CHAPTER-IV

AGRICULTURE

2 MARK QUESTIONS

1. What is agriculture

ANSWER:

The art and science of cultivating soil, raising crops and rearing livestock including animal husbandry and forestry.

2. What is primitive subsistence farming?

ANSWER:

It is a type of agriculture / farming which is practised on small patches of land with the help of primitive tools like hoe, doa, digging sticks and family / community labour.

3. What is slash and bum agriculture

ANSWER:

Under slash and bum agriculture, farmers clear a patch of land and produce cereals and other food crops to sustain their family.

4. What is the period of kharif crop?

ANSWER:

Kharif season starts with the onset of the monsoon i.e., June-July and continues till the beginning of winter i.e., October-November. For example, rice, millets etc.

5.Mention any two important factors responsible for the success of rabi crops.

ANSWER:

- (i) Availability of precipitation during winter months due to the western temperate cyclone.
- (ii) The success of Green Revolution in Punjab, Haryana and Western Uttar Pradesh.

6. Why pulses are grown as rotation crop? Give two reasons.

ANSWER:

- (i) Pulses are grown as a rotation crop because these have the capacity to fix atmospheric nitrogen in the soil into nitrogenous compound. These help to maintain or restore soil fertility.
- (ii) These need less moisture and survive even in dry conditions.

7. What is package technology What was its result

ANSWER:

Under package technology combination or package of many improved methods of cultivation are adopted simultaneously in order to increase agricultural production. This leads to 'Green Revolution'.

8. What is dry land farming?

ANSWER:

It is a type of farming which is practised in scanty rainfall areas and where irrigation facilities are inadequate, e.g., cultivation of jowar and bajra.

4 MARK QUESTIONS

- 1. Define the following terms:
- (i) Agriculture
- (ii) Kharif Crop
- (iii) Zaid Crop

ANSWER:

- (i) Agriculture: The art and science'4 of cultivating soil, raising crops and rearing livestock including animal husbandry and forestry.
- (ii) Kharif Crop: The Kharif season starts with the onset of the monsoon, i.e., June-July and continues till the beginning of winter, i.e, October-November.
- (iii) Zaid Crop: These are crops which are sown between the rabi and kharif crops. Watermelon, muskmelon, cucumber and vegetables are some examples of the zaid crops.

2. Mention any three features of slash, and burn agriculture.

ANSWER:

- (i) Farmers clear a patch of land and produce cereals and other food crops to sustain their family.
- (ii) When the soil fertility decreases, the farmers shift and clear a fresh patch of land for cultivation.
- (ii) India has tropical climate with ample sunshine. So, we have a long growing season.

3. Diversification of agriculture can be helpful for the Indian farmers. Explain.

ANSWER:

- (i) Most of the traditional crops like wheat and rice have very low market value as compare to fruits, medicinal herbs, flowers etc.
- (ii) India's diverse climate can be harnessed to grow a wide range of high value crops.

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(iii) This type of shifting allows nature to replenish the fertility of the soil through natural processes; land productivity in this type of agriculture is low as the farmer does not use fertilisers or other modem inputs.

4. What is commercial farming Mention its major features.

ANSWER:

Commercial farming is a type of farming under which farmers grow crops to sell in the market. Features:-

- (i) Farmers use higher doses of modern inputs, e.g., high yielding variety (HYV) seeds, chemical fertilisers, insecticides etc.
- (ii) The per hectare productivity is very high.
- (iii) Rice, sugarcane, tea, coffee are the major crops which are grown under this.
- 5. (i) What is a plantation agriculture
- (ii) Mention any four plantation crops produced in India.
- (iii) Mention any two factors which play an important role in the development of plantations.

ANSWER:

- (i) Plantation agriculture is a type of commercial farming under which a single crop is grown on a large area.
- (ii) Tea, coffee, rubber and sugarcane.
- (iii) (a) Developed network of transport and communication connecting the plantation areas.
- (b) Developed market.

