

Question 3

[10]

- (i) Punjab and Haryana
- (ii) Peninsular plateau
- (iii) palas
- (iv) Baolis
- (v) Magnetite
- (vi) Maharashtra
- (vii) Extensive farming
- (viii) Hyderabad
- (ix) Waterways
- (x) Incineration

PART- II (50 Marks)

(Attempt any five questions from this part.)

Question 4

- (i) (a) Tropical cyclone [2]
(b) Originates in the Bay of Bengal, in the neighbourhood of the Andaman Islands.
- (ii) (a) Assam- Bardoli Chheerha [2]
(b) Karnataka- Cherry blossoms
- (iii)(a) Mangalore receives more rainfall than Bangalore because Mangalore is situated in the windward side of Western ghats whereas Bangalore is located in the leeward side.
(b) Most of India remains dry during the North East Monsoon season because the wind blows from land to sea and brings rainfall only to Tamil Nadu and southern tip of Andhra Pradesh.
(c) Jaipur has a higher annual range of temperature than Mumbai because Jaipur is located far away from the sea and experiences continental type of climate whereas Mumbai is located near the sea and experiences maritime type of climate. [3]
- (iv)(a) maximum-minimum = $38.3 - 19.4 = 18.9^{\circ}\text{C}$.
(b) Station A -Southwest monsoon wind and Station B- Retreating Monsoon wind.
(c) Station B experiences maritime and Station A experiences continental type of climate. [3]

Question 5

- (i) (a) In-situ soil- The soils that are formed in their original position by the breaking up of parent rocks. [2]
(b) Leaching- Is the process in which the nutrients get percolated down below the soil due to heavy rainfall and leaving the top soil infertile.
- (ii) (a) The soil gets eroded by running water due to devoid of vegetation in the slopes causing sheet erosion, rill erosion and gully erosion. The soil also gets eroded near the sea shore and streams.
(b) Terrace farming. Contour ploughing and by planting trees along in the steep slopes. (any 2) [2]
- (iii) (a) Alluvial soil is formed by the deposition of sediments carried down by the rivers. [3]
(b) Khadar is more fertile than bhangra because it is replenished every year with newer deposition.
(c) Inland alluvial- in Northern plains, deltaic alluvial in the deltas of Ganga, Brahmaputra, Mahanadi, Godavari, Krishna and Kaveri. Coastal alluvial along the coastal strips of the Peninsula. (any two areas)
- (iv)(i) Red soil is ideal for dry farming as it is formed in areas with poor rainfall. [3]

- (ii) Laterite soil is red in colour due to the presence of iron oxide.
- (iii) Black soil is also known as lava soil since it is formed by the denudation of volcanic rocks.

Question 6

- (i) The trees in these forests shed their leaves from six to eight weeks during spring and early summer.
A particular species can be found over a large area.
They are commercially most exploited. (any 2) [2]
- (ii) Tropical Evergreen Forest is not commercially exploited due to tangled mass of canes, palms, bamboos, ferns and climbers along with the lack of means of transportation. (any 2) [2]
- (iii) (a) 'Tropical rain forest appears green throughout the year because the trees in these forest do not have a fixed time to shed their leaves.
(b) (i) Teak- Tropical Deciduous. Uses- used for construction purpose, ship building, making furniture railway carriages, sleepers and bridges. (any 1)
(ii) Babool- Tropical Desert. Uses- used for medicinal purpose. [3]
- (iv) The correlation of forest with the environment- purifies the atmosphere, checks pollution, helps in transpiration and precipitation and maintains the water cycle. (any 3) [3]

Question 7

- (i) Perennial and inundation canals- Perennial canal these canals are taken from perennial rivers by constructing barrages to regulate the flow of water and supplies water throughout the year. Inundation canals are taken out directly from rivers without constructing any barrage or dam. It is operational only when the river bed gets flooded. [2]
- (ii) (a) Wells can be dug at a very low cost which is well within the means of poor farmers. By the use of pumps and tubewells, water can be lifted even from great depths. Oxen which are kept for ploughing the land can be utilized for drawing water.
(b) Well irrigation is popular in Punjab, Uttar Pradesh, Goa, Haryana, Bihar, Rajasthan, Gujarat, Maharashtra, Madhya Pradesh, Andhra Pradesh, Karnataka and Tamil Nadu. (any 1) [2]
- (iii) (a) Tank irrigation is more suitable in Deccan plateau. As the rivers are not snow fed and the terrain of the Deccan plateau is very uneven with many natural depressions where tanks can be easily built.
(b) Canal irrigation is more widespread in Northern India because due to the presence of perennial rivers.
(c) A tube well should be installed in a fertile and a productive region since it enables to draw water from greater depth of 20-30 m. [3]
- (iv) Three methods of conserving water- rain water harvesting, adopting water saving technologies, encouraging watershed development, water recycling and preventing the pollution of water. (any 3) [3]

