Improvements in Food Resources: Exercise Questions

Q.1 Explain any one method of crop production which ensures high yield.

Sol. Breeding of plants is one of the methods of crop production that ensures high yield. It is implemented to improve the varieties and production of crops. In this process, plants from various places or areas are picked up with preferred good traits and then the process of cross-breeding is done and obtained the good qualities seeds for better yield.

Q.2 Why are manures and fertilizers used in fields?

Sol. Manures and fertilizers are used in fields to enrich the soil with organic matter and required nutrients. Manure improves the fertility and structure of the soil. While, fertilizers ensure a healthy growth and development in plants. They are a very good source of nitrogen, phosphorus, and potassium. To get better yield, the balanced combination of manures and fertilizers is used in the soil. They also protect the plants from diseases.

Q.3 What are the advantages of inter-cropping and crop rotation?

Sol. Inter-cropping and crop rotation both help in increase the yield of crops. The advantages of inter-cropping and crop rotation:

Inter-cropping: It prevents pests and diseases to spread throughout the field. It increases soil fertility and also decreases the chance of soil erosion.

Whereas

Crop rotation: It prevents soil depletion, increases soil fertility, and reduces soil erosion. Farmers can also grow two or more crop in the same field annually.

Q.4 What is genetic manipulation? How is it useful in agricultural practices?

Sol. Genetic manipulation is a process in which the gene for a particular character is transferred inside the chromosome of a cell. When this process happens in a plant cell, a transgenic plant is produced. These transgenic plants show characters governed by the newly introduced gene. For example, we assume that there is a wild plant that produces small fruits. If the gene responsible for larger fruit size, we will introduce it to this plant. This plant will start producing larger fruits.

Similarly, genes for higher yield, high resistance for diseases, etc. can be introduced in any desired plant. Thus, gene manipulation is very important in agricultural practices to improve crop variety, quality, and yield of crops.

Q.5 How do storage grain losses occur?

Sol: The Biotic and abiotic factors are responsible for loss of grains during storage. These are:

1. **Abiotic factors**: Moisture (present in food grains), humidity (of air) and temperature, flood and wind etc.
2. **Biotic factors**: Insects, Rodents, Birds, pesticides, Mites and bacteria etc.

Q.6 How do good animal husbandry practices benefit farmers?

Sol. Good animal husbandry practices benefit farmers:

1. It yields in good quality cattle for agricultural purpose.
2. It increases the yield of milk, eggs and meat.
3. Provides skin of dead cattle for leather and wood industry.

In this way, animal husbandry practices help the farmers to increase their economic condition.

Q.7 What are the benefits of cattle farming?

Sol. Benefits of cattle farming are:

(i) Good quality and large quantity production of milk and meat.

(ii) Cattles are used for agricultural work.

(iii) Provides skin of dead cattle for leather and wood industry.

Q.8 For increasing production, what is common in poultry, fisheries and bee-keeping?

Sol. The common factor for increasing production in poultry, fisheries, and bee keeping is the proper management techniques that we need to be followed. Regular cleaning of farms, maintenance of temperature, prevention and cure of diseases etc. are the very important management techniques to increase the production.

Q.9 How do you differentiate between capture fishing, mariculture and aquaculture?

Sol. **Capture fishing**: It is the method of capturing fishes from natural resources like pond, seawater etc.

Mariculture: It is the culture of marine fishes like-prawns, oyster and bhetki etc. in marine water for commercial use.

Aquaculture: It is the production of aquatic animals in marine and fresh water for high economic value. Aquatic animals such as prawns, lobsters, fishes, crabs, etc.