6. Name the cropping seasons of India with one crop of each season.

ANSWER:

- (i) Rabi Wheat
- (ii) Kharif Rice
- (iii) Zaid Watermelon

7. (i) What are rabi crops' Give four examples.

ANSWER:

- (i) The crops which are grown in winter from October to December and harvested in summer from April to June are known as rabi crop. * Examples: Wheat, Barley, Peas and Gram, (ii) (a) Availability of precipitation during the winter months due to the western temperate cyclone.
- (b) The success of Green Revolution in Punjab, Haryana and Western Uttar Pradesh.
- 8. With reference to kharif crop, answer the following questions:
- (i) When are kharif crops sown
- (ii) Name any four states which are the main producers of kharif crops.
- (iii) Name some kharif crops.

ANSWER:

- (i) These are sown with the onset of monsoon.
- (ii) (a) Assam
- (b) West Bengal
- (c) Andhra Pradesh
- (d) Tamil Nadu
- (iii) Rice, millet, maize, groundnut, jute and cotton.

7 MARK QUESTIONS

1.Explain any two geographical conditions required for the cultivation of pulses. Name any two important pulses producing states.

ANSWER:

Geographical conditions required for the cultivation of pulses:

- (i) Pulses need less moisture and survive even in dry conditions.
- (ii) Temperature is required from 25°C to 30°C.
- (iii) Pulses grow well in the areas of 50-75 cm rainfall.
- (iv) These can be grown on all types of soil but dry light soil is the best suited.
- (v) Pulses are leguminous crops which help in restoring soil fertility by fixing nitrogen from the air. Thus, pulses are mostly grown in rotation with other crops.

Major pulses producing states are : Madhya Pradesh Rajasthan Maharashtra Karnataka.

2.Describe any four characteristics of plantation agriculture?

ANSWER:

This is a type of agriculture which involves growing and processing of a single cash crop purely meant for sale. Rubber, tea, coffee, spices, coconut and fruits are some of the important crops which come under the category of plantation agriculture.

Features:

- (i) It is a single crop farming.
- (ii) It is a capital intensive farming, i.e., a huge amount of capital is required.
- (iii) It needs vast estates, managerial ability, technical know-how, sophisticated machinery, fertilisers, good transport facilities and a factory for processing.
- (iv) This type of agriculture has developed in areas of north-eastern India, Sub-Himalayan region, West Bengal and Nilgiri.

3. Explain the favourable geographical conditions required for the production of rice. Also mention the major rice producing states of India.

ANSWER:

- (i) Temperature: It is a kharif crop which requires high temperature, and high humidity. This means monthly temperature of about 25°C with minor variation during the sowing, growing and harvesting season, is suitable for the growth of the plant.
- (ii) Rainfall: Rice needs abundant rainfall, i.e., more than 100 cm. It can grow in areas with less rainfall, but with assured irrigation. Rice is grown in Punjab and Haryana with the help of irrigation.
- (iii) Soil: Rice can grow in a variety of soils including silts, loams and gravels, but it is grown best in alluvial soil with a sub-soil of impervious clay. Areas of production: Rice is cultivated in almost all the states of India, but most of its cultivation is concentrated in the river valleys, deltas of rivers and the coastal plains.

The main rice producing states are West Bengal, Andhra Pradesh, Uttar Pradesh, Bihar, Punjab, Odisha, Karnataka, Assam and Maharashtra.

4. What type of climate is required for the cultivation of wheat Name any four important wheat producing states of India.

ANSWER:

- (i) Temperature: Cool and moist weather during growth, and warm and dry climate during ripening is needed.
- (ii) Rainfall: 50-75 cm rainfall is required. Rainfall is necessary and beneficial, 15 days after sowing, and 15 days before ripening. A few light winter showers or assured irrigation ensures a bumper harvest.
- (iii) Soil: Light domat (loamy) soil is required. It can also be grown in black soil. Important producers: Punjab, Haryana, western Uttar Pradesh and Madhya Pradesh are the main producers of wheat.

