

Previous Year Question

Paper 2019

(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.

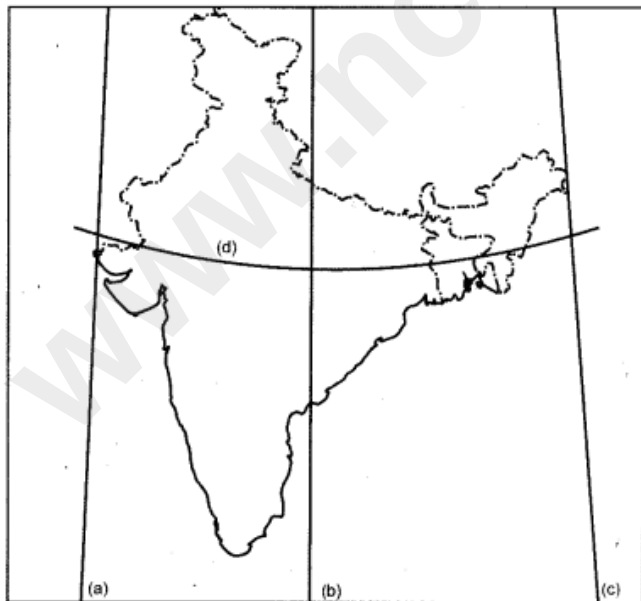
SECTION – A

Question 1.

[10 x 2]

(i) Why is the location of India in the Indian Ocean considered to be significant? Give two reasons.

(ii) With reference to the extent of India, write the angular values of the points marked as (a), (b), (c) and (d) in the map given below :



(iii) Name the four Indian geological eras in their chronological order.

(iv) Briefly explain any two factors responsible for the depletion of forests in India.

(v) Mention any two differences between the Bhabar and the Tarai regions.

(vi) Briefly explain the following terms :

(a) Psychological Density

(b) Conurbation

(vii) State two problems affecting the fishing industry in Bangladesh.

(viii) Name one mining centre for each of the following :

(a) Mica in Andhra Pradesh

(b) Iron ore in Odisha

(ix) Name the two terminals of the East-West corridor.

(x) What is an agro-based industry ? Which is the largest agro-based industry in India?

Answer:

(i) India stands at the head of the Indian Ocean at the very center of the Eastern Hemisphere commanding trade routes running in all directions. Its location, size and economic resources have made it the most dominating country among the littoral states. It serves as a great linkage between the countries lying on its coasts and further beyond. Thus, the location of India in the Indian Ocean is considered to be significant.

(ii) (a) Western longitude $68^{\circ} 7'$ East.

(b) Standard Meridian $82^{\circ} 30'$ East.

(c) Eastern Longitude $97^{\circ} 25'$ East.

(d) Tropic of cancer $23^{\circ} 30'$ North.

(iii) The four Indian geological eras in their chronological order are the Archean era (Early Pre-Cambrian), the Purana era (Late Pre-Cambrian), the Dravidian era (400-570 million years old), and the Aryan era (400 million years old to the present).

(iv) Factors responsible for the depletion of forests in India are :

1. Thoughtless and rapid exploitation of forest resources as per the demand of the increasing population.
2. For acquiring land for agriculture, industries and construction purposes, the forests have been cut down recklessly.

(v) Bhabar Region

1. It lies along the foot of the Shiwaliks from Indus to Tista, about 8 to 16 kms wide.
2. It comprises of pebble-studded rocks with porous beds so it is not suited for agriculture.

Tarai Region

1. It lies to the south of the Bhabar and runs parallel to it, about 20 to 30 kms wide.
2. It is composed of comparatively finer alluvium and is reclaimed for agriculture.

(vi) (a) There is a spelling error in the question paper, it should be physiological density rather than psychological density. Physiological density is the ratio of the total population of the country to the total cultivated area of the country.

(b) Conurbation is an extended urban area, typically consisting of several towns merging with the suburbs of a central city.

(vii) Problems affecting the fishing industry in Bangladesh :

1. Severe tropical cyclones which frequently originate in the Bay of Bengal pose a serious threat to fishermen.
2. The present fish catch is still on a small scale, the boats are small and the methods used for fishing are traditional and inefficient.

(viii) (a) Nellore district.

(b) Keonjhar or Mayurbhanj districts.

(ix) The two terminals of the East-West corridor are Silcher in Assam and Porbandar in Gujarat.

(x) Agro-based industries are the ones that depend on the raw materials produced in the agricultural sector. These are mostly consumer goods industries which are important both in respect of their contribution to total industrial output as well as to employment. The largest agro-based industry in India is the cotton textile industry

SECTION – B

Question 2.

