

ICSE Paper 2014

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/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) (i) Give the four figure grid reference of the settlement of Hamirpura.
- (ii) Give the six figure grid reference of the temple in the settlement of Jolpur. [2]

(b) (i) What does the blue coloured circle in the grid square 0619 represent ?

(ii) What is compass direction of Dantrai from Jolpur ? **[2]**

(c) What is the difference between the :

(i) pattern of settlements in 0725 and the settlement of Idarla ?

(ii) drainage pattern of the streams in 0624 and those in 0824 ? **[2]**

(d) What is the value of the contour line in square 0226? What is the contour interval in the map ? **[2]**

(e) Mention any two factors which provide evidence that the region in the map extract is a rural region. **[2]**

(d) (i) How does the feature, indicated by the black curves in 0721, show that the rainfall in this region is seasonal ?

(ii) Mention one man-made feature in the map which also provides evidence that the rainfall is seasonal. **[2]**

(g) (i) Name two natural features in 0527.

(ii) Name two manmade features in 0325. **[2]**

(h) Name two features which make Dantrai a more important settlement than the other settlements in the map extract. **[2]**

(i) Calculate the area of the region which lies to the south of northing 21 in square kilometres. **[2]**

(j) What are the following ?

(i) The black vertical line between eastings 09 and 10.

(ii) 302 in grid square 0425. **[2]**

Answer:

(a) (i) 0123-Settlement of Hamirpura.

(ii) 078187-Temple in the Settlement of Jolpur.

(b) (i) Unlined well.

(ii) North-West.

(c) (i) Settlement pattern in 0725-Dispersed
Settlement pattern in Idarla-Nucleated.
(ii) Drainage pattern in 0624-Trellis.
Drainage pattern in 0824-Dendritic.

(d) Value of contour line in square 0226 = 300 m.
Contour interval of the map = 20 m.

(e) Evidence for the region, is a rural region :
(i) There is no metalled road.
(ii) Agriculture is the main occupation.

(f) (i) Broken ground is indicated by the black curves in 0721. These features are mainly formed due to alternate wet and dry spells therefore the rainfall is indicated as seasonal.
(ii) Cart tracks are motorable in the dry seasons in the map extract.

(g) (i) Two natural features in 0527 are-seasonal stream and seasonal tank.
(ii) Two man made features in 0325 are-hut and cart track.

(h) Dantrai is more important because :
(i) It has a post office and police chauki.
(ii) It is well connected by cart racks with other settlement.

(i) Area = L × B
= 3 km × 10 km = 30 km²

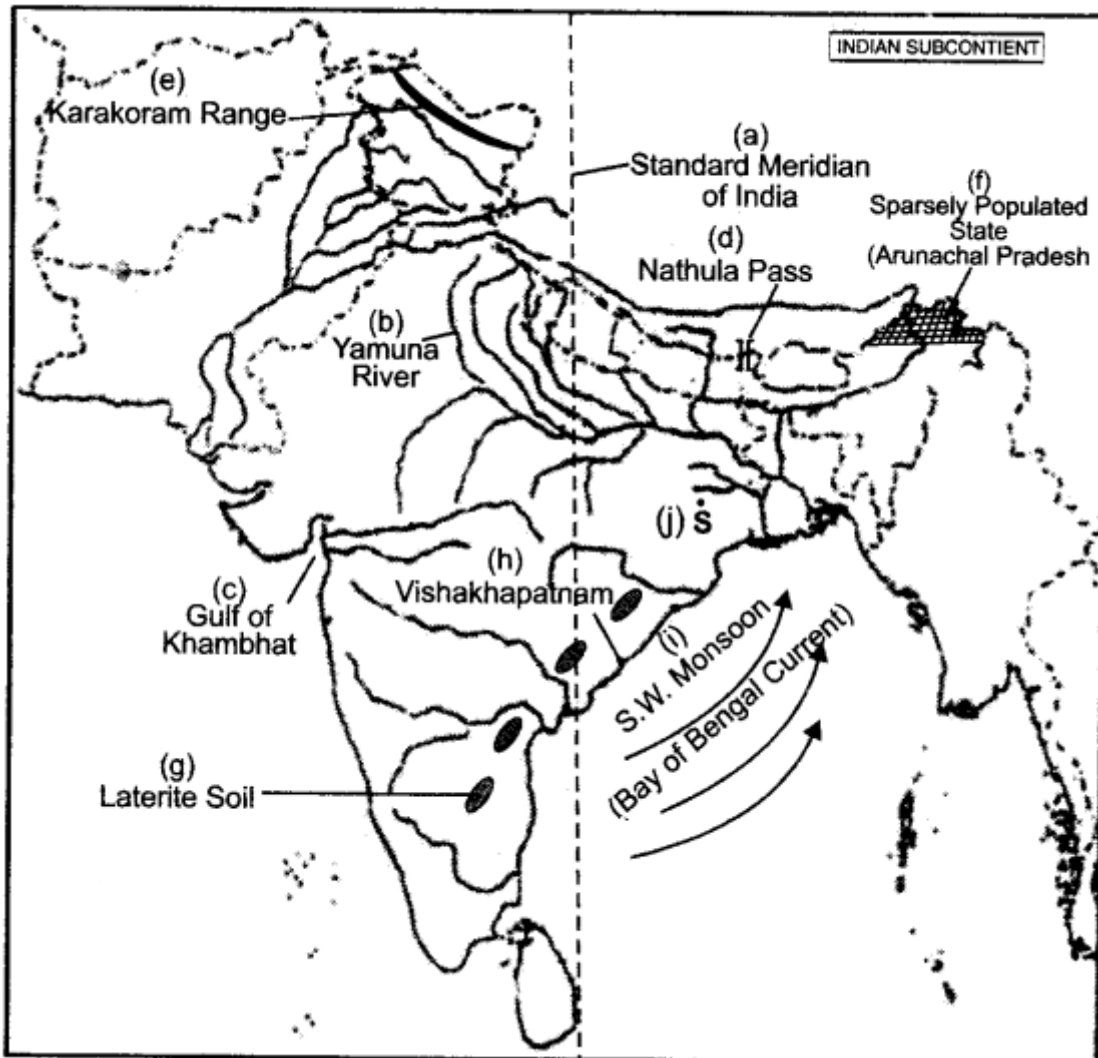
(j) (i) Longitude.
(ii) Spot height 302 m.

