

AGRICULTURE

SHORT ANSWER TYPE QUESTIONS [3 MARKS]

1. Distinguish between primitive subsistence farming and intensive subsistence farming.

Answer:

The following are the differences between primitive subsistence farming and intensive subsistence farming.

Primitive subsistence farming	Intensive subsistence farming
1)It is practiced on a small patch of land.	1)It is practiced in areas of high population pressure on land.
2)It is done with the help of primitive tools like hoe,dao and digging sticks.	2)It is done with the help of fertilizers, insecticides, pesticides, HYV seeds, use of machines and other implements.
3)This type of farming is depended on monsoon.	3)It is entirely depended on machines.
4)When the soil fertility decreases the farmers shift and clear a fresh patch of land for cultivation.	4)The farmers continue to take maximum output from the limited land in the absence of alternative source of livelihood.
5)The production is only for home consumption.	5)The productions is not only for farmer consumption. It is for other people also.

2. Define plantation agriculture. Explain any four characteristics of plantation agriculture.

Answer:

Plantation is a type of commercial farming where a single crop is grown on a large area. The following are the four characteristics of plantation.

- Plantations have very large areas.
- Capital-intensive inputs are used.
- Migrant labourers are used.
- All the produce is used as raw material in respective industries.
- The development of plantations is the result of a well-developed network of transport and communication, connecting plantations to markets

3. How has irrigation changed the cropping pattern in many regions of India. Explain with examples.

Answer:

Irrigation has changed the cropping pattern of many regions, with farmers shifting to water-intensive and commercial crops.

- Due to the success oi the Green Revolution in Punjab, Haryana, western Uttar Pradesh and parts of Rajasthan, these states have started growing rabi crops like wheat, barley, peas and gram.
- Paddy has become an important crop of Punjab and Haryana. In states like Assam, West Bengal and Orissa, three crops of paddy are grown in a year. They are Aus, Aman and Boro.
- The development of canal irrigation and tubewells has made it possible to grow rice in areas of less rainfall such as Punjab, Haryana, Western Uttar Pradesh and parts of Rajasthan.
- The use of modem inputs like HYV (High Yielding Variety) seeds, fertilizers and irrigation has contributed to high production of maize.

4. “Wheat and rice farming in India are fairly different from each other.” Support the statement with five suitable examples.

Answer:

Wheat	Rice
(a) It is a rabi crop and a temperate crop.	(a) It is a kharif crop and a tropical crop.
(b) It requires about 10–15°C temperature and a rainfall of 60–75 cms.	(b) It requires more than 25°C temperature, high humidity with annual rainfall of above 100 cms.
(c) It requires well drained fertile soil.	(c) It requires fertile alluvial soil with a clayey layer above.
(d) Leading producers are Punjab, Haryana and Uttar Pradesh.	(d) Leading producers are West Bengal, Kerala and Punjab.
(e) It does not require much of labour.	(e) It requires cheap labour for transplantation.

5. Explain rubber cultivation in India under the following heads.

(a) Importance

(b) Geographical conditions

(c) Any two rubber-producing states

Answer:

- **Importance:** Rubber is an important industrial raw material.
- **Geographical conditions:** It is an equitable crop, which is grown in tropical and subtropical areas. It requires moist and humid climate with temperature above 25°C and rainfall above 200 cm.
- **Two rubber-producing states:** It is mainly grown in Kerala, Tamil Nadu, Karnataka and Garo hills of Meghalaya

6. Explain rice cultivation in India under the following heads.

(a) Temperature (b) Rainfall

(c) Agricultural season (d) Major producing areas

Answer:

- **Temperature:** Rice requires a high temperature of above 25°C.
- **Rainfall:** It requires high humidity with an annual rainfall above 100 cm. In the areas of less rainfall, irrigation is essential.
- **Agricultural season:** It is a kharif crop, which is grown with the onset of monsoon and is harvested in September-October.
- **Major producing areas:** Rice is cultivated in the plains of north and northeastern India, coastal areas and the deltaic regions. Development of canal irrigation and tubewells have made it possible to grow rice in areas of low rainfall such as Punjab, Haryana, Western Uttar Pradesh and parts of Rajasthan.

LONG ANSWER TYPE QUESTION [5 MARKS]

7. Describe the conditions required for the cultivation of tea. Name two major tea-producing states of India.

Answer: Tea is an important beverage crop. The following are the conditions required for its cultivation.

- The tea plant grows in tropical and sub-tropical regions, which have deep, fertile and well-drained soil, rich in humus and organic matter.
- Tea bushes require warm and moist frost-free climate all through the year.
- Tea bushes require frequent showers throughout the year to ensure continuous growth of tender leaves. It needs abundant, cheap and skilled labour.

