

# Geography Optional (UPSC - Mains) Paper - II

Note: Candidates will be required to answer one compulsory map question pertinent to subjects covered by this paper.

# **Geography of India**

# 1. Physical Setting

Space relationship of India with neighboring countries; Structure and relief; Drainage system and watersheds; Physiographic regions; Mechanism of Indian monsoons and rainfall patterns, Tropical cyclones and western disturbances; Floods and droughts; Climatic regions; Natural vegetation; Soil types and their distributions.

### 2017

44. Give a reasoned account of unusual pattern of distribution of monsoonal rainfall in India in 2017. (10)

45. Justify the inclusion of Meghalaya in Peninsular India and discuss its vegetation and soil types. (15)

46. Drainage pattern in Peninsular India is a result of its geological structure and topography. Elaborate.(15)

# 2018

47. Explain the unusual intensity of dust storms and thunderstorms across India in the pre-monsoon period of year 2018. (10)

48. Distinguish the geographical aspects of North-Western lava plateau and Chotanagpur Plateau of Peninsular India. (20)

# 2019

49. Why is the Indian Monsoon erratic in nature? Explain. (10)

50. Discuss the rainfall pattern and correlate it with spatial distribution of natural vegetation in India. (15)

51. Discuss the political aspects of Himalaya. Explain how it has affected geo-strategy, geo-politics and regional consciousness of Indian federalism. (20)

52. Present the salient features of West flowing rivers of India. (10)



53. Climate change has unsettled the rhythm of seasons. Comment with examples and empirical evidence. (10)

54. Soil type in India, classified on the basis of colour, possess specific chemical and mineral characteristics. Discuss. (15)

2021

55. Discuss the geopolitical impact of the bilateral relationship between India and Bhutan (10)

56. Appraise why drought is one of the most common climatic extremes in India. (15)

57. Discuss the ecological and economic challenges of river linking in India. (15)

58. Describe the salient features of the east-flowing rivers of India (15)

59. Describe the problems of cloud burst in India giving suitable examples. (10)

60. Explain the impact of tropical cyclones and western disturbances on the climate of India (20)

61. Describe the structure and relief features of the Deccan Plateau. (15)

# 2022

62. How do physiography and climate of India explain the biological diversity of the country? 10

63. Critically examine the factors affecting the unpredictability of South-West Monsoon system in India. 20

64. Soils of India, are clear reflections of the structure and process. Comment. 15

65. Critically examine the role of IRNSS-NavIC programme on the satellite navigation system of India. 15

# 2. **Resources**

# Land, surface and ground water, energy, minerals, biotic and marine resources; Forest and wild life resources and their conservation; Energy crisis.

# 2017

32. Explain the inter-State issues involved in implementation of the Satluj-Yamuna Link Canal Project. (10)

33. Discuss the freshwater crisis in India and prepare a blueprint for its sustainable management. (20)



34. Interlinking of rivers may sent as a major source of assured irrigation and all-weather inland navigation in India. Comment on its feasibility taking into account physical, economic and ecological implication. (20)

35. Why has solar energy in India not been developed to desired level in spite of its high potential? (15)

### 2018

36. Keeping the recent developments in view, how can the energy crisis of India be circumvented by harnessing non-conventional energy resources? (10)

### 2019

37. Examine the major causes of ground water depletion in India. (10)

38. Discuss the problems of wildlife conservation and management in India. (10)

# 2021

39. Discuss the economic significance of the volcanic soils of India (10)

40. Discuss the importance of solar energy in the future economic development of India. (20)

41. Discuss the reserves, distribution, and production of all varieties of coal in India. (20)

42. Discuss the role of watershed management for soil and water conservation in hilly regions of India. (10)

43. Examine the critical issues of groundwater resources in India. (15)

# 2022

44. The location of India provides scope for harnessing non-conventional energy resources. Discuss with examples. 15

45. Discuss the continuing disputes on water sharing between the riparian states of North-West India. 15

46. India is bestowed with rich mineral resources due to its geological structure. Correlate the above statement with large mineral belts of India. 20

47. Evaluate the role of the National Food Security Act, 2003 in providing access of food to the poor in India. 15

# 3. Agriculture

Infrastructure: irrigation, 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 socio- economic and ecological implications; Significance of



dry farming; Livestock resources and white revolution; aqua - culture; sericulture, apiculture and poultry; agricultural regionalisation; agro-climatic zones; agro-ecological regions.

