

ICSE Paper 2013

GEOGRAPHY

 (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/7

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/7 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

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No. 45D/7 and answer the following questions:

(a) Give the six figure grid reference of:

(i) Triangulated height 217

(ii) A lined well near-Chekhla. [2]

(b) (i) Name the left bank tributary of the main river.

(ii) State the direction in which this left bank tributary is flowing. [2]

(c) (i) Mention a special feature associated with the streams in grid square 9879.

(ii) Name the types of drainage pattern found in grid square 9382. [2]

(d) Give the four grid reference of each of the following :

(i) Open scrub

(ii) Bantawada [2]

(e) Name two relief features that can be seen in grid square 9782 and 9574. [2]

(f) Why do you find limited cultivation in the map extract ? Give two reasons for your answer. [2]

(g) What is the compass direction of Antroli (9576) and Chekhla (9281) from Sangla ? [2]

(h) What type of rainfall is experienced in the region shown in the map extract ? Justify your answer giving one reason. [2]

(i) Calculate the distance in kilometres along the cart track between Chitrasani (999747) and Pirojpura (978753). [2]

(j) (i) What is the geographical name that you would give to the general pattern of settlements in the region shown on the map ?

(ii) Name one region shown on the map which is unsuitable for the cultivation of crops. [2]

Answer:

(a) Six figure grid reference are :

(i) A 217—940792

(ii) Lined well near Chekhla — 925814

(b) (i) Left bank tributary is Balaram Nadi.

(ii) It is following from SE to NW.

(c) (i) Feature associated with the streams is Broken ground.

(ii) Dendritic pattern.

(d) Four figure grid reference are :

(i) Open scrub — 9573

(ii) Bantawada—9978

(e) Two relief features are :

9782 — Escarpment

9574 — Ridge/Watershed

(f) There is limited cultivation in the map because :

(i) Region is sandy with sandunes.

(ii) Presence of Broken ground which is a waste land.

(g) Sangla to Antroli — NE (North East)

Sangla to Chekhla — North

(h) This region experiences low and seasonal rainfall.

Reason — Rivers and streams are seasonal.

(i) Distance in cm = 5.2

Distance in km = $5.2/2 = 2.6$ km (Scale 2 cm to 1 km)

(j) (i) General pattern of settlements is Nucleated.

(ii) One region unsuitable for the cultivation of crops is broken ground/white coloured region which is a waste land.

Question 2:

On the outline map of India provided:

(a) Mark and name Chennai. **[1]**

(b) Label the river Godavari. **[1]**

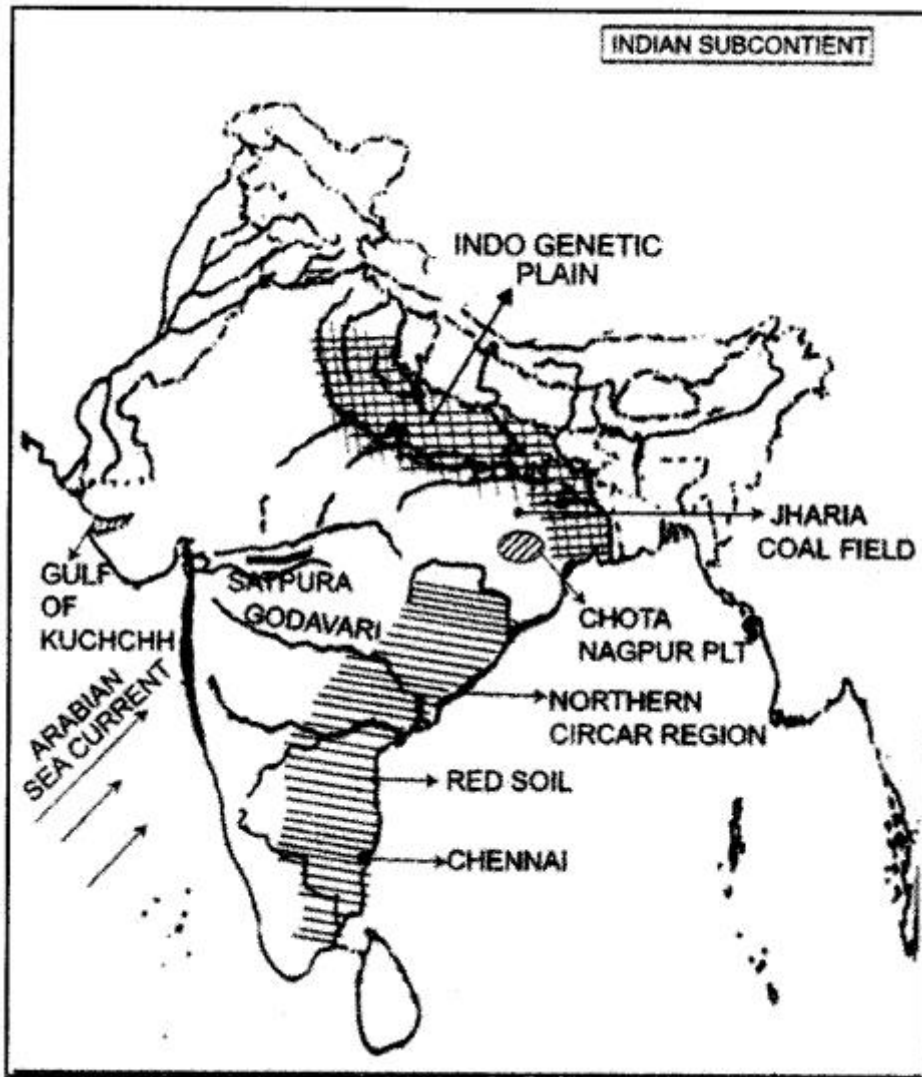
(c) Shade and label the Chota Nagpur Plateau. **[1]**

