Agriculture and Crop Production

A. Choose the correct answer:

1. What is the primary purpose of crop rotation in agriculture?

a) To increase pesticide use
b) To maintain soil fertility
c) To reduce irrigation needs
d) To harvest crops faster

2. Which of the following is a Kharif crop in India?

a) Wheat
b) Mustard
c) Paddy (Rice)
d) Gram

3. Which nutrient is most important for plant growth and is commonly found in fertilizers?

a) Calcium
b) Potassium
c) Sodium
d) Sulphur

B. Fill in the Blanks:

1. The process of loosening and turning the soil before sowing seeds is called _____.
2. Crops that are sown in the winter season and harvested in spring are known as _____ crops.
3. The traditional tool used for ploughing fields is called a _____.

C. Case Study:

Ravi is a farmer in Punjab who grows both wheat and rice. He noticed a decline in his wheat yield over the years. He consulted an agricultural expert who recommended practices like crop rotation, proper irrigation, and the use of bio-fertilizers. Ravi followed the advice and observed an improvement in the yield after one season.

Case Study Questions:

1. What was the major issue faced by Ravi in his farming?
2. How did the expert's suggestions help improve crop yield?
3. Why is the practice of crop rotation important in agriculture?
4. What role do bio-fertilizers play in improving soil health and productivity?

D. Short Answer Questions:

1. What is the difference between Kharif and Rabi crops?
2. Why is irrigation essential for agriculture?
3. What is the significance of using fertilizers and manure in farming?

E. Long Answer Questions:

1. Explain the various steps involved in crop production from preparation of soil to storage.
2. Describe the methods of irrigation used in modern agriculture and their advantages.
3. Discuss the harmful effects of excessive use of chemical fertilizers and suggest eco-friendly alternatives.