

Previous Year Question

Paper 2018

(Maximum Marks: 70)

(Time allowed: Three hours)

(Candidates are allowed additional 15 minutes for only reading the paper. They must NOT start writing during this time.)

- Answer Section A and B from Part I which are compulsory.
- Answer any four questions from Part II.
- Sketch maps and diagrams should be drawn wherever they serve to illustrate your answer.
- The intended marks for questions or parts of questions are given in brackets [].

PART – I (30 Marks)

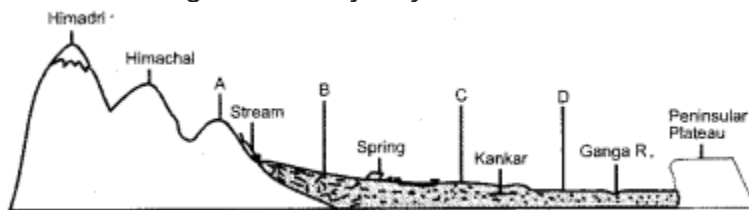
Answer all questions.

SECTION – A

Question 1.

[10 x 2]

- (i) Give two reasons to explain why India is considered to be a subcontinent.
- (ii) The figure below represents a topographic section from the Himalayas to the Peninsular region. Identify any two of the features marked A, B, C and D.



- (iii) With reference to river Godavari, name the following :
- (a) The State where it originates.
- (b) The State where it forms its delta.
- (iv) What is urban forestry ? Mention any two of its objectives.
- (v) State two reasons to explain why irrigation is necessary in India.
- (vi) Briefly explain any two problems caused by Green Revolution with respect to Indian agriculture.
- (vii) State any two important aspects of environmental management.
- (viii) Mention two ways in which hydroelectric power is better than nuclear power.
- (ix) Give two advantages of transportation by roadways.
- (x) Mention two major challenges faced by the tourism industry in India today.

Answer:

- (i) India is called a subcontinent because of its :

1. Vast size.
2. Diversity like : The Thar desert, The icecovered lofty Himalayas in the north, Vast Indo-Gangetic plains to its south, The Deccan plateau, The high temperature and heavy rains of the tropical monsoon climate.

(ii) A – Shivaliks or outer Himalayas.

B – Bhabar.

C – Bhangar.

D – Khadar.

(iii) (a) Godavari originates in the Nashik district of Maharashtra.

(b) Godavari forms its delta before joining Bay of Bengal in Andhra Pradesh.

(iv) Urban forestry pertains to raising and management of trees on public and privately owned lands in and around urban centres. It includes green-belts, road side avenues, parks etc. Its main objectives are :

1. Reduction of environmental pollution.
2. Recreation and improving aesthetic values.

(v) Irrigation is necessary in India because of :

1. Uneven distribution of rainfall. Rainfall is confined to short duration of 3-4 months in the rainy season. The rest of the year is more or less dry. Provision of irrigation can make multiple cropping possible.
2. High yielding variety of crops require regular moisture to increase farm production- Crops like rice, jute, sugarcane require large amounts of water, which can be met only through irrigation.

(vi) Two problems of Green Revolution are :

1. Inter-crop Imbalances : Though all the crops like wheat, rice, jowar, bajara and maize have gained from Green Revolution, it is wheat which has benefited the most. The HYV seeds for pulses and oilseeds have not been developed so far at all. The result is an excess of production in two main food grains-wheat and rice and shortages in most other like oilseeds and pulses.

2. Regional Disparities : Green Revolution affected only those areas which were already better placed from an agricultural point of view like Western U.P., Punjab and Haryana in the north and Tamil Nadu and Andhra Pradesh in the south. It has hardly touched Eastern India, Assam, Bihar, West Bengal and Odisha.

(vii) Important aspects of environmental management are :

1. To create a pollution free environment and to establish co-ordination between government and non-government organisations.
2. To educate people at all levels.
3. To develop long-term and short-term plans for the conservation of environment.
4. To protect bio-diversity of the world.

