these be managed?
2. Answer the following in about 150 words each:
  - a). Write an essay on the evolution of continents and oceans using various theories and models.
  - b). Discuss the concept of coral bleaching, its recovery and macroalgal regime shifts due to this process.
  - c). Explain the currents of the North Atlantic Ocean and their significant role in the climate of Western Europe.
3. Answer the following in about 150 words each:
  - a). Explain how various factors influence the origin and development of the Indian monsoon system.
  - b). Explain the effects and causes of deforestation, and its impact on the pattern of agriculture in India.
  - c). Explain the characteristic features of Frontogenesis and Frontolysis.
4. Answer the following in about 150 words each:
  - a). Discuss the problems of erosional surfaces and explain the different methods to identify them with suitable diagrams.
  - b). Land use/ Land cover and soil types influence forage quantity and quality in semi-arid regions of the world. Discuss with relevant examples.
  - c). Discuss the human response to and management of hazards and disasters in India.

## SECTION 'B'

5. Answer the following in about 150 words each:
- Analyse India's food security in the context of population growth.
  - Identify the causes and effects of energy crisis, and suggest suitable measures to solve the problem.
  - Distinguish between mobility and migration. What are the causes and consequences of rural to urban migration in India?
  - "Where economic growth is sustained over long time periods, its incidence works towards a progressive integration of the space economy." Elucidate.
  - Write a note on the relevance of von Thünen's agricultural location theory in the present context.
6. Answer the following:
- Compare and contrast the Malthusian and Neo-Malthusian perspectives in the context of population growth, resource use and environmental impact.
  - "Land degradation is a threat to productivity and sustainable resource management." Explain with suitable examples from India.
  - In the modern world, most of the frontiers have been replaced by boundaries. Explain the reasons.
7. Answer the following:
- Discuss the concept of urban resilience in the context of planning for sustainable development with reference to towns and cities of India.
  - Analyse the dynamics of industrial location in the metropolitan cities of India.
  - Write an essay on gender equity and equality in India in the context of balanced human development.
8. Answer the following:
- Discuss how and why Mackinder modified his concept of Pivot Area after the World Wars.
  - Provide an account of world population transition in the context of fertility decline and socio-economic development.
  - "Human ecology is the study of mutual relationship of people and their environment both natural and social." Discuss in detail using ecological concepts.



## PAPER- II

### SECTION 'A'

1. Answer the following:

a). On the outline map of India provided to you, mark the location of all of the following. Write in your QCA Booklet the significance of these locations whether physical/commercial/economic/ecological/environmental/cultural, in not more than 30 words for each entry :

- |                  |                    |
|------------------|--------------------|
| (i) Vadhawan     | (ii) Salkhan       |
| (iii) Coorg      | (iv) Mhow          |
| (v) Umroi        | (vi) Thoothukudi   |
| (vii) Bargarh    | (viii) Atal Tunnel |
| (ix) Gurushikhar | (x) Bum La         |

b). Climate change has unsettled the rhythm of seasons. Comment with examples and empirical evidences.

c). Discuss the methods of crop residue management in rural India to reduce pollution.

d). Has the regional aspiration of the people of Jammu and Kashmir been addressed through re-organisation of the state? Make an assessment.

2. Answer the following:

a). identify the areas covered under tribal sub-plan, discuss the programmes initiated to address their problems.

b). soil types in India, classified on the basis of colour, possess specific chemical and mineral characteristics. Discuss.

c). the pharmaceutical industry in India depends on the import of raw materials. Evaluate this statement in the view of Indo-Chinese relationship.

3. Answer the following:

a). India has opened its space to private sector for satellite based activities. Critically examine its implications indicating the major security concerns.

b). Identify oilseeds producing areas in India and discuss the measures to promote edible oil industry.

c). Give a reasoned geographical account of changing rural folk houses in India.

4. Answer the following:

a). Border area development is an important national priority. What are the resilient steps needed for peaceful borders?

b). stunting and wasting among children are major consequences of food insecurity. Discuss various schemes of Government of India to address these problems and their achievements.

c). the essential Commodities (Amendment) Bill 2020 aims to deregulate the production, supply and distribution of farm produce. Critically examine its spatial consequences.

## SECTION 'B'

5. Answer the following in about 150 words each:
- The success of Panchayati Raj depends upon meaningful participation of people at grassroot level. Examine
  - Elucidate the benefits of neem coated urea scheme for Indian agriculture.
  - Canal irrigation has led to monocropping in India. Explain with suitable examples.
  - The pattern of growing ecological footprints is uneven in nature. Analyse with reference to land resources in India.
  - Identify challenges faced by generative and parasitic towns in India and their possible remedies.
6. Answer the following:
- Digital Divide in India needs quick redressal to reduce regional disparity in development. Elaborate with suitable examples.
  - Avalanche is a major hazard in the Himalayas. What are its causes and mitigation measures?
  - The process of demographic transition is not uniform in India. Examine this statement in the context of demographic transition theory.
7. Answer the following:
- Demarcating the seismic zones of India, suggest suitable interventions required in most sensitive seismic zones for sustainable human settlements.
  - What are the characteristics of Blue Flag certified beaches? Discuss their significance for beach tourism in India.
  - Urban sprawl around planned cities evolve leading to emergence of squatter settlements. Discuss the advantages and disadvantages of such outgrowth.
8. Answer the following:
- Analyse the changing nature of workforce composition vis-à-vis rural-urban divide in India.
  - Describe the economic, maritime and strategic interests of India in South China Sea.
  - What kind of skill promotion programmes have been initiated for job deficient regions in India? Explain.