- Two major tea-producing states are Assam and West Bengal.

8. Name the two most important staple food crops in India. Mention the geographical conditions required for their growth.

Answer: The two most important staple food crops in India are rice and wheat.

The geographical conditions required for the growth of rice are as follows.

- It requires high temperature—above 25°C.
- It requires high humidity for its growth.
- It requires annual rainfall above 100 cm.

The geographical conditions required for the growth of wheat are as follows.

- It is a rabi crop and needs cool growing season.
- It requires bright sunshine at the time of ripening.
- It also requires 50 to 70 cm of annual rainfall, well distributed over the growing season.

9. Explain any five features of comprehensive land development programme initiated during 1980s and 1990s.

OR

Describe any five technological and institutional reforms initiated to improve the standard of agriculture in India.

OR

Describe any four institutional reforms introduced by the government of India in the interest of the farmers.

Answer. Comprehensive land development programme included both institutional and technical reforms. Following reforms were introduced:

- (a) Provision for crop insurance against drought, flood, cyclone, fire and disease.
- (b) Establishment of Grameen Banks, cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest were some important steps in this direction.
- (c) Kissan Credit Card (KCC) was introduced for easy availability of inputs.
- (d) Personal Accident Insurance Scheme (PAIS) was introduced by the Government of India for the benefit of the farmers.
- (e) Special weather bulletins and agricultural programmes for farmers were introduced on the radio and television.
- (f) The government also announced minimum support price, remunerative and procurement prices for important crops to check the exploitation of farmers by speculators and middlemen.

10. What are the challenges faced by the farmers today?

Answer: (a) Indian farmers are facing a big challenge from international competition and reduction in public investment in agricultural sector especially in irrigation, power infrastructure and other inputs.

- (b) Subsidy on fertilizers is decreased leading to higher cost of production.
- (c) Reduction in import duties on agriculture products.
- (d) Farmers are withdrawing their investment from agriculture, resulting in lack of alternative employment opportunities.
- (e) Erratic nature of monsoons also affects agriculture production on a large scale.

11. Suggest any five measures to enhance the agricultural production in India

Answer: Agricultural is an important economic activity in our country. I would like to suggest the following measures to enhance the agricultural production in India.

- Each district and block can be made self-sufficient in agricultural production if the government provides proper agricultural infrastructure, irrigation facilities, electricity, etc.
- Loans can be provided at lower interest rates to cultivator.
- The use of latest techniques can be encouraged.

- Instead of concentrating only on rice or wheat, the food crop with a better growth potential in that particular area must be encouraged.
- Attracting foreign investment in agriculture and also free trade in grains will not only increase agricultural production, but will also create massive employment and reduce poverty in rural areas.
- Farmers should diversify their cropping pattern from cereals to high-value crops.

12. Mention the geographical conditions required for the growth of cotton along with any four cotton-producing states.

Answer: Cotton is a kharif crop. India is believed to be the original home of the cotton plants. The geographical conditions required for the growth of cotton are as follows.

- Cotton grows in the drier parts of the black cotton soil of the Deccan Plateau.
- Cotton needs high temperature, light rainfall, 210 frost-free days and bright sunshine for its growth.
- It requires 6 to 8 months to grow.
- Major cotton-producing states are Maharashtra, Gujarat, Madhya Pradesh and Karnataka

13. What is intensive subsistence farming? Write three features of intensive subsistence farming.

Answer:

Intensive subsistence farming is practiced in areas of high density of population, where pressure of population is high on agricultural land.

The following are the three features of this type of farming.

- It is labour-intensive farming.
- High doses of biochemical inputs and irrigation are used for obtaining higher , production.
- Farm size is small and uneconomical due to the division of land.
- Farmers take maximum output from the limited land.
- Farmers do not have any alternative source of livelihood. Thus, there is enormous pressure on agricultural land.

14. Explain any five steps taken by the central and state governments to improve Indian agriculture after independence.

Answer:

Various initiatives taken by the central and state governments to ensure the increase in agricultural production after independence are as follows.

- Collectivism, consolidation of holdings, cooperation and abolition of zamindari, etc. were given priority to bring about institutional reforms in the country after independence.
- Land reforms were the main focus of the First Five Year Plan.
- The Green Revolution based on the use of package technology and the White Revolution (Operation Flood) were some of the strategies initiated to improve Indian agriculture.
- Minimum Support Price Policy, provisions for crop insurance, subsidy on agricultural inputs and resources such as power and fertilisers, Grameen banks, Kissan Credit Card (KCC) and Personal Accident Insurance Scheme are some of the reforms brought by the government.
- Establishment of Indian Council of Agricultural Research (ICAR), agricultural universities, veterinary services and animal breeding centres, horticulture development and weather forecast etc. were given priority for improving Indian agriculture.