Hydroelectric Power

1. Hydroelectric power is cheaper and does not produce any waste while generating power.
2. It does not cause pollution.

Nuclear Power

1. Nuclear power is a bit more costlier and produces radioactive waste which is very difficult and expensive to dispose off.
2. The process of mining and refining uranium causes pollution

(ix) 1. Roads can navigate high gradients and sharp turns which railways cannot do.
 2. Road transport system establishes easy contact between farms, fields, factories and markets and provides door-to-door service.

(x) Challenges faced by the tourism industry in India today are :

1. Unplanned, unrestricted growth of tourism in India deprives the tourists of the original charm and beauty and ultimately proves disastrous.
2. The development of tourism depends upon the development of infrastructure of national highways, railways, ports, airports, hotels and other services. Inadequacies of such infrastructural facilities adversely affect tourism.

SECTION – B

Question 2.

[10]

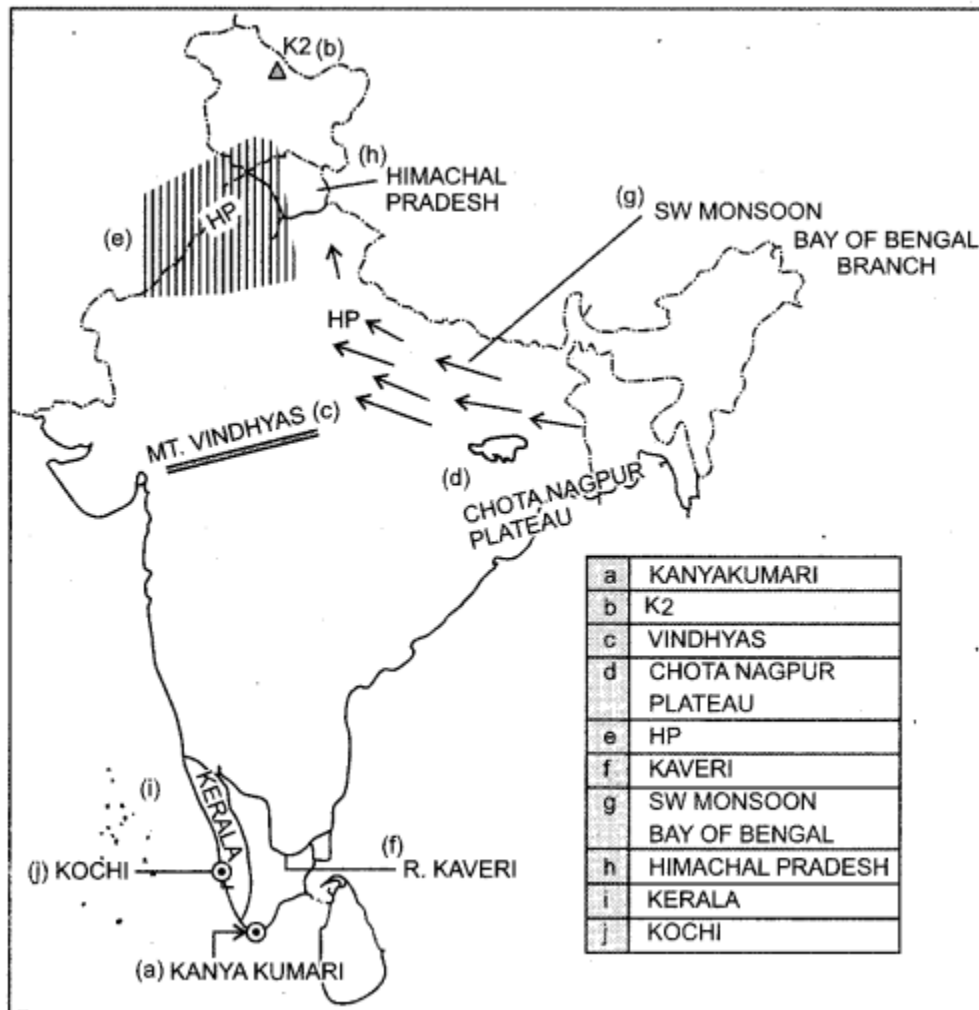
On the outline map of India provided :

- (a) Mark and name the southernmost point of the Indian mainland.
- (b) Mark and name the highest peak of the Trans Himalayas.
- (c) Mark and name the Vindhya.
- (d) Mark and name the Chota Nagpur Plateau.
- (e) Print HP over an area experiencing high pressure during the winter season.
- (f) Trace the course and label river Kaveri.
- (g) With the help of an arrow show the direction and name the wind that brings rainfall over the Gangetic Plains during the monsoon season.
- (h) Shade and name the State with the highest rural population.
- (i) Mark and name the State which has the highest sex ratio.

