# CHAPTER 15
# IMPROVEMENT IN FOOD RESOURCES
# QUESTION BANK 1

1. Name the process by which green plants make their own food.
   Ans. Photosynthesis.
2. What is crop-rotation ?
   Ans. It is growing different crops on a piece of land in a pre-planned succession.
3. Give an example of the crops grown in two-year rotation.
   Ans. Maize-potato-sugarcane-peas.
4. How are diseases in plants caused ?
   Ans. Diseases in plants are caused by pathogens such as bacteria, fungi and viruses.
5. Name the biotic factors responsible for storage losses in agricultural produce.
   Ans. Insects, rodents, fungi, mites and bacteria.
6. What is Organic farming ?
   Ans. It is a farming system with minimal use of chemicals and maximum input of organic manures, recycled farm wastes, and bioagents with healthy cropping systems.
7. What do you understand by the term photoperiod?
   Ans. It is daily duration of light hours, which also affects plants' growth along with climatic conditions, temperature etc. It is the duration of light required by plants for doing their normal activities.
8. Mention any two food materials which provide us carbohydrates.
   Ans. Potato and Rice.
9. Give two reasons as to why there is tremendous scope to develop fisheries in India.
   Ans. There is good scope for fisheries in India because : (a) India has 1·6 million hectares of inland water bodies. (b) Its coastline is 7500 km long.
10. Chicken A is (all chicken in reference are of same variety egg laying) exposed to very bright sunlight, chicken B is kept inside a dark building whereas chicken C is kept in a well-lit building. Which chicken will have maximum laying output ?
    Ans. Chicken C will have maximum laying output. This is because it is exposed to moderate sunlight. Moderate light intensity and duration has a favourable effect on the egg laying output of the hens.
11. Give two advantages of Holstein-Friesian over the Red Sindhi.
    Ans. Advantages of Holstein-Friesian over the Red Sindhi are : (a) Average milk production is more. (b) Lactation periods extend throughout the year.
12. The production of food from animal sources has increased in the last few decades. Justify.
    Ans. (a) Improved varieties and cross-breeds have been developed, (b) Proper health and disease control have also improved the yield.
13. Why according to you is animal husbandry essential ?

Ans. Animal husbandry is essential because of the following reasons : (1) To increase milk production, which automatically fulfils the need of the growing population. It also increases the production of various milk products like butter and cheese. (2) To increase egg and meat production, which are highly nutritious. (3) To increase fish production. (4) For the proper utilization of animals wastes.

14. Define macro nutrients and micro nutrients? Write one example of each.
Ans. Macronutrients are nutrients required in large quantity. e.g., nitrogen. Micronutrients are nutrients required in small quantity. e.g., boron.

15. Cattles are fed with roughage and concentrates. Why ? Which feed additives are added in the cattle field apart from nutrients ?
Ans. Roughage – to provide fibres. Concentrates – to provide proteins and other nutrients. Food additives – micronutrients to promote health and milk output of dairy animals.

16. Name the environmental factors related to cultivation practices and crop yield. Explain how they are related to crop yield.
Ans. (i) Weather : Climatic conditions should be favourable for the growth of crops, like duration of sunlight, temperature, rainfall etc. (ii) Soil Quality : All plants require nutrients for their growth. Soil acts as a medium. Soil should be rich in nutrients and should have a balanced pH for the growth of the crops. (iii) Availability of Water : Irrigation should be proper for the better production of crops.

17. Why should the pesticides be used judiciously ?
Ans. Pesticides are the chemicals that are used to control weeds, insects, rodents, fungi as well as diseases of plants. They include weedicides, insecticides and fungicides. Their excessive use cause environmental pollution. They reach the water resources by leaching and affect the aquatic flora and fauna. These harmful chemicals reach the bodies of birds, animals and human beings through the various food chains and are thus harmful to one and all. Hence, they should be used judiciously.

