

**ICSE Board**  
**Class X Geography**  
**Board Paper – 2013 Solution**

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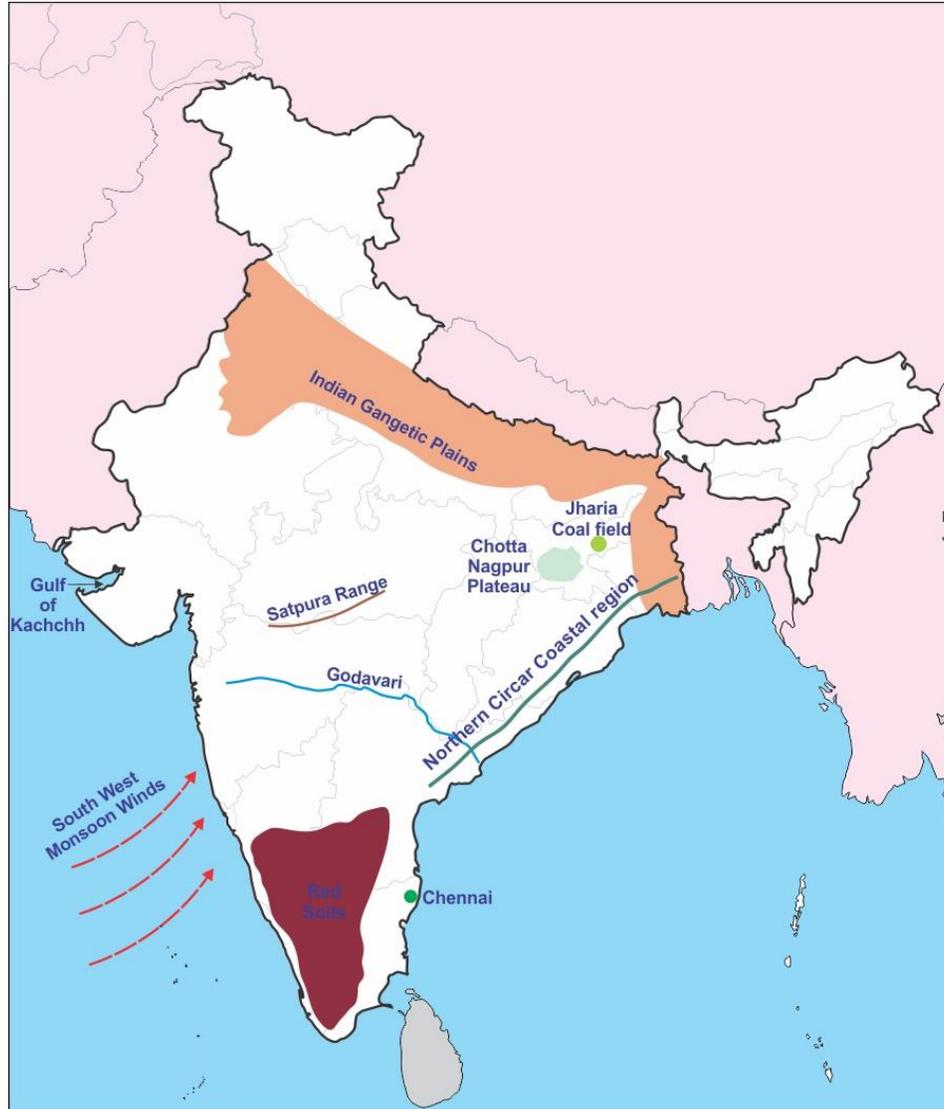
**SECTION I**  
**PART – I (30 Marks)**

**Answer 1**

- a) Six figure grid reference are:
  - i.  $\Delta$  217 : 940792
  - ii. Lined well: 925814
- b) i. Left bank tributary of the main river is Balaram nadi.  
ii It is flowing from South East to North West.
- c) i. A special feature associated with the stream is the broken ground.  
ii Dendritic pattern
- d) Four figure grid reference are:
  - i. 9573
  - ii. 9978
- e) Two relief features that can be seen are:
  - i. 9782: Escarpment
  - ii. 9574: Ridge/watershed
- f) We find limited cultivation in the map because:
  - i. The region is sandy with the presence of sand dunes.
  - ii. Presence of waste land.
- g) i. Sangla to Antroli: North East  
ii Sangla to Chekhla: North
- h) The rainfall is low and seasonal in the region as the streams and rivers are seasonal with low water levels.
- i) 2.6 km
- j) i. Nucleated settlements  
ii The region with white coloured ground means a barren land and hence is unsuitable for cultivation.

