

ICSE Paper 2011

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) Give the six figure grid reference of:

- (i) the brick kiln
- (ii) the temple near Asav. **[2]**

(b) What is the difference in the pattern of drainage in grid square 0916 and in

0712? [2]

(c) Give the four figure grid reference of each of the following:

- (i) Stony waste
- (ii) Open scrub. [2]

(d) Calculate the distance in kilometres along the metalled road between the causeways in grid square 0512 and 0808. [2]

(e) (i) What do the tiny curved black line in grid square 0315 indicate ?
(ii) What is the main cause for this feature ? [2]

(f) (i) What is the geographical name that you would give to the general pattern of settlements in the region shown on the map ?
(ii) Give a reason for your answer. [2]

(g) What is the general direction of flow of the Sipu Nadi, given in the map extract ?
Give a reason to support your answer. [2]

(h) Name two probable occupations of the people in the settlement of Revdar in grid square 0313 and 0413. [2]

(i) What kind of roads connect
(i) Marol with Mitani and
(ii) Revdar with Karaunti respectively ? [2]

(j) Give two reasons to show that the area depicted in the map experiences seasonal rainfall. [2]

Answer:

(a) (i) Brick kiln — 088131
(ii) The temple near Asav — 059127

(b) Pattern of drainage in square 0916 is Radial and in 0712 is trellis.

(c) Four figure grid reference of:

- (i) Stony waste — 1014
- (ii) Open Scrub — 0916

(d) Distance along the metalled road between the causeways is 11.2 cm.
Distance in km = $11.2 / 2$ (Scale 2 cm to 1 km) = 5.6 km

(e) (i) Tiny curved black lines in grid sq. 0315 indicate broken ground.
(ii) Main cause for this feature is erosion by running water due to rains in rainy season.

(f) (i) The geographical name given to the general pattern of settlement is Nucleated.
(ii) Because the settlements can be seen in clusters.

(g) The general direction of flow of the Sipu Nadi is from NE to SW.
Reason — An arrow in the river bed in sq. 1014 is indicating the flow of the river towards S.W.

(h) Two probable occupations of the people of Revdar are services and farming.

(i) (i) Road that connect Marol with Mitan is cart track and
(ii) Revdar with Karaunti is metalled road.

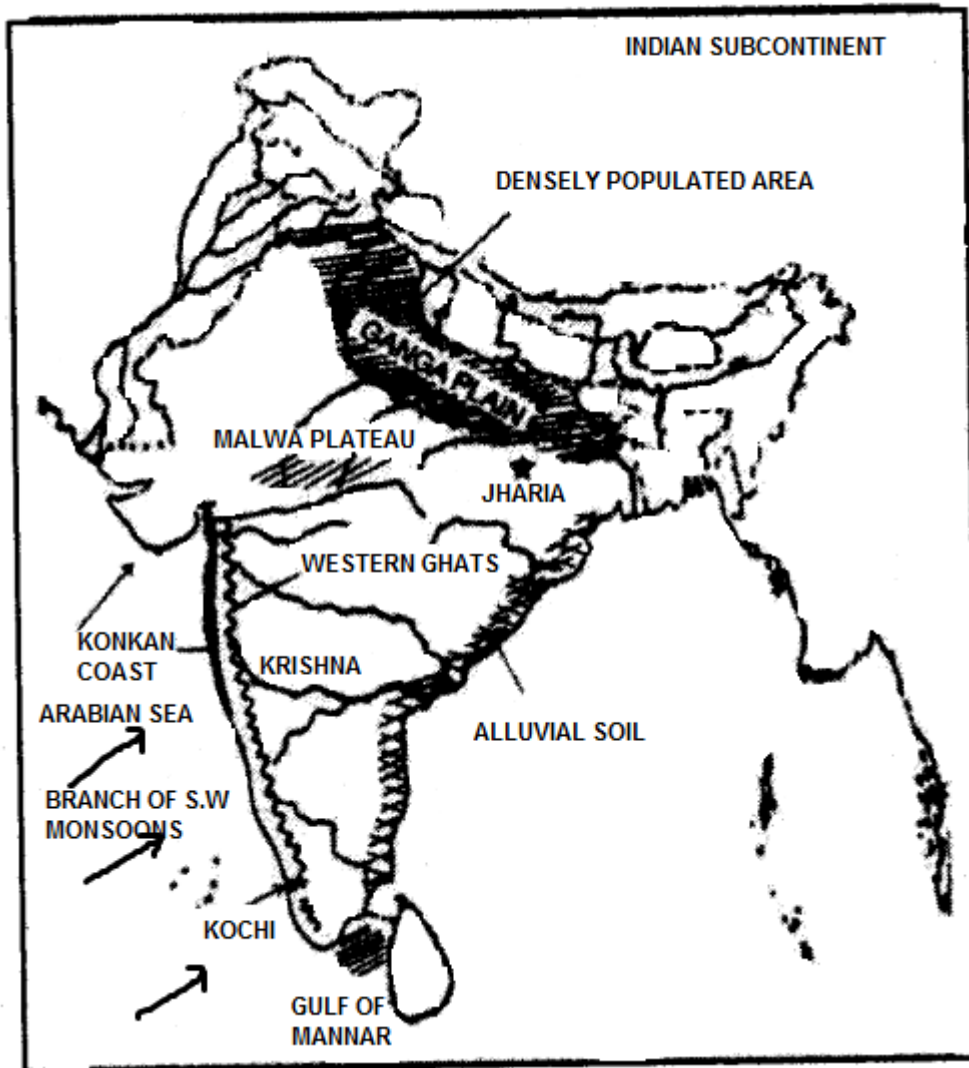
(j) Two reasons for seasonal rainfall in the given area are :
(1) Seasonal rivers and streams.
(2) Presence of broken ground.