Question 2:

- (a)** Draw, name and number the Standard Meridian. [1]
- (b)** Label the river Yamuna. [1]
- (c)** Shade and name the Gulf of Khambhat. [1]
- (d)** Mark and name the Nathu-La Pass. [1]
- (e)** Mark and name the Karakoram Range. [1]
- (f)** Shade and name a sparsely populated State in Northeast India. [1]
- (g)** Shade a region with laterite soil in Eastern India. [1]
- (h)** Mark with a dot and name Vishakhapatnam. [1]

- (i) Mark and name the wind that bring rain to West Bengal in summer. [1]
 (j) Print S on the iron mine in Singhbhum. [1]

Answer:



PART II [50 Marks]

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

Question 3:

(a) Mention the different sources of rain in Punjab and Tamil Nadu during the winter season. [2]

(b) State the benefits that are derived from the local wind that blow in summer in the following states :

- (i) Kerala
(ii) West Bengal. [2]

(c) Mention a geographical reason for each of the following :

- (i) Patna receives heavier rain than Delhi.
(ii) Western Rajasthan receives no rain from the Arabian Sea branch of the South West Monsoon winds.
(iii) Mangalore is not cold even in the month of December. [3]

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

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Temp °C	25.0	25.5	26.3	27.1	30.0	36.2	36.0	35.9	30.3	28.4	27.0	24.6
Rainfall cm	24.5	23.1	15.0	2.4	0.1	11.0	9.3	7.2	4.0	9.4	14.5	20.4

follow :

- (i) Calculate the annual temperature range.
(ii) What is the total annual rainfall ?
(iii) Presuming that the station is located in India, give a reason for its location being on the east coast or the west coast of India. [3]

Answer:

- (a)** (i) Sources of rain in Punjab are temperate cyclones or western disturbances.
(ii) Sources of rain in Tamil Nadu are North east monsoon winds.

- (b)** (i) **Kerala:** Mango showers helps in ripening mangoes and blooming of coffee cherries.
(ii) **West Bengal:** Kal Baisakhi helps the crop of rice and jute.

(c) (i) Patna receives heavier rain than Delhi because Patna lies to the east of Delhi and the amount of rain decreases as the winds (Bay of Bengal current) advances towards the north west.

(ii) Western Rajasthan receives no rain from the Arabian Sea branch because winds run parallel to Aravalli hills as such they pass without any obstacles.

(iii) Mangalore is not cold even in the month of December because it lies on the western coast therefore have the moderating influence of the sea.

(d) (i) Annual range of temperature = $36.2 - 24.6 = 11.6^{\circ}\text{C}$.

(ii) Total annual rainfall = 140.9 cm

(iii) The station lies on the west coast of India because the amount of rainfall is high in the month of June and July.

Question 4:

(a) State any two methods of controlling soil erosion. [2]

(b) Mention two differences between alluvial soil and red soil. [2]

(c) Give a geographical reason for :

(i) different regions in India having different kinds of soil.

(ii) black soil being suitable for growth of cotton.

(iii) the conservation of soil as a natural resource. [3]

(d) Name the soil which :

(i) is good for the cultivation of cashew nuts.