#### 2017

41. Farmers' suicide is one of the major agrarian problems in India. Bring out its causes and suggest the remedial measures with special reference to Maharashtra, Andhra Pradesh and Punjab. (15)

42. Land reform is a key to modern agriculture in India. Describe various measures taken in this direction after Independence. (15)

#### 2018

43. Explain the contemporary agricultural scenario in the context of rapid urbanizations in India. (15)

44. Examine the ongoing process of agricultural diversification and its implications for food security in India. (20)

#### 2019

45. Explain the significance of dry farming in drought prone areas of India. (10)

46. Correlate the agro-climatic zones with agro-ecological regions of India. (20)

47. Discuss the use of chemical fertilizers, pesticides and insecticides in agriculture and its impact on human health. (20)

#### 2020

48. Discuss the method of crops residue management in rural India to reduce pollution. (10)

49. The Essential Commodities (Amendment) Bill 2020 aims to deregulate the production, supply, and distribution of farm produce. Critically examine its spatial consequences.(15)

50. Elucidate the benefits of neem coated urea scheme for Indian agriculture (10)

51. Canal irrigation has led to monocropping in India. Explain with suitable examples. (10)

# 2021

52. Give a reasoned account of the difference between the sugar industry of North and Peninsular India. (10)



53. Discuss the recent changes brought about in institutional frameworks of agriculture in India. Evaluate its impact on the agrarian of the country. 20

54. Discuss the importance of 'Dry-land' farming in the drought-prone regions of India. 15

55. How do agro-climatic and land capability indicators assist in macro-agricultural regionalisation of India? Illustrate with an appropriate map. 20

# 4. Industry

Evolution of industries; Locational factors of cotton, jute, textile, iron and steel, aluminium, fertilizer, paper, chemical and pharmaceutical, automobile, cottage and agro - based industries; Industrial houses and complexes including public sector undertakings; Industrial regionalisation; New industrial policies; Multinationals and liberalization; Special Economic Zones; Tourism including eco -tourism.

#### 2017

- Identify the Naxal-affected areas in India and discuss their socio-economic problems. (15)
- 2. Mini steel plants can act as an instrument of decentralization of iron and steel industry in India. Explain. (15)
- **3.** Name the major industrial regions of India indicating the bases of their identification. Highlight their basic problems. (20)

#### 2018

**4.** Assess the suitability of Special Economic Zones (SEZs) for the sustainable economic development in India. (15)

# 2019

- **5.** Critically analyze the role of multinational corporations in India's economic development with suitable examples. (15)
- 6. Explain the present status of age-structure and availability of workforce in India. (15)

- **7.** The Pharmaceutical industry in India depend on the import of raw material. Evaluate this statement in view of the Indo-Chinese relationship. (15)
- **8.** Identify oilseeds producing areas in India and the discuss the measure to promote edible oil industry. (15)
- **9.** What are the characteristics of Blue Flag certified beaches? Discuss their significance for beach tourism in India. (15)



# 2022

**10.** Discuss the salient characteristics of industrial complexes of Western India. Examine the impact of SEZ policy on the region. (20)

# 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.

2017

- 1. Critically examine the feasibility of development of a comprehensive network of airways in India. (15)
- 2. Explain the role of 'Hill Transport Subsidy Scheme' in reducing regional imbalances in areas identified by the Government of India. (15)

# 2018

- 3. Account for the persisting negative trade balance of India. (15)
- **4.** Explain the pipeline network across India and its impact on regional development. (20)
- **5.** Discuss the changing composition of international trade through major seaports of India. (15)

# 2019

- **6.** Examine ongoing space programmes of India and their implications for national security in future. (15)
- **7.** Examine the development of information technology in India and its influence on work culture and society. (15)
- **8.** With special reference to India examine the changes in the nature and patterns of international trade. Mention the major influencing factors. (20)

# 2020

**9.** India has opened-up its space to private sectors for satellite-based activities. Critically examine its implications indicating the major security concerns. (20)



- Identify the major industrial corridors of India and discuss the characteristics of the Bengaluru-Mumbai Corridor. (15)
- **11.** Examine how information and communication technology has boosted the development of certain regions of India. (20)
- **12.** Critically assess the status of the balance of trade in India and suggest some measures to combat the issues. (15)

2022

**13.** Discuss the significance of new ports on the Western Coast of India on the external trade of the country. 10

# Section - B

# 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.

# 2017

40. 'Linguistic diversity is an asset as well as a challenge in India." Explain the statement focussing on the distribution of languages and the major steps taken to address the related issues. (15)

#### 2018

41. Critically assess the vanishing ethnic linguistic plurality of India. (15)

42. Discuss the socio-economic problems associates with the left behind families of international migrants from India. (10)

