ICSE Paper 2012 GEOGRAPHY

SOLVED PAPER

(Two hours)

Answers to this Paper must be written on the paper provided separately. You will not be allowed to write during the first 15 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

Attempt seven questions in all.

Part I is compulsory. All questions from Part I are to be attempted.

A total of five questions are to be attempted from Part II.

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

To be supplied with this Paper : Survey of India Map Sheet No. 45D/10 and 20 cm of twine.

Note:

- (i) In all Map Work, make wise use of arrows to avoid overcrowding of the map.
- (ii) The extract of Survey of India Map Sheet No. 45D/10 must not be taken out of the examination hall. It must be handed over to the Supervising Examiner on completion of the Paper.
- (iii) The Map given at the end of this question paper must be detached, and after marking must be fastened to your answer booklet.
- (iv) All sub-sections of the questions attempted must be answered in the correct serial
- order.
- (v) All working including rough work should be done on the same answer sheet which is used to answer the rest of the paper.



PART I [30 Marks]

Attempt all questions from this Part.

Question 1:

Study the extract of the Survey of India Map sheet No. 45D/10 and answer the following questions:

- (a) Name and give the four figure grid reference of a settlement where the people of the region meet at least once a year. [1]
- **(b)** What does the conventional symbol at grid reference 145132 mean ? [1]
- (c) If a man were to walk from Gulabganj (1820) to Harmatiya (1916):
- (i) In which direction would he be walking?
- (ii) Which are the two different kinds of roads that he would be using? [3]
- (d) What do the following numbers in grid square 1718 and 1818 mean? (i) 280 (ii) 281 [2]
- (e) What are the two differences between the settlement Bamba in 1914 and those in 1813 ? [2]
- (f) Name four facilities that Anadra has which makes it an important settlement. [2]
- **(g)** What is the quickest means of communication for the people of Dabani (1313) **[1]**
- (h) What do the following mean:
- (i) brackish in 1915
- (ii) causeway in 1715
- (iii) 6r in 1218 ? **[3]**
- (i) Mention two factors which support the following:
- (i) The Sipu river is in its middle course.
- (ii) The rainfall in the region shown in the map extract is seasonal. [4]
- (j) What is the distance in kilometres between the distance stone 20 in



1818 and the cause way in 1715 along the metalled road? [1]

- (a) Pamera —1622
- Or Malgoan—1520
- **(b)** Spot height 270
- (c) (i) SEW/SW
- (ii) Cart track and Metalled road.
- **(d)** (i) 280 Contour height.
- (ii) 281 Spot height.
- (e) Two differences between the settlement Bamba and those in 1813 are:
- 1. Settlement at Bamba is nucleated and huts are temporary.
- 2. Settlement in 1813 are permanent and dispersed.
- (f) Four facilities:
 - 1. It has good network of roads.
 - 2. It has a Police Chauki, Dispensary and Post and Telegraph Office.
 - 3. Many perennial lined wells can he seen near the settlement.
- (g) Telephones.
- (h) (i) Brackish in 1915 means salty water in the well.
- (ii) Causeway in 1715—It is any construction that enable us to cross a seasonal river or stream. It is not a bridge.
- (iii) 6r in 1218 means relative height of the river bank.
- (i) (i) Sipu River is in its middle course because
 - 1. It has broad river bed and
 - 2. Many meanders are formed by the river.
- (ii) Rain fall is seasonal because
 - 1. The rivers and tanks are seasonal in nature.

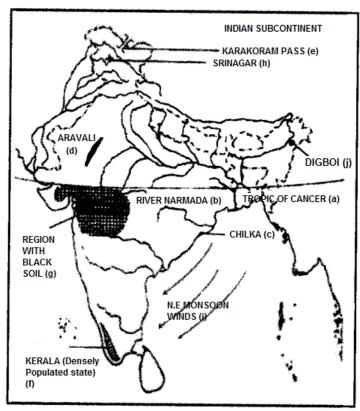


- 2. There are many causeways in the map.
- **(j)** 3.1 km.

