

ICSE Solved Paper 2019

Geography

Class-X

(Maximum Marks : 80)

(Time allowed : Two hours)

Attempt all questions from Part I and any five questions from Part II.

The intended marks for questions or parts of questions are given in brackets [].

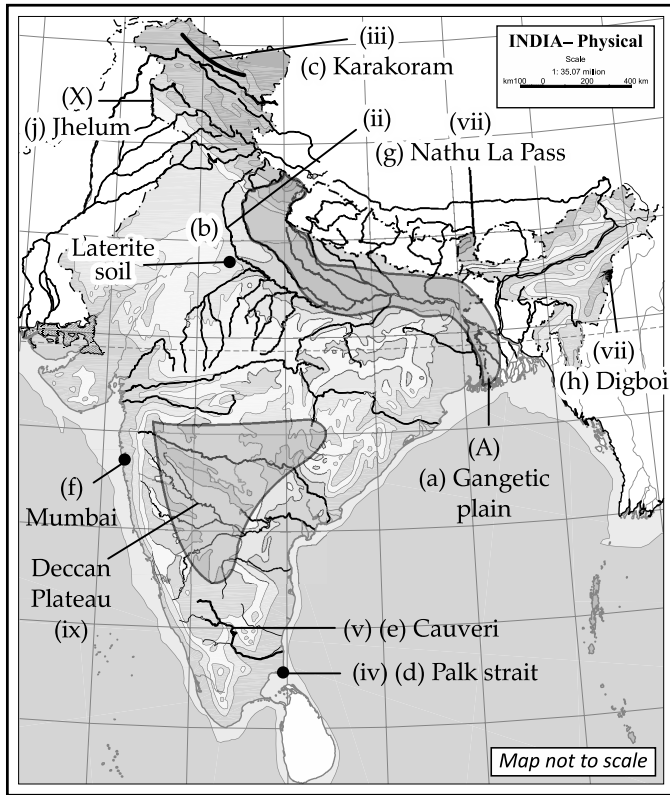
PART I

(30 marks)

Attempt all questions from this Part

1. Study the extract of the Survey of India Map sheet No. 45D/10 and answer the following questions:
 - (a) (i) Give the *six-figure* grid reference for the temple that is located to the *south west* of *Pithapura* settlement. [2]
 - (ii) Give the *four-figure* grid reference for a settlement where people of the region meet socially and for trade at least once in a year.
 - (b) (i) What is the *pattern of drainage* seen in the grid square 2118? [2]
 - (ii) What is the *pattern of settlement* seen in the grid square 1923?
 - (c) What do each of the two numbers (281 printed in black colour and 20 printed in red colour) in the grid square 1818 indicate? [2]
 - (d) (i) Name any two *man-made* features in grid square 2419. [2]
 - (ii) Name any two *natural features* in grid square 2118.
 - (e) What is the *significance* of the following? [2]
 - (i) Fire line in grid square 2417
 - (ii) Water body found in grid square 2221.
 - (f) Calculate the area of the region between 16 and 19 Easting and 18 and 22 Northing. Give your answer in kilometre square. [2]
 - (g) Give a reason for each of the following: [2]
 - (i) The water in some of the wells in the north west quarter of the map is *not fit for drinking*.
 - (ii) The region near- Anadra and Gulabganj has many *causeways*.
 - (h) (i) What is the *main means of irrigation* used by people living in the area shown on the map? [2]
 - (ii) What is the *main occupation* of the people of the region shown on the map?
 - (i) Which according to you is the *most important settlement*? Give a reason to support your answer. [2]
 - (j) Name any two *means of transport* used by the people living in the area shown on the map extract. [2]
2. On the outline map of India provided:
 - (i) Shade and label the *Gangetic Plain*. [1]
 - (ii) Shade and label *an area of laterite soil* in North India. [1]
 - (iii) Mark and label the *Karakoram*. [1]
 - (iv) Mark and label the *Palk Strait*. [1]
 - (v) Shade and label the river *Cauveri*. [1]
 - (vi) Mark and label *Mumbai*. [1]
 - (vii) Mark and label *Nathu La Pass*. [1]
 - (viii) Mark and label *Digboi*. [1]
 - (ix) Mark and label the *Deccan Plateau*. [1]
 - (x) Mark and label the river *Jhelum*. [1]

Ans.