(j) Locate and label the southernmost port city in the west coast.

Note : All the map work, including legend (Index) should be done on the map sheet only.

Answer:



PART – II (40 Marks)
Answer any four questions.

Question 3.

(a) Give three differences between the Western and the Eastern Himalayas. [3]

(b) Explain the following : [2]

(i) The Himalayan rivers are typical examples of antecedent drainage.

(ii) Jaisalmer receives very less rainfall annually.

(c) Study the climatic data provided in the table below for a city A in India and answer the questions that follow : [2]

City	T/R	J	F	M	A	M	J	J	A	S	O	N	D
A	T	-8	-3	2	7	15	18	17	12	10	5	0	-7
	R	10	8	8	5	5	5	13	13	8	5	0	5

T = Mean monthly temperature in degree Celsius (°C).

R = Average monthly rainfall in millimetres (mm).

(i) What is the cause of low rainfall in station A ?

(ii) Calculate the range of temperature of this station.

(d) (i) State how rainfall and temperature influence the vegetation type in India. [2]

(ii) Why are tropical evergreen forests not very important economically ? [1]

Answers:

(a) Differences between the Western and the Eastern Himalayas

Western Himalayas

1. The Western Himalayas lie to the west of 86°W longitude, between the Indus and the Kali rivers.
2. It rises gradually in a series of ranges.
3. The average rainfall is less than 100 cm.
4. Vegetation is mainly alpine and coniferous.

Eastern Himalayas

1. The Eastern Himalayas lie to the east of 88°E longitude, between Tista and Brahma putra rivers.
2. It rises abruptly from the plains of Bihar and West Bengal.
3. The average rainfall is more than 200 cm.
4. Vegetation is mainly dense evergreen.

(b) (i) Antecedent drainage is a river system originating before a period of uplift and folding of the land as a result of earth movements. The Himalayan rivers like Indus, Satluj and the Brahmaputra continue to cut down their valley at approximately the same rate as the uplift of the land and so maintain the general pattern and direction. So these rivers are known as Antecedent drainage.

(ii) The Aravali's alignment is parallel to the rain-bearing SW monsoon winds, so Jaisalmer does not receive any rain from the Arabian Sea branch of SW monsoon. It is also located in the rain shadow region of the Bay of Bengal branch of SW monsoon. So it does not receive any rain from the Bay of Bengal branch too.

(c) (i) Rain shadow region.

(ii) $(18^{\circ}\text{C}) - (-8^{\circ}\text{C}) = 26^{\circ}\text{C}$.

(d) (i) Climate : Rainfall and temperature influence the vegetation to a great extent. In India, regions receiving rainfall over 200 cm with high temperatures have tropical evergreen type of vegetation commonly. Regions with average temperature of 24° C 27°C and rainfall ranging between 150 cm 200 cm have tropical deciduous forests. Regions with moderate rain of 50 cm have thorn and scrub type of vegetation.

(ii) Tropical evergreen forests are not very important economically because :

1. The trees are not found in pure stands thus, commercial exploitation proves to be very expensive.
2. These are hardwood trees, i.e., they do not float on water.
3. Its warm and wet climate throughout the year paves way for a thick vegetation so, there is a lack of transport facilities. Thus, these forests do not encourage the exploitation economically.

Question 4.

(a) Why is the dependency ratio higher in rural areas than in urban areas ? State two reasons. [3]

(b) Distinguish between metropolis and megalopolis.