(d) Shade and name the Gulf of Kachchh. **[1]**

(e) Mark and name the Indo-Gangetic Plains. **[1]**

- (f) Shade and label an area with Red Soil. [1]
- (g) Mark and name the winds which bring rain to Mumbai in July and August. [1]
- (h) Mark and name the Satpura Range. [1]
- (i) Mark and name the Jharia Coal Field. [1]
- (j) Shade and label the Northern drear coastal region. [1]

Answer:



PART II [50 Marks]

*Attempt **any five** questions from this Part.*

Question 3:

- (a) Name two types of cyclonic systems that affect India and two areas that

receive rainfall from these systems. [2]

(b) Give two important characteristics of the South West Monsoon rainfall. [2]

(c) Give reasons for the following :

(i) When the Malabar coast is receiving heavy rainfall in July, the Tamil Nadu coast is comparatively dry.

(ii) The Northern Plains of India have a Continental type of climate.

(iii) Central Maharashtra receives little rainfall. [3]

(d) Study the climatic data given below and answer the questions that follow :

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature °C	23.1	24.8	26.5	29.3	32	32.8	33.1	32.1	30.5	29.3	28.7	26.1
Rainfall (cm)	15.3	10.1.	0.3	0.1	1.3	4.5	6.1	10.2	10.5	20.1	16.8	19.0

(i) Calculate the annual rainfall experienced by the station.

(ii) Suggest a name of this station, giving a reason for your answer.

(iii) Name the season during which the rainfall is heaviest. [3]

Answer:

(a) Two cyclonic systems that affect India are :

(i) Temperate cyclones — Region : North west of India (Punjab, Haryana)

(ii) Tropical cyclones — Region : Eastern coast of India (Andhra Pradesh, Tamil Nadu, West Bengal)

(b) Characteristics of S. W. Monsoon rainfall:

(i) Orographic in nature

(ii) Uncertain in amount and time.

(c) Reasons:

- (i) When the Malabar coast is receiving heavy rainfall in July, the Tamil Nadu coast is dry because it lies in rain shadow region of Arabian sea branch and Bay of Bengal is parallel to the coast.
- (ii) Northern plains have continental climate because it is away from the moderating influence of the sea.
- (iii) Central Maharashtra receives little rainfall because it lies in the rain shadow region of western ghats when Arabian sea branch strikes it.

(d) (i) Annual rainfall — 114.3 cm.

- (ii) Suggested name is Chennai because the station is receiving most of its rain in October and November.
- (iii) Retreating monsoon season.

Question 4:

(a) Differentiate between Transported soil and In situ soil, quoting a suitable example for each. **[3]**

(b) State two differences between Bhangar and Khadar. **[2]**

(c) Name the process by which Laterite soil is formed. Mention one disadvantage of this soil. **[2]**

(d) With reference to Red soils in India, answer the following questions :

- (i) Name two states where it is found.
- (ii) State two advantages of this type of soil.
- (iii) Mention two important crops grown in this soil.

Answer:

(a) Transported Soil—If a soil is carried else where at the place of rest by the agents of gradation, it is transported soil e.g. Alluvial Soil.

In situ Soil—If the soil remains at the place of its origin it is called in situ soil. e.g. Black Soil.

(b)

Bhangar	Khadar
(1) It belongs to Old alluvium.	It belongs to New alluvium.
(2) It is less fertile.	It is more fertile.
(3) It is non porous, clayey and loamy.	It is calcareous clay.
(4) It is found in the lower areas of valley bottom.	They are found 30 m above flood level of the rivers.

(c) Laterite Soil is formed by leaching in the regions of alternate wet and dry spells. Disadvantage—It is acidic in nature and cannot retain moisture.

(d) With reference to Red Soil:

(i) Tamil Nadu and Karnataka.