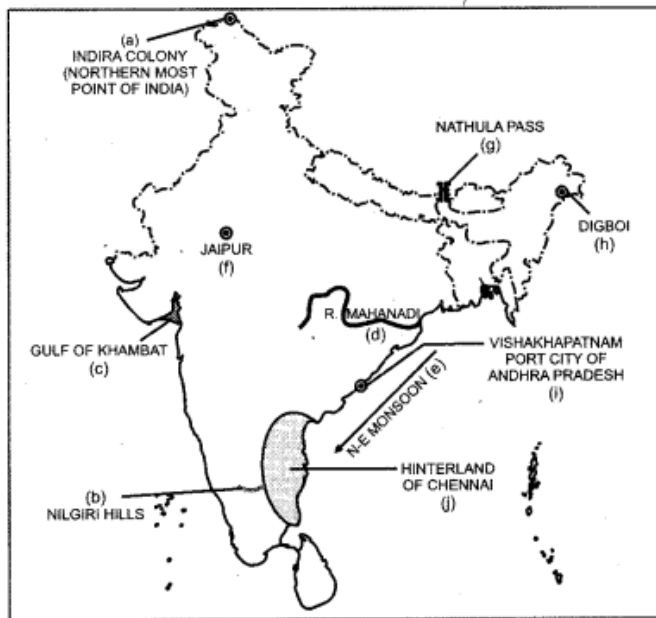
[10]

On the outline map of India provided :

- (a) Mark and name the northernmost point of the Indian Union.
- (b) Mark and label the Nilgiri Hills.
- (c) Shade and label the Gulf of Khambat.
- (d) Trace the course and label the river Mahanadi.
- (e) Show with a single arrow and name the wind that brings rain over the coast of Tamil Nadu, during winters.
- (f) Locate with a dot and name the capital city of Rajasthan.
- (g) Mark and name the Nathula Pass.
- (h) Mark and name the oldest oil-field of India.
- (i) Mark with a dot and name the major port of Andhra Pradesh.
- (j) Mark and label the hinterland of Chennai.

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

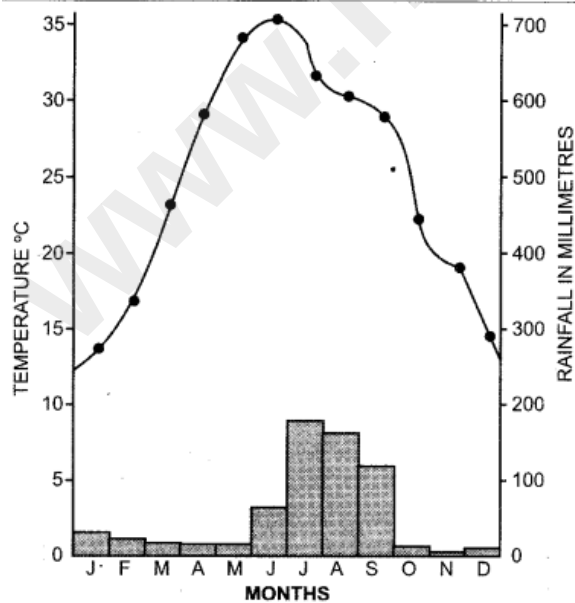
Answer:



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

Question 3.

- Briefly explain the geological evolution of the Himalayas. [3]
- Explain giving any two reasons why the deltas of the river Mahanadi suffer from occasional floods. [2]
- Study the temperature and rainfall graph of station X given below and answer the questions that follow : [3]



- (i) Is the location of station X inland or coastal ?
- (ii) What is the cause of sudden fall of temperature in July, even though it is a summer month ?
- (iii) Mention one main feature of the climate experienced by the station X.
- (d) What is Agro-forestry ? Mention any two benefits of Agro-forestry. [2]

Answer:

(a) The Himalayan ranges were formed when the Indian plate was driven northwards and pushed beneath the Eurasian Plate. With the advance of the Indian Plate towards the north, the Tethys started contracting about 65-70 million years ago. About 30-60 million years ago, the two plates came closer and the Tethys sea crust began to fracture into thrust edges. About 20-30 million years ago, the Himalayan ranges started emerging.

(b) The deltas of the river Mahanadi suffer from occasional floods because of :

1. Large scale silting and the consequent change in the river courses.
2. Indiscriminate felling of trees in the catchment areas of the river has complicated the flood problem.
3. High tide at the time of flood aggravates the flood situation.

