

ANSWERS
H.C.G PAPER -2

PART I

Question 1

(a)

- (i) 940793
- (ii) 922815

(b)

- (i) Balaram Nadi
- (ii) East to Northwest

(c)

- (i) Dendritic drainage pattern
- (ii) Trellis drainage pattern

(d)

- (i) 9573
- (ii) 9978

(e) A watershed and a pass

(f)

(g)

(h) Southwest monsoon is experienced in this region. It is clear from the cropping pattern. Here is widespread agriculture.

(i) Indirect distance along cart track between Chitrasani and Pirojpora is 4 cm.
2 cm on the map equals 1 km on the ground.
Thus, 4 cm on the map represents 2 km.

(j)

- (i) Scattered settlement
- (ii) Open mixed jungle.

Question 2



PART II

Question 3

- (a) Temperate cyclone and tropical cyclone. Temperate cyclone occurs during winter in the states of Jammu and Kashmir, Punjab, Haryana and parts of western Uttar Pradesh. Tropical cyclone originates in the neighborhood of Andaman islands and travel west or northwest to the states of Andhra Pradesh and Tamil Nadu.
- (b) Southwest monsoon rainfall lasts from June to September. The advance of the southwest monsoon is rapid and caused due to high pressure over the Indian ocean.
- (c)
- Tamil Nadu lies in the rain shadow area of the Arabian sea current and it is parallel to the Bay of Bengal.
 - Northern plains of India is extremely hot in summer but very cold in winter. This area is away from the moderating influence of the sea. Therefore the Northern plains of India have a continental type of climate.

(iii) Central Maharashtra has equable climate. so it does not attract southwest monsoon winds. Secondly, it is not hilly region which can trap the southwest monsoon.

(d)

(i) 114.3

(ii) Madurai. In the months of October, November, the northeast monsoon while crossing over the Bay of Bengal, picks up moisture and brings torrential rainfall over parts of Tamil Nadu, Andhra Pradesh, Kerala and Karnataka.

(iii) Cold season.

Question 4

(a) Transported soils are transported by various agents of erosion and consists of sediments carried and deposited by river and winds. Alluvial soil is an example of transported soil. In situ soil are formed in their original position by the breaking up of parent rocks. They include black soil, red soil, desert soil laterite soil, etc...

(b) Khadar soil:-

1. It belongs to new alluvium.
2. It is more fertile.
3. It is found in the lower levels in the plains near the river.

Bangar soil:-

1. It belongs to new alluvium.
2. It contains Kankars, nodules with calcium carbonate in subsoil so it is less fertile.
3. It is found in the plains at river terraces.

(c) Laterite soil is formed by the process of leaching due to tropical rains. This disadvantage of laterite soil are deficient in nitrogen, poor in lime potash and magnesium and does not retain moisture and hence not fertile.

(d)

(i) Tamil Nadu, Karnataka

(ii) It is porous and has high percentage of iron oxide. It contains soluble salts in small quantities.

(iii) They are suitable for vegetables, rice ,ragi and tobacco.

Question 5

(a) Tropical rain forests are evergreen forests found in warm and wet region. These are found where the rainfall is more than 200 cm, with short dry season.

(b)

- (i) Semul
- (ii) Chaplas
- (iii) Sandalwood

(c)

- (i)
 - (1) The coast and confined deltas of the Ganga, the Mahanadi, the Godavari, the Krishna and the Kaveri.
 - (2) Rajasthan, Gujarat, Haryana.

(d) Forest provide many major and minor products like wood, gum, fiber, fruits, etc...They play a significant role in the prevention and control of soil erosion.

Question 6

(a) Utter Pradesh, Haryana and Punjab have registered extensive use of tube wells. Tube well is a reliable source of irrigation and can easily dug.

(b)

- * Over exploitation of water resources
- * Improper management
- * Industrialization and Urbanization.

(c)

- (i) Utter Pradesh, Haryana, Punjab
- (ii) Canal irrigation is the cheapest source of irrigation for the farmers as they pay very nominal charges. With the help of canal, water can be transported from a water surplus area to a water deficient area.

(d)

- (i) Rooftop rainwater harvesting, check dams.
- (ii)
 - * To overcome the inadequacy of surface water to meet our demands.
 - * To arrest decline in ground water levels.

Question 7

(a) Bauxite. Aluminum is used for making pots, pans, and parts of automobiles. It is used for making electricity wires.

(b) Limestone is basic input in the cement industry. It is used in production of chemicals such as soda ash, caustic soda, bleaching powder, glass and fertilizers.