[10]

PART II

(50 marks)

Attempt *any five* questions from *this Part*

- 3.(a) (i) What type of wind is 'Monsoon'? What is its direction during summer? [2]
 (ii) Mention two characteristics of the Indian monsoon.
- (b) With reference to the *summer season* in India, answer the following questions: [2]
 (i) Mention the duration of the summer season in India.
 (ii) What is the atmospheric pressure condition during summer season over the central part of India?
- (c) Give a reason for each of the following: [3]
 (i) Goa receives heavier rainfall than Puducherry.
 (ii) Mawsynram receives the highest average annual rainfall.
 (iii) Mangaluru is cooler than Delhi in summer season.
- (d) Study the data of distribution of temperature and rain for Station X and answer the questions that follow: [3]

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Temp. °C	10	11	23	35	39	42	40	33	30	25	13	11
Rainfall cm	2	1	0	5	15	62	71	81	59	12	10	3

- (i) Is Station X in the *coastal area* or in the *interior* of the country?
 (ii) Calculate the *total annual rainfall* for Station X.
 (iii) Name the *wind* that brings **most** of the rainfall to Station X.
- (b) (i) April to June
 (ii) The atmospheric pressure is low due to high temperature.
- (c) (i) Goa is situated on the West coast of India i.e., the windward side of the Western Ghats, and receives heavy rainfall from the SW Monsoon winds. But Puducherry is on the East coast, which is on the leeward side. Also because by the time these winds reach there, they are devoid of much of their moisture.
 (ii) Mawsynram is situated on the wind ward side of Garo, Khasi, and Jaintia hills, and gets

Ans. (a) (i) Monsoon is a seasonal wind, which reverses its direction according to the season.

During summer it blows from South to West, so it is called SW Monsoon. [1]

(ii) Monsoons are seasonal winds. They are uncertain and erratic. [1]

heavy rainfall from the Bay of Bengal branch of SW Monsoon.

- (iii) Mangaluru is situated near the sea and so the temperatures are modified by the sea breeze and land breeze whereas Delhi is far from the sea and so has no moderating influence of the sea. It has continental climate.

- (d) (i) Station X is in the interior of the country.
(ii) Total annual rainfall for station X is 321 cm.
(iii) SW Monsoon Winds.

4. (a) (i) Name the Indian soil which is formed due to the weathering of basic igneous rocks. [2]

- (ii) Name two states of India where this type of soil is found.

- (b) Name the following: [2]

(i) An important transported soil of India.

(ii) Soil that is rich in iron oxide.

- (c) Give a geographical reason for each of the following: [3]

(i) Terrace farming is an ideal soil conservation method for hilly regions.

(ii) Dry farming is preferred in areas with red soil.

(iii) Wind is a common agent of soil erosion in arid regions.

- (d) Briefly answer the following: [3]

(i) Mention one way in which man is responsible for soil erosion.

(ii) How can deepening of the river bed help in preventing soil erosion?

(iii) Mention a physical characteristic of Laterite soil.

- Ans.(a) (i) Black Soil.

(ii) Gujarat and Maharashtra

- (b) (i) Alluvial Soil

(ii) Red Soil

- (c) (i) Terrace farming is an ideal method for hilly regions because it cuts the slopes into large steps and thus reduced the speed of flowing water check the flow of water, promote absorption of water by soil and save soil from erosion. Retaining walls of terraces control the flow of water and help in reducing soil erosion.

(ii) Red soil consists of coarse material. It is porous and friable and dry farming does not require much moisture.