5 What geographical conditions are required for the cultivation of sugarcane Name two largest producing states of sugarcane.

ANSWER:

- (i) Temperature: Sugarcane needs hot and humid climate with temperature ranging between 21°C to 27°C. Very high temperature is harmful for its growth, while low temperature slows its growth. It cannot withstand frost. Cool temperature is needed at the time of ripening.

 (ii) Rainfall: It grows best in areas receiving 75 cm to 100 cm of rainfall.
- (iii) Soil: Sugarcane grows on well-drained fertile soil. It can grow on a variety of soils including black, alluvial, loamy and reddish loam.

Sugarcane:

But the best soil is the alluvial soil of the Ganga Plain and the black soil of southern India. Sugarcane exhausts the fertility of the soil. Hence, the use of manure is essential to ensure high yields.

Areas of Production:

Uttar Pradesh is the largest producer of sugarcane. The other states in the Ganga-Plain are Bihar, Punjab and Haryana.

6.Describe any four 'geographical conditions required for the growth of tea. Mention the two major tea producing states of South India.

ANSWER:

Tea is the most important beverage crop of India.

Climatic conditions:

(i) Temperature: The tea plant grows well in tropical and sub tropical climate. Tea bushes require warm and moist, frost-free climate all through

Too heavy rainfall results in low sugar content.

- the year. Tea bushes need temperature of more than 25°C. (ii) Rainfall: Tea plant needs heavy rainfall ranging between 150 cm to 250 cm. The rainfall should be well distributed throughout the year.
- (iii) Soil: The plant requires a light loamy soil. The soil should be rich in humus and iron content. Tea is a soil exhausting crop, so frequent use of chemical fertilisers and manure is essential.

Producers:

Major tea-producing states are Assam, West Bengal, (Hills of Darjeeling and Jalpaiguri Districts), Tamil Nadu and Kerala. Apart from these, Himachal Pradesh, Uttarakhand, Meghalaya, Andhra Pradesh and Tripura are also tea producing states in the country.

7. Explain the favourable climatic conditions required for the production of rubber. Also mention the states producing rubber.

ANSWER:

- (i) Temperature: It is a tree of the tropical forests, and requires a constant high temperature above 25°C. Thus, the rubber tree cannot be grown at high altitudes.
- (ii) Rainfall: It needs heavy and well distributed rainfall throughout the year. The plant needs rainfall more than 200 cm.
- (iii) Soil: The plant requires alluvial or laterite soil. Areas of Production: India ranks fifth among the world's natural rubber producers. The state of Kerala is the largest producer of rubber in India. Kerala accounts for about 91% of the total area under rubber plantation. Tamil Nadu, Karnataka and The Andaman and Nicobar islands including the Garo Hills of the Himalayas are the other producers.
- 8. Explain the climatic conditions required for the production of cotton. Also mention the major cotton producing states of India.

ANSWER:

- (i) Temperature: Cotton needs a warm climate. Summer temperatures of 21°C to 27°C, and abundant sunshine is necessary during the growth of the plant. A long growing period of atleast 210 frostfree days is also necessary for the plant to mature.
- (ii) Rainfall: Moderate to light rainfall is adequate for cotton cultivation. Rainfall ranging between 50 cm to 80 cm is adequate. The crop can be successfully grown in areas of low rainfall with the help of irrigation. (iii) Soil: Cotton can be grown on a variety of soils but the black cotton soil of the Deccan Plateau which has the ability to retain moisture is most

suitable. It also grows well in alluvial soils of the Satluj-Ganga Plain.

Areas of Production:

The leading cotton producing states are Gujarat, Maharashtra, Andhra Pradesh, Punjab, Haryana, Karnataka, Tamil Nadu and Madhya Pradesh. Punjab and Haryana grow the long staple variety.

