Previous Year Question Paper 2011

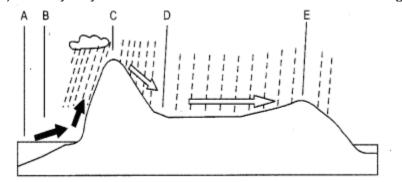
PART-I (Compulsory)

Answer all questions.

Question 1. [20]

(i) Mention two differences between the Peninsular Plateau and the Himalayas.

(ii) Identify any four of the features marked A-E in the diagram given below



- (iii) (a) Mention the typical characteristic feature of Tropical Deciduous forests.
- (b) Name two important varieties of trees growing in these forests.
- (iv) State two reasons to explain why pruning is important for tea plants.
- (v) Discuss two demerits of tube well irrigation.
- (vi) (a) What are the climatic conditions required for the cultivation of coffee in India?
- (b) Which state leads in the production of coffee?
- (vii) Give two reasons to explain why the use of renewable power resources is on the rise.
- (viii) What is meant by 'intensity of cropping'? Name the state with the highest index of intensity and the state with the lowest index of intensity.
- (ix) The Chhota Nagpur Industrial Region is also known as the 'Ruhr of India'. Give two reasons to explain why?
- (x) Why is India share international tourism regstering as a slow growth?

Answer:

(i)

Peninsular plateau	Himalayas
(1) It is a triangular shaped plateau or table land.	It is an arc shaped chain of fold mountains formed due to tectonic uplift.
(2) It is seasonal.	Himalayas are perennial.

- (ii) A Arbian sea
- D Deccan plateau
- B Moist Ascending Winds
- E Eastern Ghats
- C Western Ghats
- (iii) (a) Typical characteristic feature of Tropical Deciduous forests are :
 - 1. These forests are found in areas receiving 100 200 cm of annual rainfall.
 - 2. These trees shed their leaves in the beginning of summer season due to shortage of water.
 - 3. Although the trees shed their leaves in summer, each species has its own time. As a result, the forests never look absolutely bare at any time. These forests are quite dense with an undergrowth of creepers.
- (b) Sal and Teak.
- (iv) Regular pruning is done to keep the shrubs at the required height of 1 m to facilitate plucking and the growth of new shoots with softer leaves.
- (v) Two demerits of tube well irrigation are :
 - 1. Wells dry up during the dry summers and fail to provide water.
 - 2. As tubewells can draw out larger quantities of water, largescale depletion of ground Water takes place, the groundwater level or the water table goes down.
- (vi) (a) Coffee plant requires hot and humid climate with 15°C to 30°C and 150-200 cm rainfall. Frost is injurious to the growth of coffee plants.
- (b) Karnataka.
- (vii) Use of renewable power resources is on the rise because:
 - 1. Exhaustible resources such as coal, mineral oil, etc., are fund or stock resources with limited to time-span which will not last long.
 - 2. Non-conventional energy resources are cost efficient in the long run as the material cost is nil.
- (viii) Intensity of cropping refers to the number of crops raised on a field during an agricultural year.

Intensity of cropping =
$$\left[\frac{\text{Total cropped area}}{\text{Net sown area}} \times 100 \right]$$

The total cropped area as a percentage of the net sown area gives a measure of

cropping intensity. The state with the highest index of intensity is Punjab and lowest index of intensity is Mizoram.

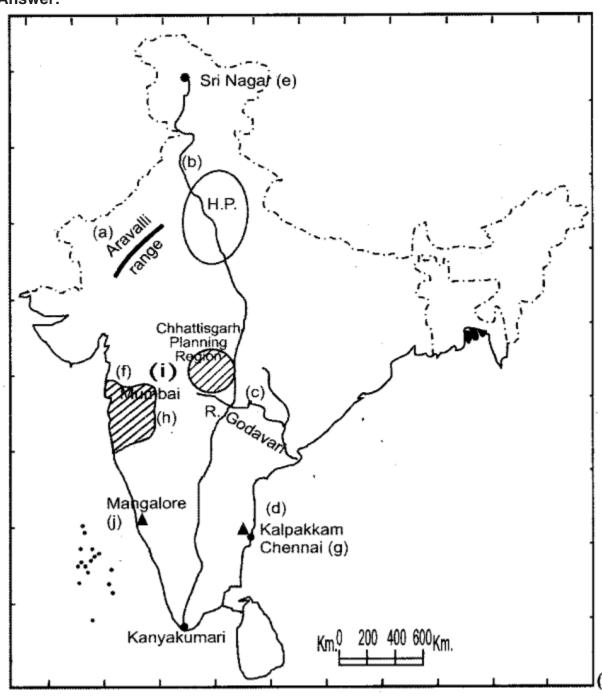
- (ix) The Chota Nagpur industrial region is also known as the 'Ruhr of India' because :
 - Different types of minerals like coal, iron ore, bauxite, mica, etc., are available in this region.
 - The availability of different types of minerals have helped in the development of different types of mineral based industries like iron and steel industry, etc.
- (x) The reasons for the slow growth of India's share in international tourism are as follows:
 - The lack of development of an integrated infrastructure consisting of national highway, railways, hotel accommodations, etc.
 - Spread of epidemic diseases like swine flue, bird flue etc.