The term used for grouping of small land holdings with bigger ones is consolidation of land holdings.

15. Explain any five features of Indian agriculture.

Answer:

The following are the five features of Indian agriculture.

- Indian agriculture is mainly of intensive subsistence type.

- It is mainly practiced in areas of high population pressure on land.
- It is labour-intensive farming, where high doses of biochemical inputs and irrigation are used for obtaining high yields.
- Farmers continue to take maximum output from the limited land in the absence of alternate source of livelihood, which leads to enormous pressure on agricultural land.
- The right of inheritance has led to division of land among successive generations and rendered the size of land holding uneconomical.

16. **How is Rice farming different from Wheat farming in respect of the following?**

- (a) **Sowing and harvesting time.**
 (b) **Rainfall / irrigation requirements.**
 (c) **Areal distribution.**
 (d) **Yield per hectare.**

Answer :

Rice	Wheat
1. It is sown with the onset of the monsoon i.e. June-July. Rainfall should be 100 cm or irrigation is necessary.	1. It is sown with the withdrawal of the monsoon i.e. November. Rainfall should be 50-75 cm or irrigation is necessary.
2. Harvesting is done in the month of October-November.	2. Harvesting is done in the month of March-April.
3. It is grown in West Bengal, Andhra Pradesh, Tamil Nadu, Punjab, Haryana, Uttar Pradesh.	3. It is grown in Punjab, Haryana, Uttar Pradesh.
4. Yield per hectare is high.	4. Yield per hectare is low.

17. **Explain any five characteristics of commercial farming in India.**

Answer: The following are the five characteristics of commercial farming in India.

- The main characteristic of commercial farming is the use of high doses of modern inputs, like HYV seeds, chemical fertilisers, insecticides and pesticides, in order to obtain higher productivity.
- The degree of commercialisation of agriculture varies from one region to another, for example rice is a commercial crop in Punjab and Haryana but in Odisha it is a subsistence crop.
- Plantation is also a type of commercial farming where a single crop is grown on a large area.
- Plantations cover large areas using capital intensive inputs with the help of migrant labourers.
- In India tea, coffee, rubber, sugar cane and banana are important plantation crops.

18. **Describe the various technological and institutional reforms, which led to Green and White revolutions in India?**

Answer : Green Revolution.

- Technical inputs resulted in the green revolution in sixties and seventies of the twentieth century.
- High yielding and early maturing variety of seeds have been used.
- Instead of bio-fertilizers, chemical fertilizers are used.
- Flooding of fields are replaced by drip irrigation and the use of sprinklers.

White Revolution.

- The Dairy Development led to the white revolution or “Operation Flood”.
- The dairy co-operation in the rural areas helped in rural development.
- The National Milk Grid achieved Operation Flood.
- Cross breed from foreign and native cattle have been developed.

19. Write four geographical requirements each for the growth of tea and sugar cane.

Answer:

For geographical conditions required for the growth of tea.

The following are the geographical conditions required for the production of sugar cane.

- It is a tropical as well as sub-tropical crop.
- It needs hot and humid climate with temperature of 21°C to 27°C.
- It requires annual rainfall between 75 cm and 100 cm.
- It can grow on a variety of soil.

20. Describe any four institutional reforms introduced by the government of India in the interest of the farmers.

Answer:

The institutional reforms introduced by the government of India in the interest of farmers are as follows.

- Collectivisation and consolidation of land holdings and abolition of zamindari system.
- Provision for crop insurance against droughts, floods, cyclone, fire and diseases.
- Establishment of grameen banks and cooperative societies to give loans to the farmers at low rate of interest.
- Announcement of minimum support price, remunerative and procurement prices for important crops to check exploitation of farmers by speculators and middlemen.
- Introduction of schemes like Kissan Credit Card (KCC) and Personal Accident Insurance Scheme (PAIS) for the benefit of the farmers. (any four)

21. Why is the growth rate in agriculture decelerating? How did the Government of India make efforts to modernise agriculture? Explain.

Answer:

The growth rate in agriculture is decelerating due to the following reasons.

- Reduction in public investment in agriculture especially for irrigation, power, rural roads, etc.
- Subsidy on fertilisers has decreased leading to increase in the cost of production.
- Reduction in import of agricultural goods
- Lack of employment in agriculture
- Erratic nature of monsoon rainfall

To modernise agriculture the Government of India has taken concerted efforts like the following.

- Setting up of Indian Council of Agricultural Research.
- Setting up of agricultural universities, veterinary services and animal breeding centres.
- Horticulture development
- Research and development in the field of meteorology and weather forecast
- Improvement of rural infrastructure