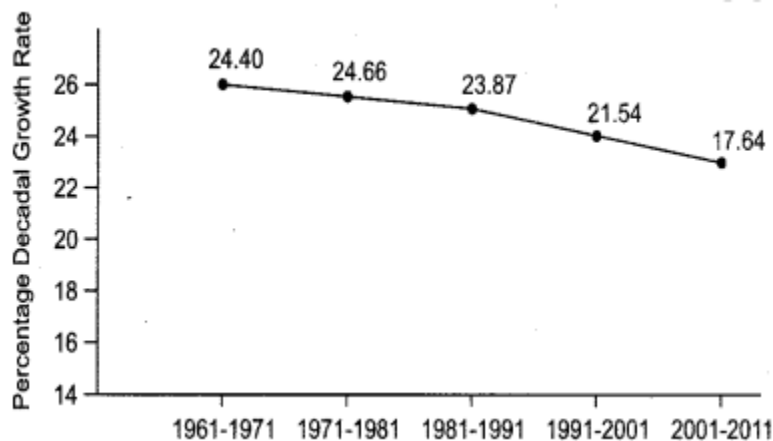
(c) With reference to the linear rural settlement pattern, answer the following: [2]

(i) How does this pattern develop ?

(ii) Name any two areas where this pattern is found in India.

(d) Define density of population. What is India's density of population as per the 2011 census ? [2]

(e) The graph below shows the percentage decadal growth rate of India for a period from 1971 to 2011. [2]



(i) What is the unique characteristic of growth during this period ?

(ii) Explain the reason causing this uniqueness.

Answer:

(a) Dependency ratio is higher in rural areas because :

1. Birth rates are higher in rural areas.

2. Large numbers of adults migrate to urban areas in search of jobs.
3. Adults who migrate return to their rural homes after retirement.

(b) Metropolis

Metro cities are cities with a population of more than 1 million. e.g., Allahabad, Kanpur, Pune, Kochi.

Megalopolis

Mega cities are those with a population of over 5 million. e.g., Mumbai, Delhi, Kolkata, Chennai, Bengaluru, Hyderabad.

(c) (i) Linear rural settlements develop along a stream, inhabited by different tribal groups or the fishing villages in the coastal areas.

(ii) Manipur, Balaghat in M.P., Raigarh district in Chhattisgarh.

(d) Density of population is a ratio of total population to the total area of the country or a part of it.

$$\text{Density of population} = \frac{\text{Total population}}{\text{Total area}}$$

India's density of population as per the 2011 census is 382 persons per sq. km.

(e) (i) The unique characteristic of the growth during this period is the period of high growth up to 1981, has definite signs of slowing down of growth rate of population after 1981.

(ii) This declining trend of growth rate of population is a positive indicator of the official efforts of birth control and people's own inclination to opt for smaller families.

Question 5.

(a) Mention any two drawbacks of land use pattern in India. Suggest any one measure to improve it. [3]

(b) (i) What is fallow land ? [1]

(ii) Suggest two farming practices which will help to reduce the extent of fallow land ?

(c) Mention two reasons why the modern methods of irrigation are preferred over traditional methods of irrigation, in India. [2]

(d) State two dangers of overwatering. [2]

Answer:

(a) The two drawbacks of land use pattern in India are :

1. Division of agricultural land into small and fragmented holdings. It is a serious problem in densely populated and intensively cultivated states of Kerala, West Bengal, Bihar and Eastern Uttar Pradesh.

2. Cultural Waste : The land was used in the past for agriculture, but has been abandoned for reasons like lack of water, salinity or alkalinity of soil, soil erosion, water logging, etc.

Measures to improve it :

1. Consolidation of holding of land. Reallocation of holdings which are fragmented.
2. Cooperative farming.
3. Cultivable wasteland can be brought under cultivation by reclaiming the land. In the interest of long-term conservation and maintenance of Eco balance, this land should be put under afforestation and not under crop farming.

(b) (i) Land which was used for cultivation but is temporarily out of cultivation.

(ii) Farming practices which will help to reduce the effect of fallow land :

1. Crop rotation.
2. Crop combination.
3. Proper irrigation facilities.
4. Proper dose of fertilizers.

(c) Wells, tanks and inundation canals are called primitive methods of irrigation which are inefficient, uneconomical and inconvenient. Only limited area can be irrigated while tubewell is capable of irrigating about ten times more the area as compared to an ordinary well. Perennial canal is much better than inundation canals because it can irrigate larger areas and provides regular irrigation throughout year. Overwatering leads to serious problems of soil salinity and alkalinity.

