

CHRIST KING HIGHER SECONDARY SCHOOL, KOHIMA
CLASS - 9
BIOLOGY

CHAPTER -15
IMPROVEMENT IN FOOD RESOURCES.

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1.What do we get from cereals,pulses,fruits and vegetables?

Ans:-Cereals-carbohydrates, pulses -proteins, fruits and vegetables -vitamins and minerals.

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1.How do biotic and abiotic factors affect crop production?

Ans:-Crops production can go down due to biotic factors(rodents,pests etc) and abiotic factors (temperature,humidity,moisture etc.)under different situation.

2. What are the desirable agronomic characteristics for crop improvement?

Ans:-The desirable agronomic characteristics for crop improvement are as follows:-

- (i) Tallness and profuse branching are desirable for fodder crops.
- (ii) Dwarfness is desired in cereals,so that less nutrients are consumed by these crops.

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1.What are macro nutrients and why are they called macro-nutrients?

Ans:- Essential elements like nitrogen,phosphorus,potassium,calcium,magnesium and sulphur are called macro-nutrients.They are called macro-nutrients because they are required by plants in large quantities.

2.How do plants get nutrition?

ans:-Plants get nutrients from air,soil and water.

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1.Compare the use of manure and fertiliser in maintaining soil fertility.

ans:- Manure:-

- (i) Manure enrich the soil with nutrients and helps in improving the soil structure.
- (ii) The addition of manures reduces soil erosion.

Fertilizers:-

- (i) By continuous use of fertilizers,the soil become powdery,dry and the rate of soil erosion also increases.
- (ii) The nature of soil changes into acidic and basic.

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1.Which of the following conditions will give the most benefits?Why?

ans:- Option (c) will give the most benefits because use of good quality seeds is not sufficient until they are properly irrigated,enriched with fertilizers and protected from biotic factors.

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1.Why should preventive measures and biological control methods be preferred for protecting crops?

ans:- Preventive measures and biological control methods should be preferred for protecting crops because they cause neither to crops nor to the environment.

2.What factors may be responsible for losses of grain during storage?

ans:- Factors responsible for losses of grain during storage are as follows:-

- (i) Biotic factors- insects,rodents,bacteria etc.
- (ii) Abiotic factors-moisture content and temperature.

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1.Which method is commonly used for improving cattle breeds and why?

ans:- The method commonly used for improving cattle breeds is cross breeding. This method is commonly used because cross between two good variety of cattle will produce a new improved variety.

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1 What management practices are common in dairy and poultry farming?

ans:-Management practices which are common in dairy and poultry farming are as follows:-

(i) Proper shelter. (ii) Basic hygienic conditions (iii) proper nutrition (iv) prevention and cure of diseases at right time.

2.What are the differences between broilers and layers and in their management?

ans:- Broilers are reared for meat while layers are reared for egg production. Broilers are fed with vitamin-rich supplementary feed for good growth rate and better feed efficiency. The ration for broilers is protein rich with adequate fat. Layers are fed with fibrous cheaper diet using agricultural by-products.

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1.How are fish obtained?

ans:- Fish can be obtained in two ways:-

(i) Capture fishing:-It involves obtaining fish from natural resources.

(ii) Culture fishing:-It involves fish farming. Farming can be done in both freshwater and marine ecosystem.

2.What are the advantages of composite fish culture?

ans:- The advantages of composite fish culture are:-

(i) In composite fish culture, five or six different species can be grown together in a single fish pond.

(ii) It ensures a complete utilisation of food resources in the pond.

(iii) It increases the yield of fish.

3.What are the desirable characteristics of bee varieties suitable for honey production?

ans:-The desirable characteristics of bee varieties for honey production are:-

(i) They should yield high quantity of honey.

(ii) The bee should stay in the bee hive for long duration.

(iii) They should breed well.

(iv) They should not sting much.

4.What is pasturage and how is it related to honey production?

ans:-Pasturage is the availability of flowers to the bees for nectar and pollen collection. Pasturage is related to honey production because it determines the taste of honey and the quantity of honey.

EXERCISE-(214)

1.Explain anyone method of crop production which ensures high yield.

ans:-Inter cropping is one of the methods of crop production which ensures high yield.