(ii) covers almost all of West Bengal.

(iii) is a result of leaching. [3]

Answer:

(a) Two methods of controlling soil erosion are :

(i) Planting trees and indiscriminate felling of trees must stop.

(ii) Terraced farming checks erosion.

(b) Differences between alluvial soil and red soil are :

(i) Alluvial soil is more fertile and deep whereas red soil is not water retentive and less fertile.

(ii) Alluvial soil is yellow in colour and red soil is red in colour.

(c) Geographical reasons :

(i) Different regions in India having different kinds of soil because different regions have different parent material and climatic conditions.

(ii) Black soil is suitable for growth of cotton because it is moisture retentive

and it is rich in iron, potash, lime, calcium, alumina humus etc.
(iii) Afforestation or planting of trees saves the soil from erosion.

- (d)** (i) Laterite soil.
(ii) Alluvial soil.
(iii) Laterite soil.

Question 5:

(a) Write two reasons why monsoon deciduous forest are commercially more valuable than other types of forests. **[2]**

(b) How do forests—

- (i) have a favourable effect on the climate of the region ?
(ii) act as a flood control measure ? **[2]**

(c) Give one important use of each of the following types of trees :

- (i) Sundri.
(ii) Sandalwood.
(iii) Rosewood. **[3]**

(d) Name the natural vegetation largely found in the following regions :

- (i) The delta of the Ganga river.
(ii) The windward side of the Western Ghats.
(iii) The Deccan Plateau. **[3]**

Answer:

(a) Two reasons :

- (i) They are found in pure stands.
(ii) They are not very dense therefore easily accessible.

(b) (i) Forests temper's down the temperature and helps in bringing rain.

(ii) Forests bind the soil particles by their roots and absorbs water.

(c) Uses of the following trees are :

- (i) **Sundri:** Used for making boats.
(ii) **Sandalwood:** Used for making handicrafts and perfumery.
(iii) **Rosewood:** Used for making expensive furniture.

(d) (i) Tidal forest.

(ii) Tropical Evergreen forest.

(iii) Tropical Dry forest.

Question 6:

(a) State two reasons why tank irrigation is popular in South India. [2]

(b) Mention two advantages that surface wells have over inundation canals. [2]

(c) Give one geographical reason for each of the following statements :

(i) Irrigation is necessary despite the monsoon.

(ii) The drip method of irrigation is the best among all modern methods of irrigation.

(iii) Canal irrigation leads to the ground around it becoming unproductive. [3]

(d) Give three reasons for conservation of water resources. [3]

Answer:

(a) Tank irrigation is popular in South India because :

(i) The hard rocks underlying large areas in the deccan do not allow percolation of water easily.

(ii) The undulating surface forms natural depressions.

(b) Two advantages of surface wells over inundation canals are :

1. They can be constructed where ever required.

2. They supply water throughout the year.

(c) (i) Because monsoon are seasonal in nature.

(ii) Because it prevents the loss of water through evaporation and directly reaches the ground.

(iii) Because the ground around it suffer from the problem of 'reh' or salts in the upper layers of the soil.

(d) Reasons for conservation of water resources :

(i) Because our water resources are polluted by foreign matters.

(ii) Increasing demand of water due to increasing population.

(iii) Uneven distribution of water all over the country.

Question 7:

(a) Mention any two uses of manganese. [2]

(b) Which of the different varieties of coal is used for domestic purposes and why ? [2]

(c) Name the mineral used in the manufacture of:

- (i) Cement
- (ii) Aluminium
- (iii) Synthetics. [3]

(d) Which State is the leading producer of the following minerals ?

- (i) Coal
- (ii) Oil
- (iii) Manganese. [3]

Answer:

(a) Two uses of Manganese:

1. Making of iron and steel. It makes it tough.
2. Manufacturing of paints and glass.

(b) Anthracite and bituminous variety are used for domestic purpose because it has high calorific value and leaves less ash.

(c) Mineral used in the manufacturing of

- (1) Cement—Limestone.
- (2) Aluminium—Bauxite
- (3) Synthetics—Petroleum

(d) Leading producer states for the following minerals :

- (i) Coal—Jharkhand.
- (ii) Oil—Maharashtra.
- (iii) Manganese—Orissa.

Question 8:

(a) How has poverty and fragmentation of land become problems of agricultural India ? [2]

(b) Mention any two features of plantation farming stating two examples. [2]

(c) Mention three differences in the geographical conditions and cultivation of rice and wheat. [3]

(d) Give a geographical reason for each of the following :

- (i) Cotton grows widely in Maharashtra.
- (ii) Clonal planting is the best method for tea propagation.
- (iii) Oil seeds are an important commercial crop grown in India. **[3]**

Answer:

(a) Poverty and farm fragmentation of land results in small and uneconomic land holding and yield per hectare becomes low.