(ii) Two advantages of Red Soil:

1. It has high iron oxide content and rich in potash.
2. It becomes productive with fertilizers.

(iii) Important crops grown are rice, millets, sugarcane.

Question 5:

(a) Mention two main characteristics of Tropical Rain Forests. **[2]**

(b) Name the tree, the timber of which could be used for the following:

(i) A soft and white timber used for making toys and match boxes.

(ii) A hard durable timber used for ship building and furniture making.

(iii) A sweet smelling timber which yields an oil, used for making handicrafts. **[3]**

- (c)** (i) Name one region in India for each of the following:
(1) Tidal forests.
(2) Thorn and Scrub.
(ii) Explain why Thorn and Scrub forests are found in the above mentioned region. **[3]**

(d) Briefly explain two reasons for forests being an important natural resource. **[2]**

Answer:

(a) Two characteristics of tropical rain forest:

- (i) Trees are dense and evergreen.
- (ii) They are found in mixed stands.

- (b)** (i) Semul
(ii) Teak
(iii) Sandalwood

- (c)** (i) (1) Tidal forests—Deltas of the Ganga, Mahanadi, Godavari, Krishna and Kaveri.
(2) Thorn and Scrub forest—Rajasthan and Gujarat.
(ii) Thorn and scrub forest are found in the above region because these areas get less than 25 cm of rainfall and average temperature of 25°C-27°C.

(d) Forest are important natural resource because :

- (i) They provide timber, medicinal plants etc.
- (ii) They help in purifying air and giving rain.

Question 6:

(a) Name two states in which tube wells are extensively used. Give a reason to explain its importance as a source of irrigation. **[2]**

(b) Give two main reasons why water scarcity occurs in India. **[2]**

- (c)** (i) Name two states where perennial canals are widely used.
(ii) Briefly explain two reasons for perennial canals being a popular form of irrigation in the named states. **[3]**

- (d)** (i) Name two methods of water harvesting in India.
(ii) Mention any two objectives of rain water harvesting. **[3]**

Answer:

(a) Tube Wells are extensively used in Uttar Pradesh and Haryana. Because the land is soft to bore and it is a fertile region.

(b) Water scarcity occurs because :

- (i) Seasonal rainfall
- (ii) More Demand due to increase in population
- (iii) Increase in urbanisation and Industrial growth.

(c) (i) Two states are Punjab and Haryana.

(ii) Perennial Canals are popular there because

- 1. Rivers here are perennial.
- 2. Land is soft and fertile.

(d) Two methods of water harvesting in India :

- (i) Recharge through trench
- (ii) Collecting of rain water on the roof top and directing to dry tanks.

Two Objectives of rain water harvesting :

- 1. Avoid flooding of roads
- 2. Raise ground water table

Question 7:

(a) Name the ore of aluminium. Describe two main uses of aluminium. **[2]**

(b) Name any two industrial products for which limestone is used as a source of raw material. **[2]**

(c) (i) Name two industries that use a high quantity of coal.

(ii) Name one important area that has large coal deposits in the states of Jharkhand and West Bengal. **[3]**

(d) (i) Which state is the largest producer of mineral oil ?

(ii) Name two coastal and two inland oil-refineries in India. **[3]**

Answer:

(a) Ore of Aluminium is Bauxite Two uses of Aluminium.

- 1. In Aircraft industry

2. In Electrical wires industry

(b) Two industrial products for which limestone is used:

1. Iron and steel industry
2. Cement industry

(c) (i) Two industries that use high quantity coal are :

1. Iron and steel industry
2. Sugar industry

(ii) Large coal deposits states :

In Jharkhand—Jharia

In West Bengal—Raniganj

(d) (i) Largest producer of mineral oil is Assam.

(ii) Two coastal oil refineries are Kochi and Chennai.

Two inland oil refineries are Barauni and Mathura.

Question 8:

(a) Distinguish between intensive commercial farming and extensive commercial farming. **[2]**

(b) With reference to rice cultivation, answer the following :

(i) Name two leading states in the production of rice.

(ii) Give two advantages of growing rice in nurseries. **[2]**

(c) (i) Name two states where coffee plantations are found.

(ii) What conditions of soil and climate are favourable for the cultivation of coffee ? **[3]**

(d) Explain in brief the following:

(i) Retting

(ii) Ginning

(iii) Broadcasting **[3]**

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Intensive Commercial Farming

Extensive Commercial Farming

(i) Size of holdings are small.	Size of holdings are big.
(ii) Food crops predominate.	Cash crop predominate.
(iii) Maximum capital, labour and skill is involved for making a small area productive.	Cash crop predominate yield per area is much less.

Answer:

(a)

(b) With reference to rice :

(i) Tamil Nadu and West Bengal

(ii) Two advantages of growing rice in nurseries are :

1. It increases the yield by 45%.
2. Uses water economically.

(c) (i) Two states where coffee plantations found : Karnataka and Kerala.