It is the method of growing two or more varieties of crops in the same land in a definite pattern.

Intercropping helps in preventing pests. It also helps to increase soil fertility and reduces soil erosion.

2.Why are manures and fertilizers used in fields?

ans:-Manures and fertilizers are used in fields because they increase the fertility of the soil and ensure good vegetative growth that results in high crop production.

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

ans:-Advantages of inter-cropping:

(i) It increases soil fertility.

(ii) It increases productivity per unit area.

(iii) Safe labour and time.

Advantages of crop rotation:

- (i) It prevent soil depletion and soil erosion.
- (ii) It helps in controlling weeds.
- (iii) It increases soil fertility.

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

ans:-Genetic manipulation is a process of transferring (genes) characters that are desirable from one plant to another.

It is useful in agricultural practices because genetic manipulation is useful in developing varieties which have increased yield,better quality,shorter and early maturity period,better adaptility to adverse environmental conditions and other desirable characteristics.

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

ans:-same as question number 3.

6.How rain water harvesting can be used in agricultural practices?

ans:-Rain water harvesting is the process of collecting ,storage and usage of rainwater for various purposes.Rain water harvesting has agricultural uses.It can be used for watering gardens and crop plants in agricultural fields.Rainwater harvesting can also be used to divert excess rain water from reaching agricultural lands thereby protecting crop plants from getting damaged.

7.List some disadvantages of using manures.

ans:-Some disadvantages of using manures are as follows:-

- (i) It is slow in action and takes long time to compose.
- (ii) It is not nutrient specific.
- (iii) It contains high amount of salt,which may damage roots of plants.

8.Give two examples of each type of fertilizers used in agriculture.

ans:-Organic fertilizers:-example-cow manure and organic compost.

Inorganic or chemical fertilizers:-Urea and ammonium sulphate.

9.How does storage grain losses occur?

ans:-Storage grain losses occur due to -

- (i)Biotic Factors:-insects,rodents,bacteria,fungi etc.
- (ii)Abiotic Factors:-temperature,moisture content etc.

10.How do good animal husbandry practices benefit farmers?

ans:-Animal husbandry helps in providing proper feed,proper shelter and protection against diseases to domestic animals.Animal husbandry also helps in developing high yielding breeds of various domestic animals through cross breeding.Thus ,animal husbandry increases the production of animal products such as milk,eggs,meat etc.As a result of higher production ,the income of farmers increases and helps in raising the living standard of farmers.

11.What are the benefits of cattle farming?

ans:-The benefits of cattle farming are as follows:-

- (i)Milk production is increased by high yielding milch animals.
- (ii) Animal waste can be used for enriching the soil.
- (iii)Cattle farming increases the overall income of the farmers and raise their standard of living.

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

ans:-For increasing production,the following things are common in poultry,fisheries and bee-keeping:-

- (i) Prevention and protection from diseases and pests.
- (ii) Providing nutritious food.
- (iii) Maintaining hygienic environmental conditions.

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

ans:-Capture fishing:-It is the method of fishing in which fishes are captured from natural sources like pond,sea water and estuaries.

Mariculture:- It is the culture of fish in marine water. Varieties of fishes like prawns, oysters and mullets are cultured for fishing.

Aquaculture:- It is done both in fresh water and in marine water.

14. What are draught animals? Give two examples.

ans:- Animals which are used to do labour work in farms are called draught animals.

example:-bullocks and horses.

15.Name two diseases each of the

(i) Cattle (ii) Poultry (iii) Fish

ans:- (i)Cattle foot and mouth diseases.

(ii)Poultry-fowl pot and birds flu.

(iii)Fish red pests and tail pot.

16.Milk is almost a balanced diet. Justify this statement.

ans:-Milk is rich in proteins and the protein in milk is known to have all the major amino acids required for building tissues and the repair of damaged cells in our body. Milk also contains essential nutrients like carbohydrates,fats and vitamins except iron. Thus, milk is almost a balanced diet.

17.Explain the role of workers in a bee colony.

ans:- In a bee colony,the worker bees are responsible for housekeeping, feeding the queen, drones and larvae,collecting nectar and producing honey.
