

Part 2

Human Food and Food Production

21) Why is irrigation needed for cultivation?

Ans - Irrigation is needed for cultivation because:-

- i) It helps in the germination of seeds and growth of plants.
- ii) It also helps in the transportation of foods, nutrients and other substances in plants.

2) Name the modern methods of irrigation. Define with example.

Ans - The modern methods of irrigation are:-

- i) Sprinkler Irrigation:- To control misuse of water during irrigation water is sprinkled on the crop - plants in the agricultural field like a fountain.

~~Examples~~

ii) Drip is the most drop by of a 4

23) Which fertilizer is better than

Ans - Biofertilizer

fertilizer

i) Biofertilizer pollutes such

ii) Biofertilizer crop

oil seed

iii) It increases

24) What is

Ans - Green

ii) Drip irrigation:- Water is supplied near the roots of the crop plant in drop by drop manure with the help of a pipe.

23) Which fertilizers are living? Why they are better than chemical fertilizers?

Ans- Biofertilizers are living.

They are better than chemical fertilizers because:-

- i) Biofertilizers are renewable and non-pollutant sources of plant nutrients such as nitrogen.
- ii) Biofertilizers are used for the specific crop plants such as pulses, legumes, oil seeds, rice etc.
- iii) It also make the soil porous and increase the fertility of soil.

24) What is green manure?

Ans- Green manure is the practice of ploughing

nodules ~~leaving~~ bearing green leguminous plant into the soil for improving the fertility. It is done mainly to increase soil nitrogen (N).

25) What are the different agents that affect the production of crops?

Ans- The different agents that affect the production of crops are weeds, pests or disease causing micro-organisms.

26) What are weeds? Why they are harmful for the crops?

Ans- Many unwanted plants which grow along with cultivated crops are known as weeds.

Weeds compete with the crop plants for water, minerals, light and space.

Thus their growth in crop field is very harmful for cultivated plants. They hamper the production as well as the

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quality of crop. Weeds also harbour pests and spread crop pests and crop diseases. Weeds also create problem in harvesting the crop. It is therefore, essential to remove these weeds from time to time.

27) What is weeding? How it is done?

Ans- The process of removing the weeds from crop field is called weeding.

It is done by spraying some chemicals on weeds to destroy (kill) them. It can also be done manually by hand.

28) Discuss the different methods of controlling the weeds.

Ans- The different methods of controlling weeds are :-

i) Mechanical method: The farmers remove the weeds by hand (uprooted). Sometimes they cut the weeds very near to the crop fields and in between the rows

Jay Khurpi or harrow hand hoeing.

ii) Chemical methods :- Some times some chemicals are sprayed on weeds to destroy (kill) them. These are called weedicides or herbicides.

iii) Biological control of weeds involves the deliberate use of insects or some other organisms which consume and specifically destroy the weed plants but not damage the crop.

29) Give examples of weeds and weedicides.

Ans Examples of weeds are Parthenium, Chenopodium, wild oat, etc.
Examples of weedicides are Dalapon, Picloram, etc.

30) Name the insect that affects the stem and roots of the plant.

Ans (Majra - Poka (Majra Poka - Tryporyza)



Affects the stem and roots of the plant.

31) Name two fungal diseases of plants and their causal organism.

Ans - The two fungal diseases are:-

i) Late-blight disease of potato is caused by *Phytophthora Infestans*.

ii) Rust diseases in wheat is caused by *Puccinia Graminis*.

32) How the pesticides are applied in the agricultural fields?

Ans - Pesticides (chemical mix with water or oil) are applied in the agricultural field by hand operating machines or by power sprayers.

33) Name some common pesticides used in the agricultural field.

Ans - Some common pesticides used in agricultural



field are DDT (Dichlorodiphenyl trichloroethane),
BHC (Benzene hexachloride or gammexane),
~~and~~ malathion, zinc sulphide etc.

34) State any 5 harmful affects of chemical pesticides.

Ans- 5 harmful affects of chemical pesticides are:-

- i) Most pesticides are not biodegradable (not break down naturally in nature) they remain in field and atmosphere causing environmental pollution.
- ii) Not only that the crop plant absorb these and directly or indirectly passes to the animals including human being and accumulate inside the tissue and causing ill-effect (diseases).
- iii) The pests can develop resistance against a specific chemical (pesticide). Therefore, next use of that particular pesticides are less effective.
- iv) Pesticides can damage the number of group representative of food to chain



v) Chemicals sometimes kill the beneficial beneficial microorganisms of soil and other animals of nature.

35) Give one example of biological control of pest.

Ans- One example of biological control of pest is some ant like insects (Hymenopteran - Parasitoids insects) are used to kill 'Aphids' one of the harmful pests of crop.

36) Define the terms —
Harvesting, threshing, winnowing

Ans- Harvesting - Harvesting is the process of cutting the crop after maturation of food grains.

Threshing - Threshing is a process where the edible part of the grain crops (such as paddy, wheat etc.) are separated from the crop plants.

Winnowing : Small farmers who have small cultivated land usually use this process. Usually they take grains already been separated by threshing and drop it into ground from certain height in a wind blowing area. The chaffs fly away as they are light and grains fall in the ground.

37) What is the importance of storage of crop?

Ans. Storage of crops is very important task because if the crops are not stored properly using appropriate measure than it may get spoilt. It is very important to keep the crops safe and keep them in a safe storage.

38) What do you mean by dry storage and cold storage.

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Q.173- Dry or nonperishable food products such as cereals, pulses, flour, sugar, spices, nuts etc. are stored in room temperature in suitable containers or bags. This mode of storage is called 'dry storage'.

The food products such as fruits, vegetables, fish, meat, eggs, milk etc. (perishable food material) stored at low temperature. This method of storage is called 'Cold storage'.

39) What are silos?

Ans. Corrain silos are steel bodied cylindrical structure. They are constructed in such a way that provision for aeration, temperature control, protection from insects, worms, rodent, birds and other animals. They have the facilities to spray pesticides, ~~fungus~~ fumigant and for inspection.