1. With intensification of canal irrigation, water table rises sufficiently and once the water table is within 2 metres, it is likely to act as a continuous source of soluble salts in the soil profile.
2. Overwatering has brought about devastation in large tracts of land. The sandy soils become alkaline and the loamy soils become saline-alkaline.

Question 6.

(a) (i) What is intensity of cropping ? [2]

(ii) Explain why there is a variation of cropping intensity in Punjab and Rajasthan.

(b) (i) Name the largest cotton producing state in India. [2]

(ii) What are the geographical conditions required for the growth of cotton?

(c) What are the three advantages that Japan has over India with respect to marine fishing ? [2]

(d) Name the largest producing state for each of the following minerals and also give one use of each of these minerals : [2]

(i) Manganese

(ii) Mica

Answer:

(a) (i) "Intensity of cropping" refers to the number of crops raised on a field during an agricultural year. The total cropped area as a percentage of the net sown area gives a measure of cropping intensity.

$$\text{Thus, intensity of cropping} = \frac{\text{Total cropped area}}{\text{Net sown area}}$$

(ii) Punjab is a densely populated state with good irrigation facilities, fertile soil and moderate rainfall. So the cropping intensity is high. Rajasthan receives very low rainfall, has not so fertile soil and irrigation facilities are absent. So the cropping intensity is low.

(b) (i) Gujarat.

(ii) Temperature : 20°C to 30°C.

Rainfall : 50 cm to 100 cm.

1. 200 frost free days in a year for its successful cultivation.
2. Black soil and alluvial soil.
3. A lot of human labour.

(c) Marine Fishing in Japan

1. The meeting of warm Kuroshio and cold Oyashio current provides plankton, which is ideal for fish.
2. Big corporations with modernised ships and equipments, help the people to go in the open ocean.
3. There are many gulfs, bays, estuaries with large number of ports providing a larger coast line helping in better opportunities in marine fishing in Japan.

Marine Fishing in India

1. There is no cold and warm ocean current confluence along the Indian coast. So plankton is not available.
2. Most of the fishermen use non-mechanised boats. They normally do not go beyond 10 km.
3. The Indian coasts do not have many gulfs, bays, estuaries and backwaters and also not many ports leading to a lesser coast-line and thereby reducing the opportunities in marine fishing in India.

(d) (i) Manganese : Largest producer Maharashtra.

Use : Used in making iron and steel, acts as a basic raw material for manufacturing its alloy.

(ii) Mica : Largest producer-Andhra Pradesh.

Use : Used in the electrical and electronic industry because it can withstand high voltage and low power loss factor.

Question 7.

- (a) State any two advantages of railways in India.
- (b) With reference to the Jawaharlal Nehru Port, state the following : [3]
 - (i) Its hinterland.
 - (ii) Two items of export.
 - (iii) Two items of import.
- (c) (i) Name the city which has the oldest artificial harbour on the east coast of India. [1]
 - (ii) State two geographical problems faced by this harbour. [2]
- (d) State any two ways in which cinema can be considered as powerful means of mass communication. [2]

Answer:

- (a) Advantages of Railways in India :
 - (i) It forms a major employment sector as lakhs of people are dependent on railways for their livelihood.
 - (ii) Railways serve as the cheapest mode of transport for bulky products over long distances.
 - (iii) Railways serve as the principle mode of transport for both freight and passengers.
- (b) (i) Jawaharlal Nehru Port has a vast hinterland covering the whole of Maharashtra and large parts of M.P, Gujarat, Rajasthan, Delhi and some parts of Karnataka and Andhra Pradesh.
 - (ii) Exports : Cotton textiles, leather, tobacco, chemical goods.
 - (iii) Imports : Crude oil, superior quality raw cotton, latest machines, instruments and drugs.
- (c) (i) Chennai.
 - (ii) 1. Severe tropical cyclones in the month of October – November which frequently originate in the Bay of Bengal, pose serious threat to fishermen.
- 2. The port is ill-suited for large ships because of the lesser depth of water near the coast.
- (d) Ways in which cinema can be considered as a powerful means of mass communication are :
 - 1. Cinema entertains millions of people everyday throughout the country.
 - 2. It provides useful information and variety of entertainment. It is the only source of entertainment and information in rural and remote areas.
 - 3. It helps the spread of a particular message or idea.
 - 4. It contributes in social relationships and promotes cultural unity.