18. How are crops selected for crop rotation ?
Ans. Growing different crops on the same field or a piece of land in a pre-planned succession is called crop rotation. For crop rotation, the selection of crops depends on the : (1) Type of soil. (2) Nutrient status. (3) Availability of water through rain or irrigation. (4) Length of rainy season. (5) Duration of crop-short or long, and (6) Availability of inputs like fertilizers, pesticides, manpower etc. (any 4)

19. Enumerate the advantages of mixed farming.
Ans. Following are the main advantages of mixed farming : (1) The risk of complete crop failure is minimized due to uncertain monsoon. (2) Higher yield is obtained with better soil fertility. (3) It provides work to all the members of a family throughout the year. (4) By adopting exact combination in mixed farming, a variety of produce can be obtained to fulfil family needs.

20. Why storage of grains leads to losses ? What preventive and control measures are adopted before grains are stored for future use ?
Ans. Due to biotic factors like insects, rodents, fungi, mites, bacteria and abiotic factors like inappropriate moisture and temperature in the place of storage, there

is degradation in quality, loss in weight, poor germinability, discolouration of produce, all leading to poor marketability. So, preventive and control measures are used before grains are stored for future use, which include strict cleansing of the produce before storage, proper drying of the produce first in sunlight and then in shade and fumigations by using chemicals that kill pests.

21. Explain the ways by which crop-production can be increased.
Ans. There are three ways : (i) Crop Variety Improvement : This approach aims at finding a crop variety that can give a good yield variety that can produce high yield under different conditions and can withstand different situations like weather changes, soil quality, water availability etc. (ii) Crop Production Management : Farmers have to look into the financial aspect of a crop. They have to think about the capital to invest on the land and the benefits they get from it. It is the financial condition that allows farmers to grow a particular crop. The purchasing capacity for inputs decides cropping system and production practices. (iii) Crop Protection Management : Field crops are infested by a large number of weeds, insect pests and diseases. If they are controlled at correct time, it will ensure increased crop production.

22. Define Animal husbandry. Why livestock production needs to be improved ?
Ans. Animal husbandry can be defined as the science of rearing, feeding, caring, breeding and utilisation of animals. Needs of improving livestock production : (i) It is required to meet the increasing demands of animal based goods like milk. meat, egg, leather etc. (ii) Animal husbandry sets guidelines for proper management and systematic approach to animal rearing. (iii)It also helps in proper utilisation of animal wastes like animal dung.

23. List any three management practices while designing a shelter for cattle.
Ans. While designing a shelter for cattle we must have a shelter that is : (a) Well ventilated, (b) Protects animals from rain, heat and cold, (c) The floor of the cattle shed needs to be sloping so as to stay dry and facilitate cleaning.

24. State two advantages of composite fish culture. What is the application of hormonal stimulation in fish culture ?
Ans. Advantages of composite fish culture : (i) It helps to get a variety in fish yield. (ii) Food in the pond gets evenly used up due to different varieties of fish having different food habits present in a pond. (iii) Fish do not compete for food as all type of fish get their kind of food. (any two) Hormonal stimulation ensures the supply of pure fish seed in desired quantities.

25. ..(a) Name one indigenous and one exotic breed of domestic fowl. (b) What are the two main products obtained from raising domestic fowl ? (c) Name two vitamins that should be included in high amount in poultry feed.
Ans. (a) Indigenous breed — Aseel, Exotic breed — Leghorn. (b) Egg, chicken meat, (c) Vitamin A, Vitamin K. ½ × 6

26. ..(a) State two characteristics of an ideal cattle shed. (b) Cattles are mainly reared for milk or performing agricultural tasks. What are these two categories of cattle known as ? (c) Name two indigenous breeds of cattle.

Ans. (a) Two characteristics of an ideal cattle shed are : well roofed/well ventilated/sloppy floor (any two) (b) Milch animals, draught animals. (c) Red Sindhi, Sahiwal