(c)

(i) * Coal is used in the manufacture of iron and steel.

* Coal is used as a source of direct heat for domestic purpose, in the potteries and for building materials like cement, burning of bricks, tiles and in iron and brass foundries.

(ii) Jharkhand - Jharia, Karanpura
West Bengal - Raniganj, Purulia

(d)

(i) Maharashtra is the largest producer of mineral oil. It produces more than 60% of total production.

(ii) Coastal refineries - Visakhapatnam refinery, Andhra Pradesh and Koyali refinery, Gujarat.

Inland refineries - Digboi refinery, Assam and Madurai refinery, Uttar Pradesh.

Question 8

(a) Intensive farming :-

* More than one crop is cultivated on the same field.

* It is a labor intensive system.

* Production is increased by using higher inputs and new techniques.

* This done in thickly populated areas, where no more land is available.

Extensive farming :-

* Farmer specializes in one or two major commercial crops.

* It is highly capital intensive.

* Production is increased by bringing more and more area under cultivation.

* This is done in thinly populated area.

(b)

(i) West Bengal, Andhra Pradesh

(ii) Growing rice in nurseries gives higher yield. This method is suitable for deltaic and flood plain regions.

(c)

(i) Karnataka, Kerala

(ii) Coffee requires a hot climate with temperature ranging from 18°C to 28°C and an annual rainfall of 125 to 200 cm well distributed throughout the year. Deep rich and loamy and well drained soils are essential for coffee cultivation. Coffee is also grown on red and laterite soils.

(d)

- (i) Retting is associated with jute. Retting is a microbiological process which loosens the outer bark and makes it easier to remove fibers from the stalk. Plant is dipped in stagnant water for 2- 3 weeks in order to soften the outer bark.
- (ii) Ginning is associated with cotton. Ginning is a process by which seeds are separated from the fiber.
- (iii) Broadcasting involves scattering the seeds by sprinkling all over the fields. This method is adopted for sowing inferior varieties of rice.

Question 9

(a) North - Utter Pradesh
South - Karnataka

(b)

- (i) Cotton textile industry
- (ii) Silk textile industry.

(c)

- * The jute plant needs heavy and evenly distributed rainfall, 170-200cm, which are found in this region.
- * Jute is a soil exhausting plant and grows well on alluvial soil. The Ganga-Brahmaputra delta has alluvial soil and soil is also responsible.
- * Jute is the crop of hot and humid climate, so it need temperature varying from 24°C to 35°C. It also require high relative humidity.

(d)

- (i) The woolen industry is localized in India because,
 - * Shortage of raw wool
 - * Lack of Market
 - * Lack of modern equipment
 - * Low quality of wool
- (ii) Sucrose content of sugarcane decrease rapidly after 24 - 48 hours. This lowers the quality of sugarcane.
- (iii) Nearly 85% of mulberry silk is produced in Karnataka because it has favorable climate for rearing silkworms. The temperature range from 16°C to 31°C. The mulberry is raised as bush plantation.
Abundant soft water, free from alkaline salts and iron are available there.

Question 10

(a)

- (i) Indian electronics industry is contributing a lot to space technology. It has played a major role in the development of electronic sector. It bring foreign exchange as it is a export industry. The television and audio industry has boomed as a result of the progress made by the electronic industry.

(ii) Bangalore, Hyderabad

(b) Bhilai steel plant, Bokaro steel plant.

(c)

* Chhota Nagpur plateau is famous for iron ores. Bihar, Bengal and Jharkhand provide raw material.

* Coal which is used as a fuel in another important input and is available in this region in plenty

* Because of more population in this region cheap labor is also available.

(d)

(i) Maruti Udyog Ltd.

(ii) The integral coach factory.

(iii) Locomotive works Railway Engines.

Question 11

(a) Air transport is very costly. Air transport is now growing as it is the fastest means of transport especially to foreign countries. It can cover very difficult terrains like high mountains, deserts, thick forests and long stretches of seas with great ease.

(b)

(i) Peninsular rivers are seasonal. Coastal traffic has to be suspended during the season of the southwest monsoon.

(ii) Chennai.

(c)

(i) The main objective of treatment of gaseous waste is to produce an environmentally safe treated effluent and gaseous waste suitable for disposal or reuse.

(ii) Asthma, a condition where breathing is difficult. Bronchitis, is an inflammation of the airways of the lungs which can be caused by breathing in certain chemicals or smoke.

(d)

(i) Methyl isocyanate

(ii) Mercury

(iii) Radioactivity elements.