

Agriculture

Question 1.

Write four points to stress the importance of agriculture in India. (2013)

Or, Why is India called an agriculturally important country? Write four supportive arguments.

Or, 'Agriculture has been the backbone of the Indian Economy' Explain the statement by giving reason. (2017 D)

Answer:

India is an agricultural country because of the following reasons:

- 1 Two-third of its population is engaged in agricultural activities which provide livelihood.
- 2 Agriculture is a primary activity and produces most of the food and foodgrains that we consume.
- 3 It produces raw materials for our various industries, e.g., cotton textile and sugar industry.
- 4 Some agricultural products, like tea, coffee and spices, are exported and earn foreign exchange.
- 5 The share of agriculture in providing employment and livelihood to the population continued to be as high as 63% in 2001.

Question 2.

Why do farming practices vary in different regions? Give three major reasons.

Answer:

Three major reasons are:

- 1 Physical environment, i.e., relief, soil and climate.
- 2 Technological know-how.
- 3 Socio-cultural practices.

Question 3.

Name some industries based on agricultural raw material.

Answer:

Cotton Textile Industry and Sugar Industry.

Question 4.

What factors does primitive subsistence farming depend on?

Answer:

Factors:

- Monsoons
- Natural fertility of the soil
- Suitability of other environmental conditions to the crops grown.

Question 5.

Write main characteristics of 'slash and burn' agriculture.

Or, Write main characteristics of Primitive Subsistence Farming.

Answer:

- This type of farming is practised in few pockets of India on small patches of land using primitive tools and family/community labour.
- Farmers clear a patch of land and produce cereals and other food crops to sustain their families.
- When the soil fertility decreases, the farmers shift and clear a fresh patch of land for cultivation. This type of shifting allows nature to replenish the fertility of the soil through natural processes.
- Land productivity is low as the farmer does not use fertilisers or other modern inputs.

Question 6.

Name some primitive tools used in 'slash and burn' agriculture.

Answer:

Tools like hoe, dao and digging sticks.

Question 8.

Write the main characteristics of intensive subsistence farming.

Answer:

- 1 It is practised in areas of high population pressure on land.
- 2 It is labour intensive farming.
- 3 Yield per hectare is high because high doses of biochemical inputs and irrigation are used.
- 4 The size of the land-holdings is small and uneconomical.
- 5 Farmers take maximum output from the limited land by raising 2-3 crops in a year from the same land, i.e., multiple cropping is practised.

Question 10.

What is the most important characteristic of commercial farming?

Answer:

The main characteristic of commercial farming is the use of higher doses of modern inputs, e.g., high yielding varieties seeds (HYVs), chemical fertilizers and pesticides to increase productivity.

The degree of commercialisation of agriculture varies from one region to another.

Question 11.

Give an example of a crop which is commercial in one region and provides subsistence in another. (2012)

Answer:

Rice is a commercial crop in Haryana and Punjab, while in Odisha it is a subsistence crop.

Question 12.

Name one type of agriculture which falls in the category of commercial agriculture. Write the main characteristics of this type of agriculture. (2012)

Or

Write six characteristics of plantation agriculture.

Answer:

Plantation agriculture is a type of commercial farming.

Characteristics of plantation agriculture:

- 1 A single type of crop is grown on a large area.
- 2 Plantation is carried out on large estates using lot of capital intensive units.
- 3 Lot of migrant labourers work on these estates.
- 4 The plantation has an interface of agriculture and industry. All the produce is used as raw material in the respective industries.
- 5 The production is mainly for the market, i.e., commercial agriculture.
- 6 A well developed network of transport and communication connecting the plantation areas, processing industries and markets plays an important role in the development of plantations.

Question 13.

Name one horticultural plantation crop and two beverage plantation crops and two States each which specialise in their production respectively.

Answer:

Horticultural plantation crop is apples, mainly grown in Himachal Pradesh and Jammu & Kashmir. Beverage crops:

- Tea which is mainly a plantation crop in Assam and North-West Bengal.
- Coffee which is grown in Karnataka.

Question 14.

Name some important plantation crops.

Answer:

Tea, coffee, rubber, sugarcane and banana are examples of some important plantation crops.

Question 15.

Name three cropping seasons of India. Write their sowing and harvesting time and major crops of each season.

Answer:

Rabi, Kharif and Zaid are the three cropping seasons.