(iii) In arid regions the soil is fine, dry and loose as there is no moisture and vegetation to hold the soil particles. Wind, therefore easily blows away the topsoil.

- (d) (i) Large scale deforestation.

(ii) Deepening of the river bed will prevent soil erosion caused by floods. It will increase the capacity of the river valley for holding water and there will not be overflowing of banks.

(iii) Acidic and coarse. It is commonly considered to have formed in hot and wet tropical areas.

- 5.(a) Give two reasons to explain as to why we need to conserve our forest resource. [2]

- (b) (i) Mention two conditions required for the growth of Littoral Forest. [2]

(ii) State one characteristic feature of the forest found in the Nilgiri Hills.

- (c) (i) Give two reasons to explain as to why the Tropical Evergreen Forests are difficult to exploit for commercial purpose. [3]

(ii) Name any two trees found in Tropical Evergreen forests.

- (d) Briefly explain each of the following: [3]

(i) The trees in the Tropical Desert Forest have stunted growth.

(ii) There is a gradual increase in the forest cover in India in recent times.

(iii) The trees in Monsoon Deciduous Forests, shed their leaves for about 6-8 weeks during March and April.

- Ans.(a) (i) Forests provide us with a wide variety of valuable products like timber, gums and resins, etc.

(ii) Forests play an important role in regulating the earth's temperature and rainfall.

(iii) They help in checking environmental pollution. [Any two]

- (b) (i) (1) Littoral forests grow in deltas estuaries and creeks which are prone to tidal influences.

(2) Climatic conditions are required warm and wet and rainfall of about 150-200 cm.

(ii) The trees of these forests shed their leaves once a year. The trees there are shorter, and the undergrowth is denser with the abundance of epiphytes, mosses and ferns.

- (c) (i) The forests are dense and have thick undergrowth.

The trees are not found in pure stands. There is a large variety of trees which make exploitation difficult.

(ii) Rosewood and Mahogany

- (d) (i) Trees have stunted growth because of a lack of moisture.

(ii) The tree cover is gradually increasing in recent years because the forest conservation scheme is being followed all over the country. The policy checks deforestation and promotes afforestation and re-afforestation.

(iii) The trees shed their leaves during the dry season as sufficient moisture for leaves is not available.

6. (a) "The modern means of irrigation are gaining popularity." Give two reasons to justify this statement. [2]

(b) Mention two factors that favour the development of tube well irrigation in Punjab. [2]

(c) Give a reason for each of the following: [3]

(i) Most of the South Indian states are *not suitable for development of canal irrigation*.

(ii) There is an urgent need for *water conservation in India*.

(iii) Development of irrigation is essential for the *growth of the agriculture sector of India*.

(d) Briefly explain the following terms : [3]

(i) **Inundation canal.**

(ii) **Rooftop rainwater harvesting.**

(iii) **Surface water.**

Ans.(a) (i) Modern means have higher application efficiency and less wastage of water and results in more yield.

(ii) Fertilizer and nutrient loss is minimized due to localized and reduced leaching.

(b) (1) Water table is high with a perennial water supply.

(2) Presence of alluvial soil which is soft and facilitates digging.

(c) (i) The land surface is uneven and rocky and the rivers are seasonal.

(ii) Large areas suffer from scarcity of water, water bodies are contaminated and the growing population is raising the demand for water.

(iii) Development of irrigation has helped improve food security, reduce dependence on monsoons, improve agricultural productivity and create rural job opportunities.

(d) (i) **Inundation canal** – These are flood canals that are taken out directly from the rivers without any regulating systems.

(ii) **Rooftop rainwater harvesting** – It is a technique through which rain water is captured from the roof catchments and stored in reservoirs.

(iii) **Surface water** – water present on the Earth's surface, such as in a stream, river, lake, wetland, ocean, or reservoir.