Question 2:

On the outline map of India provided :

- (a)** mark and name Kochi [1]
- (b)** label the river Krishna [1]
- (c)** shade and label the Malwa Plateau [1]
- (d)** mark and label the Konkan Coast [1]
- (e)** shade and label the Gulf of Mannar [1]
- (f)** shade and label an alluvial soil area in Peninsular India [1]
- (g)** mark with arrows the direction of the Arabian Sea branch of South West Monsoon Winds [1]
- (h)** shade and label the Western Ghats [1]
- (i)** mark the Jharia coal field [1]
- (j)** shade and name a densely populated area. [1]

Answer:



PART II [50 Marks]

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

Question 3:

(a) Give two important characteristics of the summer monsoon rainfall in India. [2]

(b) 'Rainfall in India is Orographic in nature.' Give an example with reference to the distribution of rainfall and the effect of relief on its distribution. [2]

(c) Give a reason to explain why :

(i) the coastal areas of India do not experience a significant variation in temperature between summer and winter months.

- (ii) the annual rainfall in Rajasthan is less than 25 cm.
 (iii) the Coromandel coast gets most of its rain during the winter season. [3]

(d) Study the climatic data given below and answer the questions that follow : [3]

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature °C	24.5	25/7	27.7	20.4	30.0	32.5	31.0	30.2	29.8	28.0	25.9	24.7
Rainfall (cm)	4.6	1.8	1.3	1.8	3.8	4.5	8.7	11.3	11.9	30.6	35.0	13.9

- (i) Name the driest month.
 (ii) Calculate the annual rainfall experienced by the station.
 (iii) What is the annual range of temperature ?

Answer:

(a) Two characteristics of the summer monsoon rainfall are :

1. It is erratic in nature.
2. It is mainly orographic in nature/type.

(b) 'Rainfall in India is Orographic in nature. Example Western Ghats which are parallel to the western coast is in a suitable direction to check the rain bearing monsoon winds. The western slope of it that faces the winds receives heavy rainfall i.e. more than 200 cms. whereas the leeward side of it is not able to do so as the winds are descending on that slope. This region receives low rainfall.

(c) (i) This is because of the moderating influence of the adjoining water bodies. The land and sea breezes moderate the temperatures.
 (ii) This is because Aravallis are parallel to the Arabian sea branch of S.W. monsoons and are unable to check the winds. This is also because Rajasthan lies in the rain shadow region when Bay of Bengal Branch strikes the Aravallis.

(iii) Coromandel coast gets most of its rain during winter season because of N.E. monsoons which pickup moisture from Bay of Bengal and strikes the Coromandel coast.

- (d) (i) Driest month is March.
(ii) Annual rainfall is 129.2 cms.
(iii) Annual range of temperature is 12.1°C.

Question 4:

- (a) Name two states in India where Regur soil is found. In what way does Regur soil help agriculture. [2]
(b) Mention two main characteristics of Laterite soil. [2]
(c) State the difference between Alluvial soils found in the lower courses and the upper courses of rivers. [3]
(d) Name two important agents of erosion. For each, state one method of controlling the erosion caused. [3]

Answer:

(a) Regur soil is found in Gujarat and Maharashtra.
It helps agriculture because it is moisture retentive and rich in iron, potash, lime, calcium, magnesium and humus.