Rabi crops (Winter crops):

These are sown in winter from October to December.

Harvested in summer from April to June.

Important crops are wheat, barley, mustard, peas, gram etc.

II. Kharif crops (Crops of the rainy season):

These are sown with the onset of monsoon (June-July) and are harvested in September-October. Important crops are rice, maize, millets, jowar, bajra, tur (arhar), moong, urad, cotton, jute, groundnut and soyabean.

. Zaid season: It is a short cropping season during summer months (mainly between March-April and June-July in different parts of the country).

Important crops are watermelon, musk melon, cucumber and fodder crops, etc.

Question 16.

Where are rabi crops mainly grown? Describe the climatic conditions required for their growth.

Answer:

Rabi crops such as wheat and other crops are grown mainly in states from the north and north-western parts such as Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Uttaranchal and Uttar Pradesh. Climatic conditions: Availability of precipitation during winter months due to western temperate cyclones help in successful growth.

The green revolution has also been an important factor in the growth of rabi crops.

Question 17.

Name some important rice growing regions of India.

Answer:

Assam, West Bengal, Coastal regions of Orissa, Andhra Pradesh, Tamil Nadu, Kerala and Maharashtra etc.

Question 18.

Name three states which raise three paddy crops in a year. Name these crops also.

Answer:

Assam, West Bengal and Orissa grow three crops in a year. The crops are Aus, Aman and Boro.

Question 19.

(a) Which is the most important food crop of India? What is its position in world production?

Or, Name the food crop of Kharif season. What is India's position in the world with regard to its production?

(b) Write the rainfall and temperature requirements for the growth of this crop.

(c) Name four major regions of rice cultivation.

(d) Name four states which produce irrigated rice.

Answer:

(a) Rice is the most important food crop (Kharif crop) of India. India holds second position in rice production after China

b) For rice cultivation, high temperature of 25°C and above and high humidity with annual rainfall of 100 cms is required.

(c) Four major regions of rice cultivation are:

- Plains of North India
- Plains of North-Eastern India
- Coastal areas
- Deltaic regions.

(d) Irrigated rice is produced in Punjab, Haryana, Western Uttar Pradesh and Rajasthan. Development of dense network of canals and tubewells has made it possible to grow rice in these states which receive less rainfall..

Question 20.

(a) Which is the second most important cereal crop of India? Write the geographical conditions required for its growth.

(b) Name two major zones of wheat growth and name six major states of wheat production.

Answer:

(a) Wheat is the second most important cereal crop of India. It is the main food crop.

Geographical conditions:

- 1 Cool and moist growing season.
- 2 Bright sunshine at the time of ripening.
- 3 Rainfall: 50 to 75 cm evenly distributed over the growing season.
- 4 Loamy soil is best for its growth.

(b) Two important wheat growing zones in India are:

- The Ganga-Sutlej plains in the North-West and
- Black soil region of the Deccan.

The major wheat producing states are: Punjab, Haryana, Uttar Pradesh, Bihar, Rajasthan and Madhya Pradesh.

Question 21.

Which is the third most important food crop of India? Name the cropping season in which it is grown. Name four leading states of its production.

Answer:

Jowar is the third most important food crop with respect to area and production. It is mainly the crop of Kharif season. It is a rainfed crop grown in moist areas.

Leading states of production are: Maharashtra, Karnataka, Andhra Pradesh and Madhya Pradesh.

Question 22.

What are coarse grains? Why are they important in India? Name the crops which are included in this category and name three leading states producing each of these crops.

Answer:

Millets are called coarse grains. They are important because they have high nutritional value and make an important part of the diet for poor people.

Most important millets are as follows:

- 1 Ragi — Leading producer is Karnataka, followed by Tamil Nadu. Himachal Pradesh, Jharkhand, Uttaranchal, Sikkim etc are other important regions.
- 2 Jowar — Maharashtra is the leading producer followed by Karnataka, Andhra Pradesh, Madhya Pradesh.
- 3 Bajra — It grows well on sandy soils and shallow black soils. Rajasthan is the largest producer followed by Uttar Pradesh, Maharashtra, Gujarat and Haryana.

Question 23.

Write two geographical conditions required for the growth of Ragi and write its nutritional value.

Answer:

Geographical conditions:

- Ragi grows well in dry regions.
- It grows well on red, black, sandy, loamy and shallow black soils.