Question 2. [10]

On the outline map of India provided:

- (a) Mark and name the oldest mountain range.
- (b) Print HP over an area of high pressure in winter.
- (c) Trace the course of and name the river which has mineral oil reserves in its basin.
- (d) Locate and name a nuclear power station south of the Tropic of Cancer.
- (e) Draw the North-South Corridor and mark the terminal towns.
- (f) Mark and name the urban center which has registered the largest population growth in recent years.
- (g) Mark and name the port which is hit by cyclones in the months of October and November.
- (h) Shade and name the Mumbai-Pune Industrial Region.
- (i) Shade and name the Chhattisgarh Planning Region.
- (j) Mark and name the center which has an oil refinery belonging to the joint sector.

Answer:



Map not to scale)

PART-II Answer any four questions

Question 3.

- (a) (i) Name the sea, the sediments of which now form the Himalayas. [3]
- (ii) During which geological era, were the Deccan Traps formed?
- (iii) The volcanic activity during the era mentioned in (ii) above, led to two great events. Name the events.
- (b) Mention two differences between the Andaman and Nicobar Islands and the Lakshadweep Islands. [2]
- (c) Mention two reasons for the 'break' in monsoons. [2]
- (d) Give three reasons why various Social Forestry Programmes were started in India. [3]

Answer:

- (a) (i) Tethys
- (ii) In the Mesozoic Era (about 70 million . years ago).
- (iii) 1. The break up of Gondawana landmass.
- 2. The uplift of the himalayas out of the Tethys sea

(b)

Andaman and Nicobar	Lakshadweep
(i) Andaman and Nicobar islands are located in Bay of Bengal between 6°- 14° N and 92° – 94° E longitudes.	Lakshadweep is located in Arabian sea and extends from 8° N to 12° 30′ N latitudes and 70°E to 71°E longitude.
(ii) The Andaman and Nicobar islands are cluster of islands quite bigger than Lakshadweeps. Andaman has around 200 Islands and Nicobar has 19.	It is an archipelago comprising twelve atolls, three reefs and five submerged banks with an area of 1-2 sq. km only.

- (c) Two reasons for the 'break' in monsoon are:
 - 1. Failure of the tropical depression.
 - 2. Dislocation of the monsoon trough (ITCZ) over North India.
- (d) Three reasons for starting various social forestry programmes in India are as follows:
 - 1. To reduce pressure on the traditional forests by developing plantations of fuel wood, fodder and grasses.
 - 2. For the afforestation of barren lands, aimed at helping in environmental and social and rural development.

3. Community forestry involves the raising of trees on public or community lands aimed at providing benefit to the community as a whole. The protection of the plantation is primarily the responsibility of the community as a whole.

Question 4.

- (a) Explain the following:
- (i) The year 1921 is known as the 'demographic divide'. [4]
- (ii) The period during the years 1951-1981 is often referred to as the period of 'population explosion'.
- (b) State three differences between compact settlements and dispersed settlements. [3]
- (c) Give three positive consequences of migration. [3]

Answer:

- (a) (i) According to the population estimates of India, till 1871, Indian's population recorded a modest growth. Since then the population has been increasing consistently. However, in 1921, population growth declined to 0.30% caused by large-scale deaths caused by diseases like influenza, plague, cholera etc. This is why 1921 is called the 'demographic divide'.
- (ii) During 1921-1951, the population of India increased from 251 million to 361 million, registering a growth rate 47.3%. During 1951¬1981, the population nearly doubled from 361 million to 683 million, a growth rate of 89.2%. In 2001, the population stood at 1027 million registering a growth rate of about 50%. This is why the period from 1951-1981 is referred to as the period of population explosion.