9. Differentiate between the commercial agriculture and the subsistence agriculture.

ANSWER:

Subsistence farming:

- (i) Farming practices in which the entire crops are consumed by the farmers and their family. They do not have any surplus to sell in the market.
- (ii) Farms are small and fragmented.
- (iii) food crops are cultivated mostly are cereals like rice and wheat along with oil seeds, vegetables and sugarcane.
- (iv) Old tools and implements are used by the farmers. There is a total absence of modern equipments like tractors and farm inputs like chemical fertilizers, insecticides and pesticides.
- (v) Depends on monsoon and there is greater use of manpower.

Commercial farming:

- (i) In this Farming practice most of the goods produced are mainly sold in the market for earning money.
- (ii) Landholdings are large and cash crops are cultivated to earn money from them.
- (iii) Major commercial crops grown in different parts of India are cotton, jute, sugarcane groundnut.
- (iv) In this type of farming, farmers use inputs like irrigation, chemical fertilizers, insecticides, pesticides and high yielding varieties of seeds better.
- (v) By the use of modern equipments like tractors e.tc .less manpower is used .

10. Name any four oilseeds produced in India. What is their economic importance

ANSWER:

Main oilseeds produced in India are:

- (i) Groundnut (ii) Mustard
- (iii) Coconut (iv) Sesamum

Economic importance of oilseeds:

- (i) Most of these are edible, and used as a cooking medium in the form of oil.
- (ii) Extracted oil is also used as raw material for manufacturing large number of items like paints, varnishes, hydrogenated oil, soaps, perfumes, lubricants, etc.
- (iii) Oil cake which is the by product, obtained after the extraction of oil from oilseeds is an excellent cattle feed.
- (iv) Oil cake is also used as a fertilisers.

MULTIPLE CHOICE QUESTIONS

1) In India, Jhumming, a primitive form of cultivation, is called 'Bewar' or 'Dahiya' in
a) Odisha
b) Chhattisgarh
c) Andhra Pradesh
d) Madhya Pradesh
Answer: Option (d)
2) Rabi crops are sown in winter from October to December and harvested in summer from April to
a) August
b) June
c) May
d) July
Answer: Option (b)
3) The Green Revolution was successful in Punjab, Haryana, and parts of Rajasthan.
a) Western Uttar Pradesh
b) Eastern Uttar Pradesh
c) Madhya Pradesh
d) Gujarat
Answer: Option (a)
4) Kharif crops are grown with the onset of monsoon in different parts of the country, and these are harvested in

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a) July-August
b) June-August
c) September-October
d) October-November
Answer: Option (c)
5) In states like Assam, and Odisha, three crops of paddy are grown in a year. These are Aus, Aman and Boro.
a) Uttar Pradesh
b) West Bengal
c) Punjab
d) Haryana
Answer: Option (b)
6) India is the second-largest producer of rice in the world after
a) Indonesia
b) Japan
c) Malaysia
d) China
Answer: Option (d)

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Answer: Option (c)

7) Rice is a Kharif crop that requires high temperature (above 25°C) and high humidity with annual rainfall above			
a) 100 cm			
b) 200 cm			
c) 150 cm			
d) 50 cm			
Answer: Option (a)			
8) Wheat requires growing season.	_ of annual rainfall evenly distributed over the		
a) 25 to 50 cm			
a) 25 to 50 cm b) 75 to 100 cm			

FILL IN THE BLANKS

- 1. **Jowar** is the third most important food crop with respect to area and production.
- 2. **India** is the largest producer as well as the consumer of pulses in the world.
- 3.Bajra grows well on sandy soils and shallow **Black soil.**
- 4. **Brazil** is the world's largest producer of sugarcane.
- 5.Jalpaiguri in **West Bengal** is a major tea-producing district in India.

SUMMARY

Agriculture is the art and science of cultivating the soil, growing crops, and raising livestock. It includes the preparation of plant and animal products for people to use and their distribution to markets. Agriculture provides most of the world's food and fabrics.