# 2019

11. Analyse the role of interstate migration in regional disparity in India. (20)

- 12. Give a reasoned geographical account of changing rural folk houses in India. (15)
- **13.** Stunting and wasting among children are major consequences of food in insecurity. Discuss various schemes of the Government of India to address insecurity. Address these problems and their achievements. (15)



**14.** The process of demographic transition is not uniform in India. Examine this statement in the context of demographic transition theory (15)

#### 2021

**15.** Critically examine the relevance of Ravenstein's law of population migration with reference to India. (10)

#### 2022

- **16.** Discuss the impact of Forest Rights Act, on the local forest communities in India. 10
- **17.** 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? 10
- 18. Discuss the emergence of linguistic regions and states in India. 15

# 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; Slums and associated problems; town planning; Problems of urbanization and remedies.

# 2017

38. Small towns in India have problems and prospects of their own. Elaborate. (10)39. Mention various methods of functional classification of towns in India and explain the method applied by Asok Mitra. (20)

# 2018

40. Examine the driving forces of changing urban morphology of million plus cities of India with suitable examples. (20)

41. Peri-urbanization has created enormous environmental problems. Discuss their causes and consequences with reference to the National Capital Region (N.C.R) of India. (15)

42. Describe the changing regional morphology of rural settlements in India. (20)

# 2019

43. Correlate the price of land, vertical growth of cities and the growth of slums in large cities of India. (10)

44. Provide a reasoned account on emerging conurbations in India and explain with suitable examples the problems associated with it. (15)



45. Urban sprawl around planned cities evolves leading to the emergence of squatter settlements. Discuss the advantages and disadvantages of such outgrowth. (15)46. Analyse the changing nature of workforce composition vis-à-vis rural-urban divide in India. (20)

### 2021

47. Critically examine the importance of the Smart Cities Programme for solving the urban problems in India. (15)

48. Discuss Ashok Mitra's classification method of Indian cities. (10)

2022

49. Examine the role of high population concentration in Indian slums in making them more vulnerable during pandemic conditions like the COVID-19. (15)50. What are the drivers of urban sprawl around the major cities of the country? How have new investments in transport projects supported sprawl development? (15)

# 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.

# 2017

36. "An effective three-tier Panchayat Raj System will strengthen the bottom-up approach to multilevel planning in India." Explain. (20)

37. How may tourism in hilly areas of India be developed as an important source of economy? (15)

38. Goods and Services Tax (GST) has differential impact on developed and backward States of the country. How and why? (10)

39. Integrated development of road and rail networks in a complementary framework is a prerequisite for regional development. Explain with reference to North-Eastern Region of India. (20)

40. Describe the salient features of Sagar Mala Project and highlight its role in port-led development of coastal regions in India. (15)

# 2018

41. Why setting up of Water Management Boards is a controversial issue in India. (10)



42. Explain the changing river courses and their impacts on the riparian population in India with suitable examples. (10)

43. Examine the role of people's participation in successful decentralized planning in India. (10)

44. Illustrate with suitable examples the endeavours undertaken in augmenting conservation of water and vegetation in India. (20)

45. Discuss the strategies of integrated development of island territories in India. (15)

46. Startups may play important role in giving fillip to economic growth in India. Illustrate with examples. (15)

#### 2019

47. Assess the importance of foot-loose industries in the development of backward regions in India. (10)

48. Discuss how watershed management has become a tool in eradication of rural poverty in India. (15)

49. Analyse the incentive oriented programmes for removing regional imbalances in socio-economic development of India. (15)

#### 2020

- 50. The success of Panchayati Raj depends upon meaningful participation of people grassroots level. Examine. (10)
- 51. Identify challenges faced by generative and parasitic towns in India and their possible remedies. (10)
- 52. Digital Divide in India needs quick redressal to reduce regional disparity in development. Elaborate with suitable examples. (20)
- 53. What kind of skill promotion programmes have been initiated for job deficient regions in India? Explain. (15)

- 54. Critically examine how the Panchayati Raj system is a catalyst in decentralized planning in India. (20)
- 55. Assess the growth of multinational corporations in the liberalized economic environment of India. (15)
- 56. Discuss the Command Area Development Programme and its impact on eliminating regional inequalities in India. (15)



- 57. Can the Panchayat Raj institutions play a role in grassroot level planning in India ? If yes, discuss how. 10
- 58. Why do disparities in development and incomes between regions persist in large countries like India? How the recent ADP plan address the issue ? 20

# 9. Political Aspects

Geographical basis of Indian federalism; State reorganisation; Emergence of new states; Regional consciousness and inter state 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.