(b)

Compact Settlement	Dispersed Settlement
(i) It is usually found in fertile plains of river valleys.	It is found in mountainous highlands, ridges, forested areas and deserts and semideserts.
(ii) Main occupation is agriculture.	Main occupation is cattle rearing, lumbering, etc.
(iii) The houses are located adjacent to each other and form a compact block.	The houses are located at a distance from each other.

- (c) Positive consequences of migration are as follows:
 - Economic in Nature: Remittances, both from international and internal migrants, to their families home add to the economic prosperity.
 - Social in Nature: Migrants are agents of social change, as they bring with them
 new ideas. Migrations helps in the intermixing of diverse cultures. It widens the
 mental horizons of people.

• Rural to urban migration also helps in urban development.

Question 5.

- (a) Despite tank irrigation being a simple form of irrigation, it is not used by all farmers. Explain why. [3]
- (b) (i) Today, the need to conserve water resources has become greater that ever. Explain. [3]
- (ii) Mention two steps that need to be undertaken for the conservation of water resources.
- (c) Give two demerits of canal irrigation. [2]
- (d) Mention two methods by which the problem of limited agricultural land may be solved.

Answer:

- (a) Tank irrigation is not used by all farmers because:
 - Only limited area can be irrigated.
 - Most tanks dry up in the dry season when water is most needed.
 - Tanks cover large areas of cultivable land. In many areas, other sources of irrigation have been adopted and the dry beds of the tanks have been reclaimed for agriculture.
- (b) (i) The need to conserve water has become greater in recent times because of growing population pressure which has resulted in the depletion and pollution of the groundwater.
- (ii) Developing water saving technologies and encouraging watershed development, rainwater -harvesting, reuse and recycling of water should be undertaken for the conservation of water.
- (c) Two demerits of canal irrigation are:
 - 1. Farmers tend to flood their fields with water with the intention of getting a bumper crop. They also wish to get the maximum benefit from the money they have spent to use the facility of canal irrigation.
 - 2. Marshy areas near canals become breeding grounds for mosquitoes.
- (d) Two methods by which the problem of limited agricultural land may be solved are:
 - 1. By reducing the extent and frequency of fallow land by the use of fertilizers, irrigation, crop rotation and combination.
 - 2. Green revolution / Intensive agricultural method.

Question 6.

(a) Mention three ways in which technology has benefited agriculture. [3]

- (b) (i) What geographical conditions are required for the growth of wheat? [4]
- (ii) Compare wheat cultivation in India and China-with reference to the varieties grown.
- (c) Why is mica used in the electrical and electronic industry? [1]
- (d) Mention two problems affecting the fishing industry in Bangladesh. [2]

Answer:

(a) Change in technology in Indian agriculture started in 1960s with the introduction of high yielding variety of seeds, fertilizers and mechanisation. These modern inputs require assured water supply to the crops.

The four modern inputs are as follows:

1. High Yielding Variety of Seeds:

HYV seeds are the product of modem technology. It has increased the yield per hectare tremendously. Now, HYV seeds are used in almost every crop. New HYV of seeds for wheat and rice were brought to India from Mexico and Philippines respectively. HYV seeds for jowar and maize were also introduced. The use of HYV seeds increased the production of crops phenomenally. In 1966 – 67, area under HYV of seeds was only 1.89 million hectares and increased to 71.3 million hectares in 1994 – 95. In 2001, 90.6 percent of total wheat cropped area is under HYVs.

Example of HYV seeds are:

Wheat: Kalyansona, Sonalika.

Rice: IR – 36, IR – 58.

2. Fertilizers:

The use of fertilizers is an important factor of modern technological inputs in the agricultural field. The production and consumption of fertilizers has increased many fold after the independence. The consumption of fertilizers was only 760 thousand tones of nutrients in 1965-66. It rose to an all times high of 18,069 thousand tones nutrients in 1990-2000.

3. Modern Equipment's of Agriculture:

The modern equipments of agriculture have made the agriculture productive and easy.

4. Irrigation:

The supply of water for irrigation through canals or tube wells has increased the production of crops and has also led to the increase in net cropped area

- (b) (i) The cultivation of wheat requires a temperature of 10°C while sowing and 15°C-20°C during repening. Average annual rainfall of 50-70 cm is also suitable for the cultivation of crops.
- (ii) In India, wheat is a Rabi crop-therefore, winter wheat is grown whereas in China both winter and spring wheat are grown.