(c) (i) Inland.

(ii) The cause of sudden fall of temperature in July is due to the onset of the monsoon season. There is a fall of temperature from July to September because of rainfall during this period.

(iii) The station experiences continental type of climate with marked seasonal changes with respect to temperature and rainfall.

(d) Agro forestry involves the raising of trees and agricultural crops either on the same land or in close association in such a way that all land including the waste patches is put to good use. Two benefits of Agro-forestry are :

1. The farmers are able to get food, fodder, fuel, fruit, and timber from their land.
2. The land gives maximum production and provides employment to rural masses.

Question 4.

- (a) (i) Define index of concentration. [1]
- (ii) How is it useful in the study of population? [1]
- (b) Differentiate between natural growth of population and migratory growth of population. [2]
- (c) Explain why sex composition is an important demographic attribute of the population in India. [2]
- (d) Figure A and B given below show two types of settlement patterns that have developed in India [2]



Figure A

Figure B

- (i) Name the settlement patterns in Figures A and B.
- (ii) State one characteristic feature of each of the settlement patterns.

- (e) (i) What is urbanisation ? [1]
- (ii) What are the two main components of urbanisation ? [1]

Answer:

- (a) (i) Index of concentration is the proportion of the population living in each state or union territory to the total population of India.
- (ii) Index concentration is a very useful method to understand the uneven nature of distribution of population. For example, the population of Uttar Pradesh according to 2001 census was 166 million whereas total population of India in the same year was 1027 million. So, the index of concentration for

$$\text{U.P. in 2001 was : } \frac{166}{1027} \times 100 = 16.16$$

(b) Natural Growth of Population

1. The difference between natural birth-rate and death rate is called natural growth of population.
2. It is prevalent in developing countries.

Migratory Growth of Population

1. The growth of population caused by migration of population, is called the migratory growth of population.
2. It is mostly seen in developed countries.

(c) Sex composition is a very important demographic attribute of population. Separate data for males and females is important for various types of planning and for other demographic characteristics such as natality, mortality, migration, marital status, economic characteristics, etc. The balance between the two sexes affects the social and economic relationships within a country.

The sex ratio in India has fallen from 972 in 1901 to 933 in 2001. This is a very serious trend which speaks volumes of the second rate treatment given to females in India. This dangerous trend must be checked at all costs and females must be given their proper place in society. Only then India can look forward for the overall development of the country.

(d) (i) Settlement patterns in :

Figure A: Checker Board or Rectangular pattern.

Figure B : Star-like pattern.

(ii) The characteristic features are :

Figure A : Checker board or rectangular pattern of settlement develops in villages at the meeting place of two roads. The streets are either parallel or perpendicular to each other and the settlement takes a rectangular shape. These are found in the northern plains, especially in the Ganga-Yamuna Doab and also in Tamil Nadu, Karnataka and Andhra Pradesh states of South India.

Figure B : A village acquires a star-like pattern of settlement when streets radiate from a common centre. Such villages are found in Tamil Nadu and in the Upper Ganga plain.

(e) (i) Urbanisation refers to the population shift from rural areas, the gradual increase in the proportion of people living in urban areas, and the ways in which each society adapts to this change.

(ii) The main components of urbanisation are :

1. Population pressure and lack of resources in the rural areas are the push factors for urbanisation.
2. People migrate to urban areas due to the availability of better standards of living, well paid jobs, greater opportunities, better health care and education facilities.

Question 5.

(a) Briefly explain any two adverse effects of small and fragmented holdings on agricultural productivity [2]

(b) State two ways in which forest area in our country can be increased.

(c) Mention three constraints explaining why cultivable waste land is not being used for

cultivation at present. [3]

(d) In which two ways are tube-wells better than ordinary wells as a form of irrigation ?

(e) With reference to canal irrigation, name one canal in each of the following states [1]

(i) Uttar Pradesh

(ii) Punjab

Answer:

(a) Effects of small fragmented holdings on agricultural productivity are :

1. Low agricultural productivity and backward state of our agriculture is due to the large amount of time and labour lost in moving seeds, manure and cattle from one piece of land to another.
2. Irrigation becomes difficult on such small and fragmented fields.
3. A lot of fertile agricultural land is wasted in providing boundaries. The farmer cannot concentrate on improvements.

(b) Forest area can be increased by :

1. Massive trees plantations.
2. Vigorous restrictions on the reckless felling of trees.
3. Much of the area reclaimed from the forest for agriculture should be retired from cultivation and brought back under forest.