Question 2:

On the outline map of India provided:

- (a) Draw, name and number the Tropic of Cancer [1]
- (b) Label the river Narmada [1]
- (c) Shade and name Lake Chilka [1]
- (d) Mark and name the Aravali Mountains [1]
- (e) Mark and name the Karakoram Pass [1]
- (f) Mark and name a densely populated state in South India [1]
- (g) Shade and name a region with black soil [1]
- (h) Mark with a dot and name Srinagar [1]
- (i) Mark and name the winds which bring rain in winter to the Coromandel Coast [1]
- (j) Name and print 0 on an oil field in North-east India. [1]





PART II [50 Marks]

Attempt any five questions from this Part.

Question 3:

- (a) (i) Name the type of climate prevailing over India.
- (ii) Mention any two factors responsible for ii. [2]
- (b) What is the direction of the summer monsoon? Why? [2]
- **(c)** Give geographical reasons for the following:
- (i) Even in summer Shimla is cooler than Delhi.
- (ii) The northern plains of India do not freeze in winter.
- (iii) Kochi has a lesser annual range of temperature than Agra. [3]
- **(d)** Study the climatic data given below and answer the questions that follow:

Temperature °C 23.8 25.0 27.7 28.3 30.2 30.3 30.4 30.3 30.0 30.3 25.5 Rainfall (cm) 0 0 1.1 1.5 2.1 45.3 46.5 45.4 43.3 20.1 3.0		Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (cm) 0 0 1.1 1.5 2.1 45.3 46.5 45.4 43.3 20.1 3.0	_	Temperature °C	23.8	25.0	27.7	28.3	30.2	30.3	30.4	30.3	30.0	30.3	25.5	24:2
	=	Rainfall (cm)	0	0	1.1	1.5	2.1	45.3	46.5	45.4	43.3	20.1	3.0	0.1

- (i) Calculate the mean annual temperature.
- (ii) What is the total rainfall during the monsoon season?
- (iii) Does the station have a maritime or a continental climate? Give a reason for your answer. [3]

Answer:

- (a) (i) Tropical monsoon climate.
- (ii) Two factors responsible are:
- 1. Latitudinal extent
- 2. Presence of Himalayas.
- **(b)** Direction of summer monsoon is SW. Because winds deflect towards their right in northern hemisphere.
- **(c)** Geographical reasons:
- (i) Shimla is cooler than Delhi in summer because the temperature decreases with the height at a rate of 1°C for every 165 m of ascend.
- (ii) Northern plains of India do not freeze in winter due to the presence of Himalayas which do not allow the cold polar winds to enter India.
- (iii) Kochi has a lesser annual range of temp, than Agra because Kochi is located on the sea coast and its temperature is modified by the land and sea breezes. Agra is away from the sea.
- (d) (i) Mean annual temperature 28°C
- (ii) Total rainfall 180.5 cm.
- (iii) Station has maritime type of climate because it has low range of temperature i.e., 6.6°C.

Question 4:

- (a) State two methods of controlling the erosion of soil caused by running water. [2]
- **(b)** Mention two differences in the alluvial soil of the northern plains and the alluvial soil on the coastal plains of India. **[2]**
- **(c)** Mention any three characteristics of black soil which makes the soil fertile. **[3]**
- (d) Give geographical reasons for the following:
- (i) Laterite soil is not suitable for cultivation.
- (ii) Red soil is red in colour.
- (iii) Khadar soils are preferred to Bangar soils. [3]

- (a) Soil erosion caused by running water can be controlled by following methods:
- (i) By planting trees.
- (ii) Terrace farming.



- **(b)** Alluvial soil of the northern plains are coarse in texture and light in colour whereas the alluvial soil on the coastal plains are dark and fine in texture.
- (c) Three characteristics of black soil which make the soil fertile are:
- (i) It is rich in iron, potash, lime, calcium, alumina, magnesium, carbonates and humus.
- (ii) It is moisture retentive.
- (iii) It is fine grained in texture.
- (d) Geographical reasons:
- (i) Laterite soil is not suitable for cultivation because it is acidic in nature and does not retain moisture.
- (ii) Red soil is red in colour because it is rich in iron.
- (iii) Khadar soil is preferred to Bangar because it is more fertile as it is replished every year by floods.