- (c) Mica has insulating properties which can withstand high voltage and has low power loss factor. This has made mica useful in the electrical and electronic industry.
- (d) Two problems affecting fishing industry in Bangladesh are:
 - The cyclonic storms which originate in the Bay of Bengal pose a serious threat to the fisherman.
 - Traditional and inefficient methods used for fishing poses a limitation for the expansion of the fishing industry.

Question 7.

- (a) Give three reasons to explain why there is a dense network of railways over the North Indian Plains. [3]
- (b) (i) Mention two demerits of road transport. [3]
- (ii) Name the terminal towns of:
- 1. National Highway Number 1.
- 2. National Highway Number 2.
- (c) Pipelines are a very convenient mode of transportation, yet there are difficulties in using them. Enumerate two difficulties in using pipelines as a mode of transport. [2]
- (d) What is Telecommunication? What are the main components of Telecommunication? [2]

Answer:

- (a) Dense network of railways are found over North Indian plains for the following reasons:
 - This is a plain area which is suitable for the construction of railways.
 - This densely populated region has highly developed agricultural and industry.
 - Large scale urbanisation has also helped in the development of railways.
- (b) (i) Two demerits of road transport are:
 - 1. Roadways are not suitable for long distance travel.
 - 2. Heavy commodities like coal and iron cannot be easily transported by roads.
- (ii) 1. National Highway 1 links Delhi and Amritsar.
- 2. National Highway 2 links Delhi and Kolkata.
- (c) Two difficulties in using pipelines are as follows:
 - Underground pipelines cannot be easily repaired and detection of leakage is also difficult.
 - Its capacity cannot be increased once it is laid.

(d) Telecommunication is the modem device for the communication at individual and mass level. It has facilitated the communication of messages within a short span of time. It consists of transmission of word messages and ideas.

The main components of telecommunication are telegraph, telephone, fax, radio, television and internet.

Question 8.

- (a) Mention two advantages of mini cement plants. [1]
- (b) (i) The availability of which two factors, determines the localisation of the aluminium industry? [3]
- (ii) Name two products made from aluminium.
- (c) (i) What is the difference between foot loose and 'key' industries? [3]
- (ii) Give one example of each of the industries mentioned in (i) above.
- (d) (i) Name the agro-based industry located near the Deccan Trap region. [3]
- (ii) Mention two important factors responsible for the location of the industry, in the above mentioned region.

Answer:

- (a) Two advantages of mini cement plants are:
 - It provides employment to the rural mass.
 - It makes cement easily available in remote and inaccessible areas.
- (b) (i) Availability of bauxite and coke determines the localisation of the aluminium industry.
- (ii) Railway coaches and defence accessories are the two products.
- (c) (i) A footloose industry is an industry which can be located anywhere like electronics, garments manufacturing, etc. Proximity to the location of raw material is not required. A key industry is one that can be located in the areas of location of raw materials like iron and steel. A key industry is the mother of all the industries.
- (ii) Footloose industry: e.g. computer chips industry.

Key Industry: e.g. Iron and steel industry.

- (d) (i) Cotton textile industry.
- (ii) 1. Cheap HEP is readily available from the region of western ghats.
- 2. Humid climate helps prevent the breaking of the yarn/thread.

Question 9.

- (a) What is multi-level planning? What are the advantages of this type of planning? [3]
- (b) (i) What is a planning region?
- (ii) Mention any two characteristics of a planning region. [2]
- (c) What factors have led to the emergence of Bengaluru as the 'Electronic Capital' of India ? [3]

- (d) (i) What is the significance of the coal deposits of Chhattisgarh?
- (ii) Which country import the iron ore deposits of Chhattisgarh ? [2]

Answer:

- (a) Multi-level planning as an approach that aims at planning for the development and optimal utilization of resources of the local agencies or units of administration. The advantages are :
 - Optimum utilisation of resources.
 - Fulfilment of the basic needs of the people.
- (b) (i) A planning region refers to an area which is the main focus of efficient placement of infrastructure and zoning for sustainable growth.
- (ii) Two characteristics of a planning region are:
 - 1. It aims to promote environmental, social and economic issues of a region.
 - 2. It aims at optimum utilisation of resources.
- (c) Bengaluru is the electronic capital of India because:
 - Availability of skilled and trained worker.
 - Readily available quality research and development institutions.
 - Development of various electronic industries like the Indian Telephone Industries. The Electronics Corporation of India, Bharat Electronics, etc.
- (d) (i) They are used in the iron and steel industries of Eastern India and also a major item of export.
- (ii) China.