(b) Two main characteristics of laterite soil are :

1. It is red in colour with high content of iron oxides.
2. High content of acidity and inability to retain moisture.

(c) Alluvial soil found in the upper course is coarse in texture, light in colour and less fertile whereas Alluvial soil found in the lower course is fine textured, dark in colour and more fertile.

(d) Two important agents of erosion are :

1. Wind and
2. Running water.

Erosion by wind can be controlled by planting shelter belts perpendicular to the wind direction.

Erosion by running water can be controlled by planting trees, making dams across the river etc.

Question 5:

- (a) What are 'Tidal forests' ? Name two typical trees found there. [2]
(b) Write two main characteristics of the Deciduous Monsoon Forests. [2]
(c) Name the type of forests found in the western part of the Western Ghats. Give two reasons why these forests are so named. [3]
(d) Mention three methods for the conservation and development of forests in India. [3]

Answer:

(a) Tidal forests are the forests that grow in Delta regions of Ganga, Godawari, Mahanadi, Krishna, and Kaveri. These trees have stilt like roots which support the plants during high tide. These forests grow in salt water. Two typical trees found here are Sundri and Hintal.

(b) Two main characteristics of the Deciduous Monsoon forests are :

1. They shed their leaves before the summer season.
2. They tend to occur in pure stands.

(c) Tropical Evergreen forests are found in the western part of the Western Ghats. They are named so because they remain green throughout the year as they do not have any particular season to shed their leaves and also because they grow in the regions receiving rainfall of more than 250 cm.

(d) Three methods for the conservation and development of forests are :

1. Check indiscriminate deforestation.
2. Banning of shifting cultivation.
3. Prevention of overgrazing.

Question 6:

- (a) Name two states in which well irrigation is widely used. Mention one advantage of well irrigation in India. [2]
(b) Mention two disadvantages of tank irrigation. [2]
(c) Give three reasons to justify the need to conserve water. [3]
(d) Mention any three water harvesting systems practised in India. [3]

Answer:

(a) Two states in which well irrigation is widely used are Uttar Pradesh and Punjab.

Advantage—They are the simplest and the cheapest source of irrigation

(b) Disadvantages of tank irrigation are:

1. Many tanks dry up during the dry season.
2. Silting of tank is a problem and desilting of these tanks is often required.

(c) We need to conserve water because :

1. Monsoon rain is unevenly distributed.
2. Because of over-exploitation the water table has lowered down.
3. Scarcity of water is caused by pollution of water by domestic and industrial usage. Conservation of water is required.

(d) Three water harvesting systems practised in India are :

1. Rainwater harvesting.
2. Recharging of ground water.
3. Recycle and Reuse of water.

Question 7:

(a) What grade of iron-ore is mostly mined in India ? Name two leading iron-ore producing states. **[2]**

(b) What is lignite ? Name the two areas where lignite is found in India. **[2]**

(c) Name the leading producer of manganese in India. Name two important industrial uses of manganese. **[3]**

(d) Name the two states where limestone is found. Mention two important uses of limestone. **[3]**

Answer:

(a) Hematite and Magnetite states grade of iron ore is mostly found in India. Two leading iron ore producing states are Orissa and Jharkhand.

(b) Lignite is a poor quality coal which has 60% of carbon content. It is found in Kashmir (Riasi) and Tamil Nadu (Neyveli).

(c) Leading producer of Manganese in India is Orissa. Two Industrial uses of Manganese are:

1. Used for the manufacturing of paints and glass.

2. Used in Iron and Steel industry to strengthen steel.

(d) Two states where limestone is found — Chhattishgarh and Madhya Pradesh.

Two uses of limestone are :

1. It is used as raw material in cement industry and
2. As flux in iron and steel industry.

Question 8:

(a) Mention any two problems of agriculture in India. **[2]**

(b) State two geographical requirements for the growth of wheat in India. **[2]**

(c) With reference to the cultivation of coffee in Southern India

(i) Name the two varieties of coffee plants grown on commercial scale.

(ii) Why are coffee estates inter-planted with orange trees, cardamom and pepper vines ?

(iii) Name one state where coffee is grown extensively. **[3]**

(d) Explain the following terms :

(i) Withering

(ii) Plantation Farming

(iii) Drilling **[3]**

Answer:

(a) Two problems of agriculture in India are :

1. Land holdings are small due to farm fragmentation.
2. Farmers are poor and not educated so cannot afford modern technology and implements.

(b) Geographical requirement of wheat are :

1. **Temperature:** It is a crop of temperate region, requires temperature ranging between 10°C to 15°C.
2. **Rainfall:** It requires rainfall ranging between 50 to 100 cm.

(c) With reference to coffee cultivation :

(i) Two varieties of coffee are Arabica and Robusta.