7. (a) Give two advantages of using *bio-gas* as a source of power. [2]

(b) Name the following: [2]

(i) A metallic mineral for which the *Balaghat* district of Madhya Pradesh is famous.

(ii) *The multi-purpose project based on the River Sutlej.*

(c) Give a reason for each of the following: [3]

(i) Odisha has benefitted greatly from the *Hirakud Project*.

(ii) Copper is used to make electric wires.

(iii) India's location is advantageous for the generation of solar power.

(d) Briefly answer the following: [3]

(i) Name a *mineral* used to generate *nuclear power*.

(ii) Why is *petroleum* often referred to as "*liquid gold*"?

(iii) State one disadvantage of using coal as a source of power.

Ans.

(a) (i) Cheap and easy to use

(ii) Environment friendly and helps in reducing pollution.

(b) (i) Manganese

(ii) Bhakra Nangal Dam.

(c) (i) (1) Electric power is supplied to the industries at Hirakund, Rourkela, etc.

(2) Provides navigation facilities for over 480 km from Hirakund up to the sea.

(ii) Copper has high thermal and electrical conductivity.

(iii) India lies in Tropical and Temperate latitudes and has Tropical Monsoon Climate. The Rainy season is short and the number of cloudy days is less. Bright sunny days help in the generation of solar power.

(d) (i) Uranium

(ii) It is largely used as fuel in transportation on land, in the air and on water. It also provides raw material for various petrochemical products.

(iii) Burning coal emits harmful wastes such as carbon dioxide, sulphuric acid, etc., which pollutes the environment.

8. (a) Mention two steps taken by the government to boost agricultural production in India. [2]

(b) (i) Name two *varieties of millet* grown in India.

(ii) What is the soil requirement for growing millet? [2]

(c) Study the picture given below and answer the questions that follow: [3]



(i) Mention the *climatic condition* that is suitable for the cultivation of this crop.

(ii) Name the *state* that produces the *largest amount* of this crop.

(iii) In which *cropping season* is this crop grown in India?

- (d) Give a geographical reason for each of the following: [3]
- Cultivation of *wheat* is confined to the northern part of India.
 - Practicing *mixed farming* gives security to farmers.
 - Ratoon cropping* is gaining popularity among sugarcane cultivators.

Ans.

- Increased irrigation facilities to the agricultural sector.
 - Rural electrification.
 - Jowar, Bajra, Ragi (Any two)
 - Can be grown in less fertile soils. Alluvial soils.
 - Cotton requires 21°C to 27°C and rainfall ranging between 50 cm to 80 cm.
 - Gujarat
 - Kharif season.
 - Wheat requires cool and a wet climate during the growing season of crop and a dry warm climate at the time of its ripening, along with the alluvial soil and good irrigation facilities. Such climate is available in North India.
 - Mixed farming adds to the income of the farmer as the rearing of the livestock is done simultaneously.
 - Ratoon crop matures fast and is economical.
- 9.(a) Where do the following *iron and steel plants* get their supply of *iron ore* from? [2]
- Bhilai Iron and Steel Plant.
 - Vishakhapatnam Steel Plant.
- (b) 'Karnataka has developed as an important state for the growth of the silk industry.' Give two reasons to justify the statement. [2]
- (c) With reference to *sugar industries* answer the following questions: [3]
- Why should these industries be located close to the sugarcane growing areas?
 - Name two *by-products* of the sugar industry.
 - Mention one *leading sugar producing state* in North India and one in South India.
- (d) Give a reason for each of the following: [3]
- Ahmedabad is an important *cotton textile producing centre* in India.
 - Cottage industries are significant for our economy
 - Petrochemical industries* are usually located close to the oil refineries.

- Ans.(a) (i) Bhilai Iron and Steel Plant
Iron ore – Dalli – Rajhara range
- (ii) Vishakhapatnam Steel Plant
Iron ore – Bailadila mines in Chhattisgarh.
- (b) (i) Availability of favourable climate where the temperature ranges from 16°C and 31°C .
- (ii) Availability of *Bombyx mori* silkworm, which is reared throughout the year.

