

Geography

Syllabus:

- Salient features of world's physical geography.
- Distribution of key natural resources across the world (including South Asia and the Indian subcontinent);
- Factors responsible for the location of primary, secondary, and tertiary sector industries in various parts of the world (including India)
- Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc., Geographical features and their location- changes in critical geographical features (including water bodies and ice-caps) and in flora and fauna and the effects of such changes.

Year – 2013

1. What do you understand by the theory of continental drift? Discuss the prominent evidences in its support.
2. There is no formation of deltas by rivers of the Western Ghat. Why?
3. Major hot deserts in northern hemisphere are located between 20-30 degree north and on the western side of the continents. Why?
4. With growing scarcity of fossil fuels, the atomic energy is gaining more and more significance in India. Discuss the availability of raw material required for the generation of atomic energy in India and in the world.
5. It is said the India has substantial reserves of shale oil and gas, which can feed the needs of country for quarter century. However, tapping of the resources doesn't appear to be high on the agenda. Discuss critically the availability and issues involved.
6. Do you agree that there is a growing trend of opening new sugar mills in the Southern states of India? Discuss with justification.
7. Analyze the factors for highly decentralized cotton textile industry in India.
8. The recent cyclone on the east coast of India was called "Phailin". How are the tropical cyclones named across the world?
9. Bring out the causes for the formation of heat islands in the urban habitat of the world.
10. What do you understand by the phenomenon of temperature inversion in meteorology? How does it affect the weather and the habitants of the place?
11. Bring out the causes for more frequent landslides in the Himalayas than in Western Ghats.

Year - 2014

1. Whereas the British planters had developed tea gardens all along the Shivaliks and Lesser Himalayas from Assam to Himachal Pradesh, in effect they did not succeed beyond the Darjeeling area. Explain.
2. Account for the change in the spatial pattern of the Iron and Steel industry in the world.
3. Why did the Green Revolution in India virtually by-pass the eastern region despite fertile soil and good availability of water?
4. Explain the formation of thousands of islands in Indonesian and Philippines archipelagos.
5. Why are the world's fold mountain systems located along the margins of continents? Bring out the association between the global distribution of Fold Mountains and the earthquakes and volcanoes.

6. Tropical cyclones are largely confined to South China Sea, Bay of Bengal and Gulf of Mexico. Why?
7. Most of the unusual climatic happenings are explained as an outcome of the El-Nino effect. Do you agree?
8. Bring out the relationship between the shrinking Himalayan glaciers and the symptoms of climate change in the Indian sub-continent.
9. Critically evaluate the various resources of the oceans which can be harnessed to meet the resource crisis in the world.
10. How does India see its place in the economic space of rising natural resource rich Africa?

Year - 2015

1. Explain the factors responsible for the origin of ocean currents. How do they influence regional climates, fishing and navigation?
2. India is well endowed with fresh water resources. Critically examine why it still suffers from water scarcity.
3. The states of Jammu and Kashmir, Himachal Pradesh and Uttarakhand are reaching the limits of their ecological carrying capacity due to tourism. Critically evaluate.
4. How far do you agree that the behavior of the Indian monsoon has been changing due to humanizing landscapes? Discuss.
5. What are the economic significances of discovery of oil in Arctic Sea and its possible environmental consequences?
6. Mumbai, Delhi and Kolkata are the three mega cities of the country but the air pollution is much more serious problem in Delhi as compared to the other two. Why is this so?

Year - 2016

1. "The Himalayas are highly prone to landslides." Discuss the causes and suggest suitable measures of mitigation.
2. Discuss the concept of air mass and explain its role in macro-climatic changes.
3. The effective management of land and water resources will drastically reduce the human miseries. Explain.
4. South China Sea has assumed great geopolitical significance in the present context. Comment.
5. Present an account of the Indus Water Treaty and examine its ecological, economic and political implications in the context of changing bilateral relations.
6. Enumerate the problems and prospects of inland water transport in India.
7. In what way micro-watershed Development projects help in water conservation in drought prone and semi-arid regions of India.
8. Major cities of India are becoming more vulnerable to flood conditions. Discuss.

