

## IV. Long Answers Type Questions

Question 1. What are the various methods of irrigation in India? Answer: Most of agriculture in India is rain-fed, several different kinds of irrigation system are adopted to supply water to agricultural lands. The resources are- wells, canals, rivers and tanks.

- Wells: Dug wells and tube wells. In dug wells water is collected from water— bearing strata.
- Tubewells: Can tap water from deeper strata.
- Canals: Most extensive irrigation system. Canals receive water from reservoirs or rivers. The main canal is divided into branch canals having further distributaries to irrigate fields.
- River lift system: Water is directly drawn from the river for supplementing irrigation in areas close to rivers.
- Tanks: These are small storage reservoirs, which intercept and store the run-off of smaller catchment areas.

Question 2. Large amount of food grains get spoiled every year in India due to improper storage of food grains. How can this be avoided?

Answer: Food grains get spoiled by insects, fungi, rodents, bacteria, moisture, temperature in the place of storage.

Storage losses can be minimised by following preventive and control measures.

- 1. The seeds/grains that are to be stored should be dry, with no moisture in it.
- 2. The grains should be cleaned.
- 3. The grains should be fumigated using chemicals that kills pest.
- 4. The storage houses should be water proof.
- 5. The grains should be stored in sealed gunny bags or metal containers
- 6. The bags should be stacked in order i.e. in pile for proper fumigation, and should be kept few centimetres away from the wall.
- 7. The ventilators if any should be closed tightly, to avoid birds visiting the storage house and destroying the grains.
- 8. The walls and the floor should be water-proof with no holes in it, to avoid rodents, pests.

Question 3. Explain different types of fisheries.

Answer: The different types of fisheries are marine fisheries, inland fisheries, capture fishing, mariculture and aquaculture.

- Marine fisheries: Marine fishes are caught using fishing nets.
  Large schools of fishes is located by satellites. Some are farmed in sea water.
- Mariculture: Marine fishes are cultured in seawater this culture of fisheries is called mariculture.
- Inland fisheries: The fisheries done in fresh water resources like canals, ponds, reservoirs and rivers is called inland fisheries.
- Capture fishing: It is done in sea-water, estuaries and lagoons.
- Aquaculture: Culture of fish done in different water bodies is called aquaculture.

Question 4. What are the practices used for dairy industry? Answer: The practices required for raising daily animals to get the optimum yield are:

- (i) Shelter, (ii) feeding, (iii) rearing of animals, (iv) breeding.
- (i) Shelter: The shelter should be clean, spacious and airy.
- (ii) Feeding: Proper food is essential for dairy animals, two types of food are roughage and concentrates. Proper feed at proper time is required for dairy animals.
- (iii) Rearing of animals: Providing them proper health care and protection from pathogens, diseases and proper vaccination.
- (iv) Breeding: The crossing of different variety of milch animals to obtain a breed that can produce more yield of milk.

## V. Value-based Ouestions

Question 1. A group of Eco Club students made a compost pit in the school, they collected all bio-degradable waste from the school canteen and used it to prepare the compost.

- (a) Name two waste that can be used for the compost and two wastes obtained from canteen which cannot be used for the compost making?
- (b) What is the other important component required for making the compost?
- (c) What values of Eco Club students are reflected in this act? Answer:
- (a) Two waste used for compost are vegetable peels and fruit peels. Two waste material that cannot be used as compost are polythene bags and plastic items.
- (b) Bacteria and fungi present in soil are the other important component for making compost.
- (c) Eco Club students reflect the value of group work, responsible citizens.

Question 2. Surject read an article in the newspaper that prolonged and excess use of pesticides and fertilizers leads to cancer in human beings. He also saw the increased number of cancer patients in his town. He started educating the farmers in his town to minimize or stop the use of chemicals in farming and adopt the organic farming.

- (a) What is the most common pesticide used in our country?
- (b) Give one difference in organic farming and chemical farming.
- (c) What value of Surject is seen in the above act? Answer:
- (a) The common pesticide is DDT.
- (b) Organic farming: It is a farming system with minimal or no use of chemicals as fertilizers, herbicides, pesticides etc.

Chemical farming: Generally, chemicals are used as fertilizers, herbicides, pesticides etc. to increase crop yield.

(c) Surject showed the value of responsible person, leadership quality, initiative taker and a concerned citizen

Question 3. Large number of Bhetki fish died and got crushed in the turbines of hydroelectric power stations while they migrated from river to sea. The environmentalist gave power plant the solution to this problem. Now all Bhetki fish is removed with the help of special technique and hence do not enter the turbines to crush and die.

- (a) What is pisciculture?
- (b) Suggest two different varieties of fish.
- (c) What value of environmentalist is reflected in the above case? Answer:
- (a) The rearing of fish on large scale is called pisciculture.
- (b) Two varieties of fish are bony and cartilaginous.
- (c) Environmentalist showed the value of concerned and caring individuals.

Question 4. A group of gardening club students prepared a kitchen garden in the school campus and did organic farming to grow the

vegetables. Then the students presented their group work in the assembly to spread the awareness and make students understand the importance of organic products.

- (a) What is horticulture?
- (b) What is green manure?
- (c) State the values of gardening club students.

Answer:

- (a) Production of vegetables and fruits commercially is called horticulture.
- (b) The green plants like guar or sun hemp are turned into the soil which enriches the soil with nitrogen and phosphorus and is called green manure.
- (c) Values of gardening club students are aware individuals and responsible behaviour.