**Part I**  
**Section II**

**Answer 2**



**Part II****Answer 3**

- a) Two types of cyclonic systems that affect India are the tropical cyclones and the temperate cyclones. While the tropical cyclones bring rainfall to West Bengal and Odisha; the temperate cyclones bring rainfall to Delhi and Punjab.
- b) Two important characteristics of the South west monsoon rainfall are:
- It is influenced by the mountains and relief features of the country. For example, the western slopes of the Western Ghats get heavy rainfall while the eastern slopes get scanty rainfall as the latter lies on the leeward side of the Western Ghats.
  - Monsoon rainfall in India is unevenly distributed in the country. While Meghalaya receive more than 200 cm of rainfall, the western parts of Rajasthan and Punjab get only up to 50-80 cm of rainfall annually.
- c) i. The Malabar Coast receives heavy rainfall from the Arabian Sea branch of the South west monsoon while Tamil Nadu receives scanty rainfall as it is located parallel to the Bay of Bengal branch and lies in the rain shadow area of the Arabian Sea branch.
- ii. The Northern Plains of India have a continental type of climate as these Plains lie in the interior of the continent and are located far away from the moderating influence of the sea. Thus, the summers are extremely hot and winters are extremely cold.
- iii. Regions lying on the windward side of the mountains receive heavier rainfall than the regions lying on to the leeward side of the mountains. Central Maharashtra receives little rainfall as it lies on the leeward side of the Western Ghats.
- d) i. Annual rainfall experienced by all the stations= sum total of rainfall during all the twelve months= 114.3 cm.
- ii. The name of the station is Tamil Nadu as the temperature remains moderate through out the year and the rainfall is heaviest during the beginning of the winter season.
- iii. The season during which the rainfall is heaviest is during the months of the retreating monsoon and in winter. It rains the heaviest in the month of October.

**Answer 4**

a)

<b>Transported soil</b>	<b>In- situ soil</b>
This soil is formed when the agents of erosion deposit sediments at a place.	This soil is formed when the parent rock is broken into small fragments.
This soil is formed far away from its parent rock.	This type of soil is formed near its parent rock.
This soil is extremely fertile. For example alluvial soil.	This soil is comparatively less fertile. For example black soil, desert soil etc.

b)

<b>Khadar Soil</b>	<b>Bhangar Soil</b>
It is a new alluvial soil with a fine texture.	It is an old alluvial soil with small nodules.
It is comparatively more fertile.	It is comparatively less fertile.

- c) Laterite soil is formed as a result of weathering of rocks. It happens when under high temperature and rainfall, the rocks weather away. The process of leaching then takes place. One disadvantage of this soil is that it is infertile.
- d) i. Red soil is found in large parts of Tamil Nadu and Karnataka.  
 ii. Two advantages are that the soil is rich in iron oxide and the soil becomes extremely fertile after addition of fertilisers to it.  
 iii Wheat and rice are the crops that are grown on this soil.

**Answer 5**

- a) Two main characteristics of the Tropical Rain Forests are:
- The trees of the tropical evergreen forests do not shed their leaves at the same time as there is no particular dry season for shedding their leaves.
  - The forests are dense and have under growth vegetation like creepers, bushes etc.
- b) i. Eucalyptus  
ii Rose wood  
iii Sandal wood
- c) i. Tidal forests are found in the deltaic regions of Ganga and Brahmaputra in the eastern coastal plains of India.  
ii Thorn and Scrub is found in the semi arid and arid regions like in western Rajasthan.  
iii Thorn and Scrub forests are found in the above regions as they are arid and semi arid regions receiving only scanty rainfall. Such vegetation has long roots and waxy and leathery leaves in order to conserve water.
- d) Forests must be conserved due to the following reasons:
- They help in the prevention of soil erosion and floods.
  - Forests largely affect the climate of a place by influencing the rainfall, temperature and humidity.

**Answer 6**

- a) Tube wells are extensively used in the states of Punjab and Western Uttar Pradesh. It is an important source of irrigation as it irrigates large areas of land in comparatively less time and it can irrigate the fields throughout the year.
- b) Two reasons why water scarcity occurs in India are:
- After independence, India has witnessed industrialisation. The establishment of large industrial houses and the increasing number of industries has exerted tremendous pressure on the fresh water resources.
  - Increase in the number of urban centers with dense population has also exerted pressure on the water resources. Many houses and societies have independent water boring devices which have lowered the water table.
- c) Perennial canals are widely used in the states of Uttar Pradesh and West Bengal. It is popular in these states due to the presence of perennial rivers in the region. Further, these canals provide water for irrigation through out the year.
- d) i. Two methods of rain water harvesting in India are:
- Collection of rain water from the rooftop through pipes into an underground structure.
  - Excess water collected through rainfall may be taken to wells, which further helps in well and underground water recharge.
- ii. Two objectives of rainwater harvesting are:
- To utilise the rainwater for domestic consumption.
  - To recharge the ground water table.