Year - 2017

1. How does the Juno Mission of NASA help to understand the origin and evolution of the Earth? (150 words)
2. "In spite of adverse environmental impact, coal mining is still inevitable for development". Discuss (150 words)

3. Mention the advantages of the cultivation of pulses because of which the year 2016 was declared as the International Year of Pulses by United Nations. (150 words)
4. How does the cryosphere affect global climate? (150 words)
5. Account for variations in oceanic salinity and discuss its multi-dimensional effects. (250 words)
6. Petroleum refineries are not necessarily located nearer to crude oil producing areas, particularly in many of the developing countries. Explain its implications. (250 words)
7. In what way can floods be converted into a sustainable source of irrigation and all-weather inland navigation in India? (250 words)
8. What characteristics can be assigned to monsoon climate that succeeds in feeding more than 50 percent of the world population residing in Monsoon Asia? (250 words)

Year- 2018

1. Why is Indian Regional Navigational Satellite System (IRNSS) needed? How does it help in navigation?
2. Define mantle plume and explain its role in plate tectonics.
3. What are the consequences of spreading of 'Dead Zones' on marine ecosystem?
4. Why is India taking keen interest in resources of Arctic Region?
5. Define blue revolution, explain the problems and strategies for pisciculture development in India.
6. What is the significance of Industrial Corridors in India? Identify industrial corridors, explain their main characteristics.
7. The ideal solution of depleting ground water resources in India is water harvesting system." How can it be made effective in urban areas?

Year 2019

1. How can the mountain ecosystem be restored from the negative impact of development initiatives and tourism?
2. How is efficient and affordable urban mass transport key to the rapid economic development of India?
3. How do ocean currents and water masses differ in their impacts on marine life and coastal environment?
4. Can the strategy of regional resource-based manufacturing help in promoting employment in India?
5. Discuss the factors for localisation of agro-based food processing industries of North-West India
6. Empowering women is the key to control population growth." Discuss
7. What is water stress? How and why does it differ regionally in India?
8. Assess the impact of global warming on the coral life system with examples
9. Discuss the causes of depletion of mangroves and explain their importance in maintaining coastal ecology.

Year 2020

1. Discuss the geophysical characteristics of Circum-Pacific Zone. (Answer in 150 words)
2. The process of desertification does not have climatic boundaries. Justify with examples. (Answer in 150 words)
3. How will the melting of Himalayan glaciers have a far-reaching impact on the water resources of India? (Answer in 150 words)
4. Account for the present location of iron and steel industries away from the source of raw material, by giving examples.(Answer in 150 words)
5. The interlinking of rivers can provide viable solutions to the multi-dimensional inter-related problems of droughts, floods and interrupted navigation. Critically examine. (Answer in 250 words)

6. Account for the huge flooding of million cities in India including the smart ones like Hyderabad and Pune. Suggest lasting remedial measures. (Answer in 250 words)
7. India has immense potential of solar energy though there are regional variations in its development. Elaborate. (Answer in 250 words)
8. Examine the status of forest resources of India and its resultant impact on climate change. (Answer in 250 words)

Year 2021

- Differentiate the causes of landslides in the Himalayan region and Western Ghats
2. Despite India being one of the countries of the Gondwanaland, its mining industry contributes much less to its Gross Domestic Product(GDP) in percentage. Discuss
 3. what are the environmental implications of the reclamation of the water bodies into urban land use? Explain with examples
 4. Mention the global occurrence of volcanic eruptions in 2021 and their impact on regional environment.
 5. Why is India considered as a sub-continent? Elaborate your answer.
 6. Briefly mention the alignment of major mountain ranges of the world and explain their impact on local weather conditions, with examples.
 7. How do the melting of the Arctic ice and glaciers of the Antarctic differently affect the weather patterns and human activities on the Earth? Explain.
 8. Discuss the multi-dimensional implications of uneven distribution of mineral oil in the world.
 9. What are the main socio-economic implications arising out of the development of IT industries in major cities of India