(c) The constraints are :

1. Due to human neglect large tracts of land of U.P., Punjab and Haryana turned infertile due to salinity or alkalinity of soil.
2. Due to extensive soil erosion or water logging or lack of water, agricultural land of the past had to be abandoned.
3. Due to unfavourable physiographic position or deficiencies in the soil resulting from faulty agricultural practices, large tracts of land now, can not be used for agriculture.

(d) Tube Well

1. It generally irrigates 2 hectares of land per day.
2. Tube-wells can bring up water or irrigate land quickly with the help of machines

Ordinary Well

1. It irrigates 0 – 2 hectares of land per day.
2. Wells take longer time to irrigate the same area.

- (e) (i) Uttar Pradesh-Upper Ganga Canal.
(ii) Punjab – Bhakra Canal.

Question 6.

- (a) (i) What is crop rotation ?
(ii) Mention two reasons why crop rotation is necessary in India.
(b) What is the importance of animal husbandry in Indian agriculture ? [2]
(c) Differentiate between pelagic fish and demersal fish. [2]
(d) Name the following : [3]
(i) A geothermal energy plant in Himachal Pradesh.
(ii) An offshore oilfield in the country.
(iii) The nuclear power station in Tamil Nadu.

Answer:

(a) (i) The growing of different variety of crops in succession on a piece of land to avoid 'exhausting the soil and to control weeds, pests & diseases is called crop rotation.

(ii) Crop rotation is necessary in India as :

1. It helps make the soil more fertile, as legumes such as beans and ground nuts fix nitrogen in the soil.
2. It helps to reduce the use of chemical fertilizers as nitrogen is fixed naturally in the soil.
3. It helps to control weeds, diseases and pests by breaking their life cycles.
4. It reduces the risk of crop failure in case of drought or diseases.

(b) Animal husbandry forms a very important part of Indian agriculture. Animal husbandry and Dairy development plays a prominent role in the rural economy in supplementing the income of rural households, particularly, the landless and small and marginal farmers. It also provides subsidiary occupation in semiurban areas and more so for people living in hilly tribal and drought prone areas where crop output may not sustain families.

Pelagic fish

1. These are generally small in size and swim near the surface.
2. They are found in large shoals and may be caught close to the shore or far out at sea.
3. E.g., macrakerel, herring, etc.

Demersal fish

1. These fish live at the bottom of shallow seas.
2. They prefer cooler waters and thus, are most frequently found at depths of about 40 metres where sunlight can easily penetrate.

3. E.g., cod, halibut, etc.

- (d) (i) Manikaran.
- (ii) Mumbai High.
- (iii) Kalpakkam.

Question 7.

- (a) Explain two factors that affect inland waterways in India.
- (b) Give reasons for the following [3]
 - (i) There is a dense network of railways over the North Indian Plains.
 - (ii) Peninsular Plateau has a high proportion of metalled roads.
 - (iii) A good transport network promotes industrial development.
- (c) Mention one advantage and one disadvantage of air transport. [1]
- (d) Differentiate between Telecommunication and Mass Communication. [2]
- (e) State any two ways in which radio can still be considered as a powerful means of mass communication in remote areas. [2]

Answer:

(a) Factors affecting inland waterways in India are :

- 1. The rivers and canals do not have a regular flow of sufficient water.
- 2. Rivers of South India are seasonal and are not much suited for navigation due to the presence of waterfalls, cataracts and sharp bends in their course.
- 3. Silting of river beds reduces the depth of water and creates problems for navigation. Desilting of river beds is a way costlier affair.

(b) North Indian Plains have a dense network of railways because :

- (i) 1. Northern plain area is a densely populated region with highly developed agriculture and industry.
- 2. Large scale urbanisation and industrialisation have created a great demand for rail transport.
- 3. It is a flat plain which is suitable for the construction of Railways.

(ii) Peninsular Plateau has a high proportion of metalled roads due to :

- 1. High concentration of Industries.
- 2. Urbanisation.
- 3. Building materials are locally available.

(iii) Cheap and efficient transport is essential for the growth of industries as transport is a vital link between production and consumption, and also between production distribution. Transport facilities are required for carrying raw material and labour force to

manufacturing site and carrying manufactured goods to the market. Thus, a good transport network promotes industrial development.

(c) Advantage of air transport : It is very essential for a vast country like India where distances are large, and the terrain and the climatic conditions are so diverse. It is the fastest mode of transport which has reduced distances and converted the world into one unit.

Disadvantage of air transport : It is the 'costliest mode of transport which many people cannot afford.