**Answer 7**

- a) Bauxite is an ore of aluminum. Two main uses of aluminum are:
- Since aluminum is a good conductor of electricity, it is used in the electrical industry.
  - Aluminum is a light weight metal, it is used in the manufacturing of airplanes and ships.
- b) Limestone is used as raw material in the cement industry and it is also used as a flux in the iron and steel industry.
- c) i. Two industries that use a high quality of coal are the iron and steel industry and the cement industries.  
ii. Jharkhand- Jharia  
West Bengal- Raniganj
- d) i. Assam is the largest producer of mineral oil in India.  
ii Two coastal oil refineries are Mumbai and Chennai,  
Two inland oil refineries are Mathura and Assam,

**Answer 8**

a)

<b>Extensive Farming</b>	<b>Intensive Farming</b>
Farms are large in size.	Farms are generally small in size.
Most of the work is done by machines.	Most of the work is done manually as it is labour intensive.

- b) i. West Bengal and Uttar Pradesh are leading producers of rice in the country.  
ii Two advantages of growing rice in nurseries are:
- Better development and protection of saplings are ensured in the nurseries.
  - Transplantation of saplings from nurseries into the fields results in high yield.
- c) i. Karnataka and Kerala are the two leading states where coffee is grown.  
ii Coffee grows well on fertile and well drained loamy soil.  
A coffee plantation requires hot and humid climatic conditions. Though rainfall should be distributed throughout the year, there should be one long dry season so that the coffee beans can ripen. Frost is harmful for the coffee plantation.
- d) i. Retting: It is a method in which the stalk of the plant is soaked in water and the fibre is removed from its bark. To achieve this purpose, plants are first submerged in the pool of clean gently flowing water and then fibre is separated from the stem.  
ii Ginning: It is a process which takes place after the harvesting of cotton. In this process cotton fibers are separated from the seeds.  
iii Broadcasting: It is a method in which the seeds are scattered after ploughing the soil, before the arrival of the Monsoon.

**Answer 9**

- a) North- Uttar Pradesh  
South- Tamil Nadu
- b) i. Ahmadabad- Textile industry  
ii Mysore- Silk industry
- c) Three favourable conditions responsible for the growth of the jute industry in west Bengal are:
  - i. The hot and damp climate favours the growth of jute in the region.
  - ii. The state is well connected to major towns and cities through rail and road transport.
  - iii. Availability of coal and cheap labour in the region.
- d) i. India is a tropical country and hence woollen clothes are in demand only during the winter season in northern part of the country. Thus, woollen industry is a localised industry which is centered mostly in northern parts of the country.
  - ii If sugarcane is not crushed within 24 hours, then the level of sucrose present in it begins to decline.
  - iii Sericulture flourished in Karnataka as many mulberry trees are grown here and the climate is suitable for the growth of mulberry trees.

**Answer 10**

- a) i. In recent times, the electronic industry supports Space Technology. The defence sector also cannot function without the support of the electronic industry.
  - ii. Two cities which have leading software companies are Bengaluru and Pune.
- b) The Bhilai steel Plant and the Bokaro steel Plant were set up with Russian collaboration.
- c) There is a large concentration of iron and steel plants in the Chota Nagpur Region due to the following reasons:
  - i. The Chota Nagpur region has rich reserves of minerals like coal, iron ore etc.
  - ii. Availability of cheap labour from the surrounding areas of Bengal, Jharkhand and West Bengal.
  - iii. The region is well connected with rail and road transport.
- d) Gurgaon : Machine tools  
Perambur: The Integral Coach Factory (Railways)  
Chittaranjan: Electric and hydraulic locomotive engines.

**Answer 11**

- a) One disadvantage of air transport is that it is very expensive. It is still popular because it is the fastest means of transport and through it help can be provided to the people in the hilly regions in case of natural calamities.
- b) Two reasons why peninsular rivers are not ideal for navigation are:
  - i. They do not have water through out the year  
They have sharp bends and waterfalls.
  - ii. Chennai is the port which is often hit by cyclones during the months of October and November.
- c)
  - i. The main objective of the treatment of gaseous waste is to prevent air pollution.
  - ii. Asthma and bronchitis are two diseases that can be caused due to gaseous pollution.
- d)
  - i. The Bhopal Gas tragedy was caused due to the leakage of methyl isocyanate in large quantities from the Union Carbide Plant located in Bhopal.
  - ii Minamata Disease was caused due to the intake of methyl mercury through the consumption of fishes caught from the Minamata Bay in Japan.
  - iii This was a radioactive accident that was caused due to the explosion of a reactor at the nuclear power plant located at Chernobyl in the Former USSR.