(ii) Conditions required for Coffee cultivation are :

Soil—Red and laterite soil well drained with humus.

Climate—It requires temperature ranging between 18°C to 28°C and rainfall between 125 cm to 200 cm well distributed throughout the year.

(d) (i) **Retting**—It is the soaking of the stalk and the removal of the fibre from the bark after plants are submerged in a pool of gently flowing clear water to separate the long stands of fibre from the stem.

(ii) **Ginning**—Removal of cotton seed from cotton fibre is called Ginning.

(iii) **Broadcasting**—The scattering of seeds by hand over the soil is called Broad-casting method of sowing.

Question 9:

(a) Name any two large sugar producing states, one each in north and south India. [2]

(b) Name an agro-based industry based in the following industrial centres:

- (i) Ahmedabad
- (ii) Mysore **[2]**

(c) State three favourable conditions responsible for the growth of the jute industry in West Bengal. **[3]**

(d) Give geographical reasons for the following:

- (i) The woollen industry is a localized industry in India.
- (ii) It is necessary to crush sugar cane within 24 hours of harvesting.
- (iii) Sericulture flourished in Karnataka. **[3]**

Answer:

(a) Two large sugar producing states are :

In North—Uttar Pradesh

In South—Maharashtra

(b) Agro based industries are :

Ahmedabad—Cotton industry

Mysore—Silk industry

(c) Three favourable conditions are :

- (i) Raw material is easily available from Ganga-Brahmaputra delta.
- (ii) Abundant water is available of retting and washing from River Hoogly.
- (iii) Coal for power is easily available from Raniganj.

(d) Geographical reasons:

(i) Woollen industry is a localized industry in India because India is a tropical country and has its market only in North India.

(ii) It is necessary to crush sugar cane within 24 hours of harvesting because the sugar content decreases as it dries up.

(iii) Sericulture flourished in Karnataka because it has favourable climate for rearing silkworms and availability of abundant soft water free from alkaline salts and iron.

Question 10:

(a) (i) What is the significance of the electronics industry in recent times ?

(ii) Name two cities that have leading software companies. **[2]**

(b) Name the steel plants that were set up with Russian collaboration. **[2]**

(c) Explain three reasons as to why there is a large concentration of iron and steel plants in the Chota Nagpur region. **[3]**

(d) What industrial product are the following centres noted for ?

- (i) Gurgaon
- (ii) Perambur
- (iii) Chittaranjan. **[3]**

Answer:

(a) (i) Significance of electronic industry—It covers a wide range of products including television, transistor, cellular telecom, computers, defence, railways, meteorological equipment, space research as well as medical equipments. It has revolutionized the life style of the Indian masses in the recent past.

(ii) Two cities are Bangluru and Pune.

(b) Steel plants which were setup with Russian collaboration are :

- (i) Bokaro Steel Plant in Jharkhand.
- (ii) Bhilai Steel Plant in Chhattisgarh.

(c) Three reasons for large concentration of iron and steel plant in Chota Nagpur Region :

- (i) Availability of raw iron ore
- (ii) Availability of coal
- (iii) Availability of cheap labour

(d) (i) Gurgaon—Maruti Car

(ii) Perambur—The Integral Coach Factory

(iii) Chittaranjan—Chittaranjan Locomotive Works.

Question 11:

(a) Give one disadvantage of air transport. Why is it still a popular means of transportation in India ? **[2]**

(b) (i) Give two reasons why peninsular rivers are not ideal for navigation.

(ii) Name a port on the east coast which is often hit by cyclones during the months of October and November. **[3]**

(c) (i) State the main objective of the treatment of gaseous waste. [1]
(ii) Name two common diseases caused as a result of gaseous pollution. [1]

(d) What was the cause of the following ?

- (i) The Bhopal Tragedy.
- (ii) The Minamata Disease.
- (iii) The Chernobyl Disaster. [3]

Answer:

(a) Disadvantage of air transport—It has limited carrying capacity still it is popular because it is free of physical barriers such as mountain range, valleys etc.

(b) Peninsular rivers are not ideal for navigation because

- (i) 1. Rivers are seasonal in nature.
- 2. Rivers flow through undulating rocky plateau region.
- (ii) Vishakhapatnam port is often hit by cyclones during October and November.

(c) (i) Objectives of the treatment of gaseous waste is to drain the harmful particles and allow clean air to escape through chimneys.

(ii) Two diseases of gaseous pollution are lung cancer and asthma.

(d) (i) The Bhopal tragedy—Leakage of Methyl isocyanate.

(ii) The Minamata Disease—By mercury poisoning.

(iii) The Chernobyl Disaster—Leakage of nuclear radiations.