Question 8

- (i) (a) Iron ore- Jharkhand, Chhattisgarh, Odisha. (any 1)
(b) Types of Anthracite, Bituminous, Lignite and peat. Bituminous coal is extensively used in iron and steel industry. [2]
- (ii) (a) Petroleum is often referred as liquid gold because not even a tiniest part of crude oil goes wasted or remains unused.
(b) Disadvantage of using coal as a source of power causes pollution. [2]
- (iii) (a) Many port cities have their own oil refineries since it avoids cost of transportation and to avoid fire accidents as it is highly inflammable.
(b) Copper is used in electrical industries since it is a good conductor of electricity.

- (c) Wind farms provides additional income to the land owners because the surplus energy can be sold to near by grid. [3]
- (iv) Location of Hirakud built across the Mahanadi river. Bhakra Nangal project built across the Sutlej river. The states that get benefitted Hirakud- Odisha and Bhakra Nangal- Punjab, Haryana, Rajasthan, Himachal Pradesh, Chandigarh and Delhi. [3]

Question 9

- (i) (a) The leading states in the production of rice is West Bengal.
 (b) Transplanting method – the seeds re grown in nurseries and after 4 to 5 weeks when saplings attain 25-30 cm of height they are transplanted to rice fields. Only healthy plants are picked, weeds are removed and less wastage of seeds and gives higher yield. [2]
- (ii) (a) Sett Method. [2]
 (b) Oil cake.
- (iii) (a) Cotton- Climatic condition that is suitable for cultivating the above crop- Temperature ranging between 21°c and 30°c.
 (b) The state that produces the largest amount of the above crop is Gujarat and Maharashtra.
 (c) Kharif crop. [3]
- (iv) (a) Varieties of coffee- Coffee Robusta, Coffee Liberica and Coffee Arabica. [3]
 (b) Climatic condition- Temperature 15°c to 28°c
 (c) Leading producer- Karnataka

Question 10

- (i) Advantages of mini steel plant- Uses scrap iron which is easily available, cheap, do not dependent on electric power so they do not cause pollution, less investment and need not be located near the source of raw material. [2]
- (ii) Iron and steel industry. It is called as basic industry since it provides raw materials for all other industries like industrial machines, electrical machinery, defence equipment, railway tracks, automobile etc... [2]
- (iii) By-products of sugarcane are molasses, bagasse and press mud.(any 1).
 Any two problems of sugar industry in India- poor quality of sugarcane, cost of production is high, irregular supply of the crop, fluctuation in price, by products are not utilised, old and outdated machines.(any 2) [3]
- (iv) Petrochemical industries are gaining importance in India because it is cheaper, cost effective and economically stable. (any 1)
 Any two production units- Reliance industries, Indian petrochemical corporation, Herdillia chemicals, National organic chemicals industries etc...(any 2) [3]

Question 11

- (i) Economic benefits of Golden Quadrilateral- it connects many major cities and ports. It provides impetus to truck transport, it enables in industrial growth. (any 2) [2]
- (ii) Disadvantages of railways- lacks flexibility of routes, travelling is long and tedious, cannot be laid in every industrial region, causes air and noise pollution and cannot cross the oceans. (any 2) [2]
- (iii) (a) Nearly 70% of Indians do not use air transport because it is expensive. [3]
 (b) A well-developed transport network is important for industries because it enables in transporting raw materials to the production unit and finished goods to the market.
 (c) Railways are not common in North- East India because it is a hilly area.
- (iv) Advantages of waterways – environment friendly, cost effective, fuel efficient, carries heavy and bulky material, comfortable and it is safe and less traffic. (any 2)

Disadvantage- depends on weather conditions, needs long travelling hours and causes sea sickness and it is limited to the areas where rivers are navigable and oceanic routes exist. (any 1) [3]

Question 12

(i) Sanitary landfill- where waste is packed and dumped daily at the site and is covered with earth.

Advantage- pollution free, minimizes health problems and free from fire hazards. (any 1) [2]

(ii) Recycling- It is a process that includes the collection and breaking down of waste material to create something new out of it. It is important for waste management as it reduces waste accumulation and conserves natural resources.[2]

(iii) Advantages of segregation- When waste is segregated, there occurs a reduction in the volume of waste that reaches the landfills. Air and water pollution is considerably reduced and it becomes easier to apply different processes of waste disposal like composting, recycling and incineration. [3]

(iv) Sewage should be treated before disposal- Sewage contains large amounts of organic matter and microbes. Many of which are pathogenic. Thus their disposal into water without proper treatment may cause an outbreak of serious diseases and pollutes the water and soil. [3]