(ii) Because they supplement the farmer's income and provide shade to the

coffee plants.
(iii) Karnataka.

(d) (i) Withering: It is involved in the process of making black tea. The tea leaves are spread over shelves called withering racks and air is blown over the leaves to reduce their moisture content and to make them soft and flexible. This is called withering.

(ii) Plantation farming: It is a type of farming in which a single crop is grown on large estates which are scientifically managed. Crops are grown mainly for sale purpose. It involves large number of labourers and huge capital.

(iii) Drilling: It is a method of sowing seeds at regular interval through a bamboo shaft attached to the plough which make furrows.

Question 9:

(a) Name and define two important by-products of the sugar industry. [2]

(b) Give two reasons why the state of Punjab is the largest producer of woollen textiles. [2]

(c) Mention three main problems of the Jute textile industry in India. [3]

(d) With reference to the cotton textile industry :

(i) Which is the country's most important manufacturing center ?

(ii) State two geographical reasons for its importance. [3]

Answer:

(a) Two important by products of sugar industry are :

1. **Molasses:** It is a kind of dark brown syrup that drains from sugar during the process of manufacture. It is used to produce industrial alcohol, fertilizer, rum etc.
2. **Bagasse:** It is the rejected cane left after being crushed. It is mainly Used for manufacturing paper, fibre board etc.

(b) Punjab is the largest producer of woollen textiles because :

1. Raw material is easily available as sheep rearing is the main occupation in hilly areas adjoining Punjab.
2. Demand for product is high because of very cold winters.

(c) Problems of jute textile industry :

1. Demand for jute products have decreased due to synthetic substitutes in national and international markets.

2. India faces a problem of shortage of raw jute as most of the jute growing areas went to Bangladesh after partition.
3. Obsolete machinery and inefficient or uneconomic units.

(d) (i) Mumbai is the country's most important cotton textile manufacturing centre.

(ii) Two geographical reasons are :

1. Mumbai's hinterland, the black regur soil produces the raw cotton required.
2. The humid climate of Mumbai favours the production of yarns of finer counts.

Question 10:

(a) Which iron and steel industry of India is located away from the main coal areas ? What is the main source of energy in the absence of coal ? **[2]**

(b) Give two geographical reasons for the growth of IT industries in Bangalore. **[2]**

(c) With reference to the Bokaro Steel Plant, from where does it get its (i) coal (ii) iron ore (iii) water supply ? **[3]**

(d) Name one important centre each for the production of the following : (i) Tractors (ii) Electronic goods (iii) Petro chemicals. **[3]**

Answer:

(a) Visveswaraya Iron and Steel Limited is located away from the main coal areas. Its main source of energy earlier was charcoal but now it uses Hydroelectric Power from Mahatma Gandhi and Sharavati Hydroelectric power station.

(b) Geographical reasons for the growth of IT industries in Bangalore are :

1. Pleasant and comfortable climate.
2. Centre for international conferences and work shops.

(c) (i) Coal from Bokaro and Jharia coal fields.
 (ii) Iron ore from Bonaigarh, Kiriburu and Noamundi in Orissa.
 (iii) Water supply from River Damodar.

- (d) (i) Tractors: Faridabad (Haryana)
(ii) Electronic Goods: Hyderabad (Andhra Pradesh)
(iii) Petro Chemicals : Vadodara.

Question 11:

- (a) Why is road transport favoured in the northern plains of India ? [2]
- (b) Give reasons to explain the lack of rail transport in Northern India. [2]
- (c) Name the following :
(i) An important inland waterway of north east India.
(ii) One expressway with its terminal cities.
(iii) A major port which is not located on the sea coast and is at a distance of 128 km from the coast along the banks of a river. [3]
- (d) Mention two advantages and one disadvantage of air transport. [3]

Answer:

(a) Road transport is favoured in the northern plains of India because this is agriculturally rich region and roads' are required to transport huge amount of fertilizers, food grains from one region to another. Secondly this is a levelled region where construction of roads is easy.

(b) There is lack of rail transport in northern India because it is a mountainous region where construction of roads is comparatively easier than laying railway tracks.

(c) (i) An important inland water way of north east India: National Waterways between Sadiyan and Dhubri through Brahmaputra river.
(ii) Poona-Mumbai express way its terminal cities are Pune and Mumbai.
(iii) Kolkata Port.

(d) Advantages of Air Transport:

1. This is relatively free of physical barrier such as mountain.
2. It saves time as it is the fastest means of transport.

Disadvantage of Air transport:

1. It has limited carrying capacity.

2. It is the most expensive form of transport.