(b) Two features of plantation farming are :

- 1. Mono culture is practiced.
 - 2. Farm lands are large in size.
- Examples : Rubber and tea.

(c) Differences in the geographical conditions and cultivation of rice and wheat :

Rice	Wheat
Requires temperature between 22°C to 32°C.	Requires temperature between 10°C to 15°C.
Requires rainfall between 150 to 300 cm.	Requires rainfall between 50 to 100 cm.
Requires flooded fields.	Requires well drained fields.

(d) Geographical reasons :

- (i) Cotton grows widely in Maharashtra because black soil is found there.
- (ii) Because clonal planting helps to produce superior quality, better yield and special flavour of the mother plants.
- (iii) Oilseeds play a very important role in the Indian economy. They provide raw material to various industries.

Question 9:

(a) Name two textile industries using any animal fibres. Name an important State where these industries are located. **[2]**

(b) Give two reasons for each of the following :

(i) Kolkata is an important cotton manufacturing centre even though West Bengal is not a leading producer of cotton.

(ii) The wool industry is not as well developed as compared to the cotton industry in India. **[2]**

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

(d) Mention three factors that have helped the sugar industry flourish in the peninsular region rather than in the northern regions of India. **[3]**

Answer:

(a) Two textiles industries are :

1. Woollen Industry State—Punjab.
2. Silk Industry State—Karnataka.

(b) Reasons—

(i) Because Kolkata has humid climate, inexpensive labour, excellent means of transport and power is easily available as coal at Raniganj only raw material is not there which is easily made available from Deccan plateau region.

(ii) 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.

(c) Problems of jute textile industry :

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

(ii) India faces a problem of shortage of raw jute as most of the jute growing areas went to Bangladesh after partition.

(iii) Obsolete machinery and inefficient or uneconomic units.

(d) Three factors that have helped sugar industry flourish in peninsular region are :

- (i) Peninsular region has tropical climate which is ideal for growing sugarcane.
- (ii) Soil is well drained and consists of black regur soil.
- (iii) Mills are close to the farms so there is no loss of sucrose.

Question 10:

(a) Name one integrated iron and steel plant in the private sector. Where does it obtain its iron and coal from ? **[2]**

(b) Name two raw materials used in the petrochemical industry and state two advantages of petrochemical products. **[2]**

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

- (i) Vishakhapatnam is a leading centre for ship-building.
- (ii) Mini steel plants cause less pollution than integrated steel plants.
- (iii) The electronic industry has made an impact on both entertainment and education. **[3]**

(d) Name a manufacturing centre for each of the following industries :

- (i) Engine for MIG aircraft
- (ii) Diesel locomotives
- (iii) Software. **[3]**

Answer:

(a) Integrated steel plant in private sector is Tata Iron and Steel Company (TISCO). It obtains its iron from Singhbhum and Mayurbhanj and coal from Jharia.

(b) Raw Material used in petrochemical industry are benzene and ethylene. Advantages of petrochemical products :

1. They are cheaper.
2. They are durable.

(c) (i) Vishakhapatnam is a leading centre for ship building because Vishakhapatnam steel plant is close to it and it is also deepest land locked natural port.

(ii) Mini steel plants produce less pollution because they use electric furnace.

(iii) Electronic industry helps in making education smart and practical

through smart classes and new H.D. televisions, mobiles have worked in entertainment field.

(d) Manufacturing centres :

- (i) Engines for MIG aircraft—Bangluru/Nasik.
- (ii) Diesel locomotives—Varanasi.
- (iii) Software—Bangluru/Pune/Hyderabad.

Question 11:

(a) Why is road transport in India considered more useful than rail transport ? State two reasons in support of your answer. **[2]**

(b) Mention one advantage and one disadvantage each of inland waterways. **[2]**

(c) How does waste accumulation affect the environment ? **[3]**

(d) What is acid rain ? Mention two of its effects. **[3]**

Answer:

(a) Road transport is more useful than rail transport as :

- (i) Door to door service is most attractive feature of road transport.
- (ii) They can be constructed in hilly areas as they can negotiate sharp bends and slopes.

(b) Advantage of Inland waterways—They are cheaper than any other transport.

Disadvantage—Because of slow speed it can not compete with other means of transport.

(c) Waste accumulation results in landscape degeneration, pollution of air, water and soil, health problems and loss of terrestrial and aquatic life.

(d) Acid rain is a type of air pollution. Sulphur dioxide emitted by industries, volcanoes and released during combustion of sulphur bearing fossil fuels combines with water vapour in the atmosphere to form sulphuric and nitric acid. This acid brought down by the rainfall is called acid rain.

Effects :

1. It is responsible for scarring buildings and monuments.

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2. It corrodes metals and turn soil and water acidic.