Question 8.

- (a) Mention any three factors that determine the location of an industry. [3]
- (b) (i) What are industrial clusters ? [3]

- (ii) Identify one industrial cluster from Northern India. State two reasons for its growth.
- (c) Explain the following : [2]
 - (i) Weight losing raw material.
 - (ii) Integrated steel plant.
- (d) State any two negative impacts of tourism on the environment. [2]

Answer:

(a) Three factors determining the location of an industry are :

(i) Raw Material : Industries which use heavy and bulky raw materials in their primary stage in large quantities, are usually located near the supply of the raw material, to bring down the cost of production e.g., Iron and Steel industry.

(ii) Power : Regular supply of power is a prerequisite for the localisation of industries. Tata Iron and Steel Company at Jamshedpur, Aluminium Plant at Korba in Chhattisgarh and Renukoot in U.P., Copper smelting plant at Khetri, Rajasthan are near the sources of power and raw material.

(iii) Transport : Transport by land or water is necessary for the assembly of raw materials and for the marketing of finished products. The location of many industries around Kolkata, Mumbai and Chennai is due to the development of railways in India, connecting the port towns with their hinterlands.

(b) (i) Industries tend to be concentrated in a few pockets because of certain favourable factors. The pockets having high concentration of industries are known as industrial clusters.

(ii) Gurgaon-Delhi – Meerut industrial region. Two reasons for its growth are :

1. It owes its development and growth to hydro-electricity from Bhakra-Nangal complex and thermal power from Harduaganj, Faridabad and Panipat.
2. It is one of the fastest growing market oriented industrial cluster adjoining Delhi.

(c) (i) Raw materials which lose their weight in the process of manufacture are known as weight losing raw materials, e.g., sugar industry, iron and steel industry, aluminium industry.

(ii) Integrated Steel Plant : All three processes from melting of iron ore in the blast furnace to steel making followed by shaping of the metal by rolling is carried out under one complex.

(d) (i) The unplanned and unchecked growth of tourist centres deprives the tourists of the original charm and ultimately proves disastrous. e.g., Darjeeling, Mussoorie, Shimla.

(ii) The area around a tourist spot is covered by commercial constructions and even by industries. Such unplanned growth tarnishes the image of the concerned spot. e.g., The Meenakshi Temple at Madurai, The Palace of Udaipur in Rajasthan.

Question 9.

- (a) What is meant by development ? What is the geographer's perspective to development ? [2]
- (b) Apart from the Central Level Planning, what are the other levels in the multilevel planning ? [2]
- (c) With reference to Haldia Port, answer the following questions : [3]
- (i) Location of the port.
 - (ii) Hinterland.
 - (iii) Reason for its development.
- (d) With reference to mining in Chhattisgarh, name the following : [3]
- (i) The largest coal field.
 - (ii) The largest iron-ore mine.
 - (iii) A bauxite mining centre.

Answers:

(a) Development implies overall improvement in economic, social and political conditions of a society. It is not only area specific but also time specific. Geographer's conceptualization of development is much more comprehensive. It considers economic progress, social advancement, political development and environmental preservation. It is an integrating discipline and offers a unique synthesis of development of natural and human resources.

- (b) 1. State level planning.
2. District level planning.
3. Block level planning.
4. Panchayat level planning.

(c) (i) Haldia port is located at the confluence of rivers Hooghly and Haldi about 105 km downstream from Kolkata.

(ii) Hinterland covers a vast area including almost the whole of eastern and north-eastern parts of the country, West Bengal, Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Sikkim, Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Meghalaya, Tripura and northern parts of Chhattisgarh and Madhya Pradesh

(iii) Haldia port has been developed to release congestion at Kolkata port.

- (d) (i) Korba.
(ii) Bailadila mine.
(iii) Surguja, Raigarh, Bilaspur.