Nutritional value: Ragi is rich in iron, calcium, other micro-nutrients and roughage.

Question 24.

Mention two geographical conditions required for the growth of Maize crop in India. Describe three factors which have contributed to increase maize production. Write four major maize producing states. (2012)

Answer:

Geographical conditions required for the growth of maize crop in India:

- 1 It is a kharif crop which requires temperature between 21°C to 27°C . It requires moderate rainfall between 50-100 cm.
- 2 It grows well in old alluvial soils.

Maize is a crop which is used both as food and fodder. In some states like Bihar, maize is grown in rabi season also. Maize production in India has increased due to factors like:

- use of modern inputs such as HYV seeds;
 - use of fertilisers; and
 - use of irrigation facilities.
- major maize producing state: Karnataka, Uttar Pradesh, Bihar, Andhra Pradesh and Madhya Pradesh.

Question 25.

(a) Name three pulses each of Rabi and Kharif season. Write their importance for human beings and for agriculture.

(b) What is India's position in the world with regard to the production of pulses? Name five leading states producing pulses. (2015)

Answer:

(a) Pulses of Rabi season: Tur (arhar), urad, moong.

Pulses of Kharif season: Masur, peas, gram.

Importance of pulses:

- For agriculture. Being leguminous crops, they help in restoring soil fertility by utilising nitrogen from the air (nitrogen fixation). Therefore, these are mostly grown in rotation with other crops.

- They need less moisture and survive even in dry conditions.

(b) India is the largest producer of pulses in the world.

Major pulse producing states are: Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharashtra and Karnataka.

Question 26.

(a) What is India's position in the world regarding sugarcane production? Write the geographical conditions required for its growth.

(b) Write the major states that produce sugarcane.

(c) Name four products obtained from sugarcane.

Answer:

(a) India is the second largest producer of sugarcane after Brazil.

Geographical conditions: It is a tropical as well as subtropical crop.

- It grows well in hot and humid climate.
- Temperature: 21°C to 27°C .
- Annual rainfall between 75 cm and 100 cms. Irrigation is required in the regions of low rainfall.
- It can be grown on a variety of soils.
- It needs manual labour from sowing to harvesting.

(b) Six major states producing sugarcane are: Uttar Pradesh, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Bihar, Punjab and Haryana.

(c) Sugarcane is the main source of sugar, gur (jaggery), khandsari and molasses.

Question 28.

Write the geographical and labour conditions required for the growth of tea.

Answer:

Geographical conditions:

- 1 It grows well in tropical and subtropical climates.
- 2 It requires deep, fertile, well drained soil, rich in humus and organic matter.
- 3 It requires warm and moist frost free climate round the year.
- 4 Frequent showers evenly distributed through the year ensure continuous growth of tender leaves.
- 5 Tea is a labour intensive industry. It requires abundant, cheap and skilled labour.
- 6 It is processed within tea gardens to restore its freshness.

Question 30.

Which is the most important beverage crop of Southern India and what is its percentage share in the world? Where did its cultivation initially start in India? Name three major states of its production.

Answer:

Coffee is the most important beverage crop of Southern India. India produces about 4% of the world's coffee production. Three major states which produce coffee are: Karnataka, Kerala and Tamil Nadu, mainly in Nilgiri Hills. Initially its cultivation started in Baba Budan Hills.

Question 31.

Name a good variety of coffee which is produced in India and name the country from where it was initially brought. Why Indian coffee has great international demand?

Answer:

Arabica, the good variety of coffee was originally brought from Yemen. Indian coffee is in great demand because this coffee is of a very good quality.

Question 32.

What is horticulture? (2012)

Answer:

Cultivation of fruits, vegetables and flowers is called horticulture.

Question 33.

What is India's position in the world in the production of fruits and vegetables? Name the different Indian fruits which are in great demand world over and also name the states where each is produced.

Answer:

India is the largest producer of fruits and vegetables in the world. Mangoes grow in Maharashtra, Andhra Pradesh, Uttar Pradesh and West Bengal. Bananas grow well in Kerala, Mizoram, Maharashtra and Tamil Nadu. Oranges grow well in Nagpur and Cherrapunjee (Meghalaya). Lichi and Guavas grow in Uttar Pradesh and Bihar. Grapes grow well in Andhra Pradesh and Maharashtra. Pineapple grows well in Meghalaya. Apples, Pears, Apricots and Walnuts grow well in Jammu and Kashmir and Himachal Pradesh.

