Short Answer Type Questions – I

[2 Marks]

Q. 1. Can increasing grain production alone solve the problem of malnutrition and hunger?

Ans. No, increasing grain production only for storage in warehouses cannot solve the problem of malnutrition and hunger. Food security depends both on availability of food and access to it. As the majority of our population depends on agriculture for their livelihood, increasing the incomes of people working in agriculture thus becomes necessary to combat the problem of hunger.

Q. 2. In agricultural practices, higher input gives higher yield. Discuss how?

Ans. Higher input means good financial conditions of the farmers so that they can employ good and improved farming technologies. Thus these would give higher yields.

Q.3. What happens due to deficiency of nutrients?

Ans. Nutrients are required by the plants for maintaining their health and every living process occurring in their bodies. Deficiency of nutrients affects the various physiological processes in plants like reproduction, growth, susceptibility to diseases, etc. and can ultimately lead to the death of plant.

Q. 4. How is culture of Pomphret and Mackeral different from that of Catla and Rohu?

Ans. Pomphret and Mackeral are marine fishes cultured in sea water called mariculture. Whereas Catla and Rohu are freshwater fishes grown in inland fisheries like ponds, canals, reservoirs and rivers called composite fish culture.

Q. 5. How is the use of manure beneficial for our environment?

Ans. Manure is beneficial because they help in:

(a) protecting the damage of environment from chemicals such as pesticides and fertilisers.

(b) recycling the biological wastes, i.e., animal excreta and plant wastes, thus preventing the accumulation of these things

Q. 6. What is green manure?

Ans. Some plants like sun hemp or guar are grown in the field prior to the sowing of the crop seeds. These are then mulched by ploughing them into the soil. These green plants gradually decompose and turn into green manure which helps in enriching the soil in nitrogen and phosphorus.

Q. 7. Name the two types of fish that come under fish production.

Ans. The two types of fish are:

(a) True fin fishes, i.e., fishes that have fins like carps, catla, mrigal, etc.

(b) Shellfishes like prawns, mollusks, echinoderms, etc.

Q. 8. What is honey?

Ans. Honey is a dense sweet liquid that contains 20-40 per cent sugar, 60-80 per cent moisture, 0.22-0.3 per cent minerals and 0.2-0.5 per cent vitamins. Apart from that, it also contains certain enzymes and pollen. Uses of honey are as follows:

(a) Honey has medicinal value specially in disorders that are related to digestion and liver ailments.

(b) As it contains iron and calcium, it also helps in the growth of the body.

(c) It is used as a source of sugar in various confectionery items.

Q. 9. Name two types of animal feed and write their functions.

Ans. The two types of animal feed are:

(i) Roughage: These are rich in fibre; e.g., cowpea, berseem, etc.

(ii) Concentrates: These are nutrient-rich and low on fibres; e.g., oats, maize, etc.

Q. 10. What is a GM crop? Name any one such crop which is grown in India.

Ans. Crop which has been developed by introducing a new gene from a different source, to obtain the desired character, is called genetically modified (GM) crop. For example, Bt cotton which is made insect-resistant by introducing a new gene from a bacteria.

Q. 11. Why is organic matter important for crop production?

Ans. Organic matter is important for crop production because:

(a) It helps in improving soil structure.

(b) It helps in increasing water holding capacity of sandy soil.

(c) In clayey soil, large quantities of organic matter helps in drainage and in avoiding waterlogging.

Q. 12. Write the modes by which insects affect the crop yield.

Ans. Insects have a damaging effect on the crop yield. Some insects cut the plant parts inhibiting their growth while others suck the cell sap so bees cannot help in pollination. Some insects are even seen as the bore which damage the entire crop yield.

Q. 13. Why is excess use of fertilisers detrimental for the environment?

Ans. Fertilisers are inorganic chemicals which are not easily degraded. Excess use of fertilisers causes environmental pollution as their residual and unused amounts will become pollutants for air, water and soil.

Q. 14. Differentiate between compost and vermicompost.

Ans. Compost: It is prepared by the process in which farm waste materials like livestock
excreta, vegetable wastes, animal refuse, domestic waste, straw, eradicated weeds are decomposed and used as manure.

Vermicompost: It is the compost prepared from organic matter using earthworms which hasten the process of decomposition.

Q. 15. An Italian bee variety *A. mellifera* has been introduced in India for honey production. write about its merits over other varieties.

Ans. Merits of Italian bee variety *A. mellifera* are:

(a) It stings less.

(b) It has high honey collection capacity.

(c) It stays in the given beehive for longer periods and breeds very well.