(d) Tele communication

1. It provides for means of communication at the individual level and at the mass level through high speed transfer of messages from one part of the globe to another.
2. Talex, Fax, Telegraph, Telephone are the main means of telecommunication.

Mass Communication

1. It provides means for creating awareness, providing information, education and healthy entertainment at the mass level.
2. Electronic media (radio and television) and print media (newspapers and periodicals) are the main components of mass communication.

(e) Radio is a powerful medium which provides all sorts of useful information, news and a variety of entertainment. AIR broadcasts in 24 languages and 146 dialects with a total network of 225 broadcasting centres covering 91.4% of the country, almost reaching the entire population in a linguistically diverse country like India.

Question 8.

(a) Mention two reasons for the development of the Bengaluru-Tamil Nadu Industrial Region. [2]

(b) Give three reasons to explain the development of sugar industry in Maharashtra. [3]

(c) State two advantages that mini steel plants have over large integrated steel plants. [2]

(d) (i) Define tourism. [1]

(ii) State any two advantages of tourism in India. [1]

Answer:

(a) Bengaluru – Tamil Nadu Industrial Region has experienced the fastest industrial growth in the post-independence era as :

1. This region is dominated by the cotton textile industry but, over the years many other industries such as large number of silk manufacturing units, sugar mills, leather, chemicals, medicine and engineering industries have also emerged here.
2. Availability of cheap hydro-electric power from various dams.
3. Cheap skilled labour, good climate and proximity to vast local markets have favored the concentration of industries in this region.

(b) Maharashtra is the most important state where sugarcane cultivation and sugar mills are integrated in co-operative system. In fact, Maharashtra has emerged as India's largest producer of sugar, producing about one-third of India's sugar due to :

1. The high recovery rate of 11.6 per cent i.e. the sugar obtained is 11.6 per cent of the sugarcane used.
2. Longer crushing period of 162 days.
3. Close proximity of mills to the growing areas

(c) Mini steel plants have the following advantages over large integrated steel plants :

1. These are easy to construct and operate.
2. Mini steel plants have shorter gestation period than large integrated steel plants.
3. They produce mild steel as well as alloy steel including stainless steel and are located far away from the integrated steel plants to meet the local demands in that area.

(d) (i) Travelling to less disturbed or polluted natural areas with a view to study, admire and enjoy the beautiful aspects of a place along with the wild plants and animals and the cultural beauty (past and present) located in these areas is called tourism.

(ii) Advantages of tourism in India are :

1. It helps to improve infrastructure.
2. Development of local handicrafts and cultural activities.

Question 9.

(a) (i) What is a Planning Region? [2]

(ii) Mention any two characteristics of a planning region. [2]

(b) Explain giving two reasons why there is a need for planned development for a country like India. [2]

(c) Mention any two factors which have influenced the development of the Electronic City of Bengaluru. [2]

(d) (i) What is sericulture ?

(ii) Name two main districts of Silk production in Chhattisgarh.

(e) With reference to Haldia port, answer the following [2]

(i) Where is the port located ?

(ii) State the need for the development of this port.

Answer:

(a) (i) A planning region is a self-created living organism, having a life time which not only supports the life in the region but also radiates unifying forces that enable the region to be a unified regional space so as to facilitate the practice of regional planning.

(ii) Characteristics of a planning region are :

1. A planning region should be neither too big nor too small.
2. The boundary should be flexible.
3. There should be natural cohesion.
4. It should have economic harmony.

(b) There is a need for planned development for a country like India due to

1. Rapidly increasing population and pressure on physical resources.
2. Growing demand for food and other necessities of life.
3. Improving the general standard of living in less developed parts of India.
4. Economic progress, social advancement, political development and environment preservation.

(c) Factors that influenced the development of the Electronic city of Bengaluru are :

1. The incentives by the state and central government.
2. The strategic location of the city in the middle of the Indian peninsula.
3. A close network of road and railways.
4. A large number of Indian, foreign and multinational companies have invested large sums of money to nourish industries.

(d) (i) Sericulture is a labour intensive industry that deals with the production of silk and the rearing of silkworms for this purpose. It provides employment to a large number of people. Silk is produced by small units usually by individual families.

(ii) Silk in Chhattisgarh comes from Bastar and Bilaspur districts.

(e) (i) It is located at the confluence of rivers Hugli and Haldia about 105 km downstream from Kolkata.

(ii) Haldia port has been developed to release congestion at the Kolkata port and to enable docking of larger vessels which cannot enter the Kolkata port.