Question 34.

Name four temperate fruits which are produced in India and name the states which grow them in abundance.

Answer:

Four temperate crops are: apples, pears, apricots and walnuts. Himachal Pradesh and Jammu & Kashmir are the leading producers of these temperate fruits.

Question 35.

Describe India's position in vegetable production.

Answer:

- 1 India produces about 13% of the world's vegetables.
- 2 It stands first in the production of peas and cauliflower.
- 3 It stands second in the production of onions, cabbage, tomatoes and brinjal and stands fourth in the production of potatoes.

Question 36.

Name three non-food crops and write three major states of their production respectively.

Answer:

The three non-food crops are: rubber, cotton and jute. Rubber is produced in Kerala, Tamil Nadu and Karnataka, Andaman and Nicobar islands and Garo hills of Meghalaya. Cotton is mainly produced in Maharashtra, Gujarat and Madhya Pradesh

Jute is mainly grown in West Bengal, Bihar and Assam.

Question 37.

Write the geographical conditions required for the growth of rubber. Name the item which consumes maximum share of rubber for its manufacture.

Answer:

Conditions:

- 1 It requires hot and humid climate.
- 2 Rainfall – 200 cms.
- 3 Temperature – above 25°C.

Maximum rubber is consumed in the manufacture of auto tyres and tubes and cycle tyres and tubes. They together consume about 57.8% of the total rubber production.

Question 38.

Name four major fibre crops grown in India. What is 'sericulture'?

Answer:

Cotton, jute, hemp and natural silk are the four major fibre crops grown in India. The first three are derived directly from the crops grown in the soil, but silk is obtained from the cocoons of silk worms fed on mulberry leaves.

Sericulture: Rearing of silk worms for the production of silk fibre is known as sericulture.

Question 39.

Give an account of fibre crop which is mainly grown in Deccan Plateau region under the following heads:

(i) Its position in the world production

(ii) geographical conditions and

(iii) major states of production.

Answer:

Cotton is the fibre crop which is mainly grown in the black soil of the Deccan Plateau region.

(i) Position. India is the 3rd largest producer of cotton in the world.

(ii) Geographical conditions. Cotton requires:

- high temperature.
- light rainfall or irrigation.
- 210 frost-free days.
- bright sunshine for its growth.
- black cotton soil which is very good for its growth.
- It is a Kharif crop and requires 6-8 months to mature.

(iii) Major cotton producing states are. Maharashtra, Gujarat, Madhya Pradesh, Karnataka, Andhra Pradesh, Tamil Nadu, Punjab, Haryana and Uttar Pradesh.

Question 40.

Which fibre crop is called as the 'Golden fibre'? Which is the most important region of its growth and why? Give one major reason why it is losing the market now.

Answer:

Jute is known as the golden fibre.

Jute is mainly grown in West Bengal, especially in the Hooghly Basin because there the geographical conditions favour its growth. These conditions are:

- High temperature required during the time of growth.
- Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year. Due to its high cost, it is losing market to synthetic fibres and other packing materials particularly to nylon.

Question 41.

Name the major jute producing states and list some items or products made out of jute.

Answer:

Jute producing states are: West Bengal, Bihar, Assam, Orissa and Meghalaya.

Jute products are: gunny bags, ropes, mats, carpets, yarns and other ornamental artefacts.

Technological And Institutional Reforms

Question 42.

Give the main reasons which have necessitated agricultural reforms.

Answer:

Reforms in agriculture are necessary because of the following reasons:

- 1 Sustained uses of land without compatible techno-institutional changes have hindered the pace of agricultural development.
- 2 Most of the farmers still depend on monsoons because large parts of the country still do not have irrigation facilities.
- 3 Farmers still depend on natural fertility in order to carry on their agriculture, i.e., they lack material resources, e.g., fertilizers, etc.
- 4 Ours is an agricultural economy and about 63% of people depend on agriculture for employment and livelihood, therefore reforms have to be implemented.
- 5 For raising the agricultural production and productivity levels to produce sufficient food for the growing population.
- 6 To overcome environmental, economic and social constraints, agricultural reforms have to be seriously implemented.
- 7 The declining share in GDP is a matter of serious concern because decline and stagnation in agriculture will lead to decline in other spheres of economy.