Question 5:

- (a) Mention two reasons why Tropical Evergreen Forests are difficult to exploit for commercial purposes. [2]
- (b) Give two characteristics of tidal forests. [2]
- (c) Mention three reasons why forests must be conserved. [3]
- (d) Name any three trees found in monsoon deciduous forests and state one use of each of these trees. [3]

Answer:

- (a) Tropical evergreen forests are difficult to exploit for commercial purposes because they are dense and found in mixed stands.
- **(b)** Two characteristics of tidal forests are :
- (i) They can grow in salty water.
- (ii) Trunks of these trees are supported by still like roots.
- **(c)** Three reasons why forests must be conserved are :
- (i) They help in preventing floods.
- (ii) They check soil erosion.
- (iii) They help to save the habitat of the wild animals.
- **(d)** Three trees found in monsoon deciduous forests are : Sal, Teak and Myrobalan.

Uses:

Sal: Its timber is useful for railway sleepers.



Teak: Its timber is used for house construction and furniture.

Myrobalan: Its fruit provide material for tanning leather.

Question 6:

(a) Mention two advantages of rainwater harvesting. [2]

- **(b)** Why are inundation canals being converted to perennial canals 1 Give two reasons. **[2]**
- (c) Give two advantages and one disadvantage that tube wells have over surface wells. [3]
- (d) Where are tanks most widely used in India? Why? [3]

Answer:

- (a) Two advantages of rainwater harvesting:
- (i) It avoids flooding of roads.
- (ii) It raises the ground water table.
- (b) Inundation canals are being converted to perennial canals because:
- (i) They provide water only during rainy season.
- (ii) They are solely dependent on rainfall and irrigates higher regions.
- (c) Advantages of tube wells:
- (i) Tube well can irrigate a larger area.
- (ii) It does not dry up during summers.

Disadvantage:

It requires electricity for its working.

(d) Tanks are widely used in peninsular plateau because the undulating surface forms natural depressions and the streams and rivers there have water only during rains.

Questions 7:

- (a) (i) Name two leading states producing manganese.
- (ii) Name one use of the mineral. [2]
- **(b)** (i) Name two varieties of iron ore used in industry.
- (ii) How is the low grade iron ore utilized ? [2]
- (c) Give geographical reasons why:
- (i) Anthracite is used for domestic purposes.
- (ii) Oil refineries are located close to oil fields or near ports.



- (iii) The location of coal fields is an important factor in industrial development. [3]
- (d) Name the mineral:
- (i) which is converted to aluminium.
- (ii) which is used in the manufacture of cement.
- (iii) the largest deposits of which are found in Balaghat in Madhya Pradesh. [3]

Answer:

- (a) (i) Orrisa and Karnataka.
- (ii) Manganese is used for making steel and glass.
- **(b)** (i) Haematite and Magnetite
- (ii) Low grade iron ore is used in mini steel plants.
- **(c)** (i) Anthracite is used for domestic purpose because it does not give more smoke and have above 90% of carbon.
- (ii) Oil refineries are located close to oil fields as it helps to transport crude oil or near ports because most of the crude petroleum is imported from other countries.
- (iii) Location of coal fields is an important factor in industrial development because it is the basic source of power and it is heavy and bulky also which is difficult to transport.
- (d) (i) Bauxite
- (ii) Limestone
- (iii) Manganese.

Question 8:

- (a) What is the importance of agriculture in India? Mention two factors. [2]
- (b) Name a state which produces short staple cotton. Which climatic and soil conditions favour the cultivation of cotton in the state mentioned? [2]
- **(c)** Give geographical reasons for the following:
- (i) Jute has to be retted.
- (ii) Tea is grown on hill slopes
- (iii) Silver oak and banana trees are grown on coffee plantations. [3]



(d) Explain the following:

- (i) The propagation of rubber by the bud. grafting method.
- (ii) The propagation of sugar cane by ratooning
- (iii) The propagation of paddy by transplantation. [3]

Answer:

- (a) Importance of agriculture:
- (i) About 70% of the working population of India is directly involved in agriculture.
- (ii) Agriculture provides about a third of India's national income.
- (b) Maharashtra.

Climate condition:

Temperature: 20°C to 32°C at least 200 frost free climate.

Rainfall: Between 50 cm to 120 cm abundant sunshine is required during

ripening.

Soil: Black Cotton soil is ideal.