2017

- **1.** Bring out the geopolitical implications of Doklam dispute in the context of Indo-China relations. (10)
- **2.** Religious minorities are largely concentrated in border States of India. Discuss its causes and consequences. (15)

#### 2018

- 3. Discuss the emerging geo-political scenario of Indian Ocean realm. (15)
- **4.** Cross border terrorism has implications on border area development in India. Examine it with suitable examples. (15)
- **5.** Is the land boundary of India with its neighbouring countries a cultural divide or divided culture? Explain with suitable examples. (15)

# 2019

**6.** "India is emerging as global power in relation to Indian ocean realm." Elaborate. (15)

2020

- **7.** Has the regional aspiration of the people of Jammu and Kashmir been addressed through re-organization of the state? Make an assessment. (10)
- **8.** Identifying areas covered under tribal sum-plan, discus the programmers initiated to address to their problems (20)
- **9.** Border area development is an important national priority. What are the resilient steps needed for peaceful borders? (20)
- 10. Describe the economic, maritime and strategic interests of India in South China Sea.(15)

# 2021

11. Critically examine the problems of inter-State border disputes in India (15)



#### 2022

- **12.** Kalapani dispute has opened a new front on the India-Nepal international border. Explain. 10
- **13.** Discuss the geopolitical significance of Quad in the Indo-Pacific realm with reference to marine trade in the region. 15

# 10. Contemporary Issues

Ecological issues: Environmental hazards: landslides, earthquakes, Tsunamis, floods and droughts, epidemics; Issues relating to environmental pollution; Changes 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; Concept of sustainable growth and development; Environmental awareness; Linkage of rivers; Globalisation and Indian economy.

# 2017

34. Bring out the significance of Indian Regional Navigation Satellite System (IRNSS). (10)

35. What do you understand by soil pollution? Delineate the areas vulnerable to it in India and suggest remedial measures. (15)

# 2018

36. Give a critical account of region specific constraints of sustainable tourisms in India. (20)

37. Make a critical appraisal of the factors affecting river water quality in India. (10)38. Describe the socio-spatial consequences of the recent Nipah viral encephalitis in India. (10)

# 2019

39. Examine the problems of Glacial Lake Outburst Flood (GLOF) in India. (10)

40. "Intrabasins linkages of rivers are more feasible economically, socially and ecologically". Discuss with suitable examples from India. (20)

41. Explain the relevance of green tourism for sustainable development of mountain environment in India. (15)

42. Give a reasoned account of high level of pollution in North Indian cities as compared to South Indian cities. (15)

43. Describe the altitudinal and spatial geo-environmental hazards in the Himalayas. (15)



44. The pattern of growing ecological foot-prints is uneven in nature. Analyze with reference to land resources in India. (10)

45. Avalanche is a major hazard in the Himalayas. What are its causes and mitigation measures? (15)

46. Demarcating the seismic zones of India, suggest suitable interventions required the most sensitive seismic zones for sustainable human settlements. (20)

2021

47. Landslide is a major problem in the Himalayan region. Discuss its causes and mitigation measures. (20)

48. Examine the significance of ecotourism in relation to socio-economic development and biodiversity conservation in India. (15)

49. Discuss the salient features of Project Tiger in India. (10)

#### 2022

50. Why has extreme particulate pollution remained a festering issue in Delhi NCR region? 10

51. The process of desertification leads to soil desiccation and soil loss. Explain. 10

52. Groundwater contamination in the fast expanding urban of India appears to have become a major public health issue. Discuss. 15

53. 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. 15

# Mark on the outline map of India supplied any TEN of the following. Write brief notes (not exceeding 30 words) on significant aspect each entry:

2017

(i) Thumba (ii) Nayachar Island (iii) Doddabetta (iv) Devasthal

(v) Pangong Lake (vi) Hampi (vii) Havelock Island (viii) Luni River

(ix) Daringbadi (x) Dudhsagar Waterfalls

# 2018

Shyok River 2. Mawlynnong 3. Shravasti 4. Kori Creek 5. Amarkantak 6. Ghatshila
 Tawang 8. Neyyar 9. Dandeli 10. Mulshi Lake



(i) Lothal
(ii) River Beas
(iii) Chikhaldara
(iv) Narora
(v) Lengpui
(vi) Kuldiha Wildlife Sanctuary
(vii) Thenmala
(viii) Anamudi (ix) Barren Island
(x) Durgaduani creek

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

(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
2022			
(i) Tarangambadi (ii) Mahe (iii) Bomdila (iv) Dhola Sadiya Bridge			
(v) Talakaveri	(vi) Satkosia (vii) Dhola	vira (viii) Sonam	arg
(ix) Maliku Atoll	(x) Gangasaga		