- Sugar industry should be located close to the sugarcane growing areas as it has to be crushed within 24 hrs, else the sucrose content is reduced.
 - Molasses, Bagasse
 - North – Uttar Pradesh
South – Tamil Nadu
 - Ahmedabad is located close to the cotton growing area so raw cotton is easily available.
 - Cottage industries are easy and cheap to establish even in less developed areas. They provide employment to a large number of people.
 - Petrochemical industries drive their raw materials from oil refineries.
10. (a) "Roadways are an important means of transport in India". Give two reasons to justify the statement. [2]
- (b) (i) Why are South Indian rivers *not ideal* for the inland water transport? [2]
- (ii) Mention one *advantage* of coastal shipping.
- (c) Give a reason for each of the following: [3]
- Nearly seventy percent of Indians do not use air transport.
 - A well-developed transport network is important for industrial growth.
 - Water transport is not as popular as land transport in India.
- (d) (i) "The railway is an important means of transport as compared to airways." State two reasons to support the statement. [3]
- (ii) Mention one *disadvantage* of rail transport.

- Ans. (a) Roads require less investment and the maintenance cost is also low. It is particularly good for short distance travel for the movement of goods.
- (b) (i) Southern rivers flow through undulating land and have rapids and waterfalls.
- (ii) It is cheap and is most suitable for carrying heavy and bulky goods.
- (c) (i) Air transport is costlier than rail or road transport.
- (ii) A well-developed transport network helps in carrying raw materials to the industries and finished goods to the market.
- (iii) Water transport can be developed only if slow moving perennial rivers are available whereas land transport can be easily developed throughout the country.
- (d) (i) Rail transport is cheap. Railways connect all major cities of India whereas air connectivity is not available in many cities of India.
- (ii) Railways transport provides door to door service.

11. (a) What impact does the waste accumulation have on the following? [2]
- (i) Quality of air around us.
 - (ii) Quality of water around us.
- (b) Mention two ways in which the decomposition of waste in open areas can affect human health. [2]
- (c) (i) What can an individual do to *reduce* waste at home? [3]
- (ii) Why must *segregation* of waste be done before disposal?
 - (iii) How has *composting* proven to be a great help in managing waste?
- (d) Give a reason for each of the following: [3]
- (i) Trees must be planted in the industrial areas.
 - (ii) Chemical fertilizers must be replaced by organic manure.
 - (iii) Plastic and polythene products must be banned.
- Ans.(a) (i) Water accumulation like dumps and landfills poses serious health risks. These sites produce methane and dioxin emissions which are injurious to health.
- (ii) Water pollution results due to runoff from open dump sites containing chemicals. This can contaminate water sources like wells and surface water sources like lakes and streams.
- (b) (i) Diseases like diarrhoea, dysentery, malaria and plague are the result of the decomposition of waste in open areas. They become the breeding place of insects, rats, flies, etc.
- (ii) It gives foul smell and destroys the beauty of the area.
- (c) (i) Reuse and recycle of the discarded material at home, can reduce waste. Avoiding the use of disposable items will also reduce the accumulation of waste.
- (ii) Segregation of waste is necessary because different types of wastes are disposed in different ways. Biodegradable wastes can be decomposed and nondegradable wastes like plastic recycled.
- (iii) It is the natural process of decomposition of organic waste that yields manure or compost which is very rich in nutrients.
- (d) (i) Trees check environmental pollution as they absorb carbon-di-oxide.
- (ii) Chemical fertilizers remain in the soil for a long time continuously contaminating the top soil and ground water. Organic manure is very rich in nutrients and is eco-friendly.
- (iii) Plastic and polythene products are non-biodegradable. It results in soil pollution and clogging of drains. And if they are burned, they infuse the air with toxic fumes. They degrade the environment.