Question 43.

What are 'Institutional Reforms'? Enlist various institutional reforms taken by the Indian Government to bring about improvements in agriculture. (2015)

Answer:

Institutional reforms:

Steps taken by the government to bring about improvements in agriculture are termed as 'Institutional Reforms'.

Some steps are:

- 1 Collectivisation and consolidation of land holdings to make them economically viable.
- 2 The green revolution based on the use of package technology and the White Revolution to increase milk production are important strategies which were initiated to improve agriculture.
- 3 Cooperation with farmers and Abolition of Zamindari system.
- 4 Provision of crop insurance to protect the farmers against losses caused by natural calamities, i.e. drought, flood, cyclone, fire and disease.
- 5 Establishment of 'Grameen Banks', Cooperative Societies and Banks for providing loan facilities to the farmers at lower rates of interest.
- 6 Kissan Credit Card (KCC), Personal Accident Insurance Scheme (PAIS) are some other schemes introduced by the government for the benefit of farmers.
- 7 Special weather bulletins and agricultural programmes for farmers were introduced on the Radio and TV.
- 8 Announcement of minimum support price, remunerative and procurement prices for crops to check the exploitation of farmers by speculators and middlemen and removing the elements of uncertainty.

Question 44.

Describe some concerted efforts made by the government to modernise Indian agriculture and improve its share in the GDP.

Answer:

The following measures have been taken by the government to modernise agriculture and improve its share in the GDP:

- 1 Establishment of Indian Council of Agricultural Research (ICAR).
- 2 Setting up of Agricultural Universities.
- 3 Development of advanced Veterinary Services and Animal Breeding Centres.
- 4 Development of horticulture.
- 5 Research and Development in the field of meteorology and weather forecasts, etc.

Improving the rural infrastructure is essential for the same.

Question 45.

“The contribution of agriculture to national economy is on the decline.” Write five facts to support this statement.

Or, What is the contribution of agriculture to national economy, employment and output? Is it declining or encouraging?

Answer:

Contribution of agriculture is showing a declining trend:

- 1 The share of agriculture in GDP has shown a declining trend since 1951.
- 2 Yet its share in providing employment and livelihood to the population continued to be as high as 63% in 2001.
- 3 Although GDP growth rate of the country is increasing, it is not generating sufficient employment opportunities in the country, especially in the field of agriculture.
- 4 Farmers are dragging away their investment from agriculture because they have to face big challenges from international competition. This has resulted in further downfall in employment in agriculture.
- 5 The growth rate in agriculture is decelerating which is an alarming situation.

Question 46.

What are the challenges being faced by Indian farmers? What has this resulted in?

Answer:

Challenges faced by Indian farmers:

- 1 Reduction in public investment by government in the agricultural sector particularly in areas of irrigation, power, rural roads, market and mechanisation.
- 2 Subsidy on fertilizers has decreased leading to increase in the cost of production.
- 3 Reduction in import duties on agricultural products has proved detrimental to agriculture in the country.

All these factors have led to stiff international competition. Farmers are thus withdrawing their investment from agriculture causing a downfall in agricultural employment.

Question 48.

Write four drawbacks of green revolution.

Answer:

- 1 Due to overuse of chemicals land degradation has taken place.
- 2 Excessive irrigation caused drying of aquifers.
- 3 It became a cause for vanishing biodiversity.
- 4 It has widened the gap between poor and rich farmers because only agriculturally rich areas have benefitted from it and not the small farmers.

Question 49.

(a) Give four reasons why Indian farmers should switch over from cereals to high value crops' cultivation.

(b) What will be the implication of this change? Name three countries which have successfully done this.

Answer:

(a) Indian farmers should switch from cereals to high value crops because of the following reasons:

- It will improve their income.
- It will reduce environmental degradation at the same time.
- Fruits, medicinal herbs, bio-diesel crops, flowers and vegetables need much less irrigation than rice or sugarcane.
- India's wide variety of climates can be harnessed to grow a wide range of high value crops.

b) Its implications are:

- India has to import food.
- If we import food while exporting high value crops, our economy will grow.
- Three countries which have such successful economies are: Chile, Israel and Italy, which export farm products (fruits, wine, olives, speciality seeds) and import food.