- **(c)** (i) Jute has to be retted to separate the long strands of fibre from the stem.
- (ii) Tea is grown on hill slopes because tea plant cannot tolerate standing water on its roots.
- (iii) Silver oak and banana trees are grown on coffee plantation to provide shade to the young coffee plants and give additional income to the farmers.
- (d) (i) **Bud grafting:** This is done by the insertion of a strip of bark containing a bud from high yielding clones under the bark of young seedling about 5 cm high till they become united in 3 to 4 weeks Then the bid seedling stem is sawn off above the grafted bud.
- (ii) **Ratooning:** It is a process by which the cane is cut close to the ground where the sugar content is concentrated After that the remaining stem begins to grow again and produces the second crop called ratoon.
- (iii) **Transplantation:** In this the sowing of seeds is usually done in well-prepared seed beds called nurseries at the beginning of the monsoons. In about 4 weeks time when the plants are 15 to 20 cm tall they are carefully unrooted in bunches and replanted in rows in the flooded fields.

Question 9:

- (a) Give two reasons why the woollen industry has not developed as well as the cotton industry in India. [2]
- (b) State two factors which favour the silk industry in Karnataka. [2]
- (c) Mention three problems of the sugar industry in India. [3]



(d) In what way does the cotton industry contribute to the economy of India? Mention any three relevant factors. [3]

Answer:

- (a) Woollen textile industry has not developed as the cotton textile industry because:
 - 1. The need for woollens is limited to the winter months in northern India
 - 2. Indigenous wool is of poor quality and have' to depend on other countries for raw materials.
- (b) Two factors which favour the silk industry in Karnataka are:
- (i) It has enough fresh water from alkaline salts for the processing of silk fibre.
- (ii) Favourable temperature i.e. between 16°C to 30°O is suitable for silk worms.
- **(c)** Three problems of the sugar industry in India are:
- (i) This industry is seasonal in nature as the raw material is available only at the time of harvest
- (ii) There is a great distance between the sugar factories and the fields. Due to transportation cost of production increases.
- (iii) There is loss of sucrose if not crushed with in 24 hrs.
- (d) The contribution of cotton industry to the economy of India are:
 - 1. It is the premier industry of India.
 - 2. Directly or indirectly more than 2 crore people depend upon this industry.
 - 3. India is the world's third largest exporter of cotton textiles.

Question 10:

- (a) What are petrochemicals? Name any two products made fro. n pet rot hemicals. [2]
- (b) Why has the electronics industry grown in importance? [2]
- (c) Mention three advantages that a mini steel plant has over an integrated steel plant. [3]
- (d) Name:
- (i) A city on the east coast of India which has a ship building yard.
- (ii) The iron and steel plant set up with German collaboration.



(iii) A city which has a plant manufacturing Maruti cars.

Answer:

(a) Petrochemicals are mainly chemicals derived from petroleum resources like coal, gas and petroleum.

Two products are plastics and acrylic fibres.

- **(b)** Because it does jobs that electricity alone cannot do and it makes wonders possible in every fields like entertainment, space technology, medical sciences and software industry.
- (c) Advantages of Mini steel plants are:
 - 1. They use the electric arc furnace and thus conserve coal.
 - 2. They require smart capital investment.
 - They cater to the local need of the market and the cost of transport is reduced.
- (d) (i) Vishakhapatnam
- (ii) Rourkela steel plant
- (iii) Gurgaon.

Question 11:

- (a) Why has the importance of inland waterways declined? Give any two reasons. [2]
- (b) Name two areas where helicopter services may be used ? [2]
- (c) Mention any three problems being faced by the Indian Railways. [3]
- (d) What is the Golden Quadrilateral? Mention any two ways in which it will help in the economic development of the country. [3]

- (a) Importance of waterways is declining because :
- (i) It is a slow means of transport.
- (ii) Rivers of India do not have a regular flow of water as water is diverted for irrigation.
- (b) Helicopter services may be used in :
- (i) Mountains
- (ii) Flooded areas.



- (c) Problems faced by Indian railways are:
- (i) It lack repair and maintenance of tracks and bridges.
- (ii) India as the railways operation is on their gauges and shift from gauge to another is a problem.
- (iii) Rail traffic has increased and the old tracks are not able to carry the increased load and accidents are frequent.
- **(d)** Golden Quadrilateral comprises the national highways connecting Delhi-Mumbai- Chennai-Kolkata by a 6-lane super highway. It has a total length of 5846 km.

Two ways it will help in the economic development of the country are:

- (i) India is a land of vast distances from north-south as well as from eastwest. This forms an integrated transport system and bring different people together.
- (ii) Cities lying close to these roads will also be well developed and enhance the growth of our country.

