

Board – ICSE

Class- VIII

TOPIC – FOOD PRODUCTION

1. List the uses of bacteria in the food industry.

Ans. (i) In the manufacture of vinegar, butter and cheese.

(ii) The process of tanning hides in leather making and preparing sponges.

(iii) The separation of flax and hemp fibres which are used for making linen cloth and ropes.

(iv) Fermentation of green plants for the production of ensilage for animal food.

(vi) Bacteria are used for forming lactic acid, vinegar, citric acid, and vitamins.

(vii) For formation of antibiotics, serums and vaccines, vitamin B complex.

2. Mention the benefits of "Green revolution" in our country.

Ans. Green revolution: Knowledge of science has brought about manifold increase in the production of grains, pulses and other crops and led to green revolution. Factors leading to it are:

(i) development of high – yielding varieties.

(ii) development of early – maturing varieties.

(iii) disease – resistant varieties.

(iv) using of fertilizers and pesticides.

(v) development of drought – resistant and dwarf varieties.

Dr. M.S. Swaminathan is known as the father of green revolution in India which has led to manifold increase in the production of wheat and rice using hybrid varieties (wheat – Kalyan Sona and Sonalika, Rice – IR – 8 Padma, Jaya and Pusa 215, Maize – Ganga 101 and Rankit).

3. Write a brief note on the importance of microbes.

Ans. Microbes include bacteria, fungi, algae and protozoa. Bacteria is used in making curd, cheese, vinegar, antibiotics, vaccines, biogas. They also fix atmospheric nitrogen and help in recycling of nutrients in nature. Fungi is used as food (mushroom), in making alcohol, wine, beer, antibiotics, bread and recycling of nutrients. Algae is a source of iodine, food, fertilize crs, agar and constitutes the first link in the food chain. Protozoa form a link in the food chain and help in adding nutrients to the soil.

4. Which microorganisms are used in bread-making?

Ans. Fungi called yeast.

5. Name the type of microorganisms useful to us.

Ans. Bacteria, fungi (like yeast), algae and protozoa.

6. Name any one variety of edible mushrooms

Ans. White button mushroom (*Agaricus bisporous*) and paddy straw mushroom (*Volvariella*) the two varieties of edible mushrooms.

7. Put a tick mark (✓) against the correct alternative in the following statement: Which one of the following is a rabi crop:

- (i) Mustard
- (ii) Pea
- (iii) Rice
- (iv) Wheat

Ans. 4. Wheat

8. Put a tick mark (✓) against the correct alternative in the following statement: Identify the Kharif crop:

- (i) Barley
- (ii) Mustard
- (iii) Rice
- (iv) Wheat

Ans. 3. Rice

9. Differentiate between food crops and cash crops and give two examples of each.

Ans. Food crops

- (i) These are crops which are grown for food such as cereals: wheat, rice, maize, pulses, oil seeds.
- (ii) These grow in the plains generally.
- (iii) These are annuals and complete their cycle in one season as in case of wheat, rice, maize, gram, beans, peas.

Cash crops

- (i) These are crops which are cultivated for commercial purposes such as tea, coffee, rubber, coconut, spices.
- (ii) These grow in the hilly areas on the slopes as water of rain should not stand in the roots as in case of tea.
- (iii) These plants are perennials. These plants live for more than two years. Tea, coffee require pruning before winter.

10. What are Kharif crops? Give the name of the most important cereal plant of such crops. Briefly describe any three methods for cultivation of Kharif crops.

Ans. Kharif crops generally grow in rainy season. Rice is the most important cereal Kharif crop growing in India. It occupies the largest area in India. It needs rainfall from 150 to 200 cms. It requires flooded fields during its growth. It requires alluvial loamy soil.

Cultivation methods of Kharif crops:

- (i) **Broadcasting:** After preparing the fields for growing the rice crop the seeds are thrown in the fields. This method is adopted in the areas where there is less of rain. The fields are not flooded with water. This method is being adopted in China and Japan.
- (ii) **Dibbling:** In this method seeds are dropped at regular interval in the furrows made by the plough.
- (iii) **Transplantation:** Here the seeds are soaked for 24 hours. The seeds get sprouted. Then these seeds are transferred to nurseries. Here the seeds grow and attain a height of 6" to 9" and then these

seedlings are transferred to specially prepared flooded fields which have been properly ploughed. Then those seedlings start growing in the fields. Then the fields are watered and manured from time to time. Then the crop matures and ultimately for ripening they require a temperature ranging from 16°C to 20°C. When the crop become fully ripe and plants become golden yellowish, then the crop is harvested manually or with the help of combines.

11. Name the two main crop seasons of India. Give three examples of the crops grown during each season.

Ans. The two main crops seasons in India are:

(i)**Kharif season:** The rainy season is from July to October and is known as the Kharif Season. The chief kharif crops are the milles, known as Bajra and Jowar, Paddy, Maize, Cotton.

(ii)**Rabi season:** The winter season is from November to April and is known as rabi season. Wheat, Gram, Peas, Linseed and Mustard are important rabi crops.

12. Multiple choice question. Tick (✓) the correct choice: Which of the following is not a cereal

(i)wheat

(ii)sorghum

(iii)maize

(iv)groundnut

Ans. 4. Groundnut

13. Fill in the blank:

Cotton fibre is rich in _____.

Ans. Cotton fibre is rich in cellulose.

14. Give four examples of Cereals.

Ans. Cereals: wheat, rice, maize, barley.

15. Give uses of Cotton plants.

Ans. Cotton: Cotton is a fibre yielding plant and is used to make clothes, bedsheets, curtains, etc.

16. Give uses of Neem plants.

Ans. Neem: Neem is a medicinal plant whose leaves are used as an antiseptic. It is used in soaps and creams for treating skin diseases.

17. Multiple choice question. Tick (✓) the correct choice: Crops produced for sale to earn money are called

(i)food crops

(ii)cash crops

(iii)horticultural crops

(iv)plantation crops

Ans. 2. cash crops

18. Define the term Agriculture.

Ans. Agriculture: Agriculture means the cultivation or growing of plants and raising of animals, useful to humans, in the field.

19. Define the term Crop yield.

Ans. Crop yield: The final output of the crop produced, measured in terms of weight and area of land is called as crop yield. It is generally expressed as kg/hectare.

20. Define the term Cash crops.

Ans. Cash crops: Crops produced for sale to earn money rather than for use by the grower are called cash crops. Examples: sugarcane, cotton, rubber, etc.

21. Give five examples of crop plants.

Ans. Examples of crop plants: Pulses, cereals, coffee, tea, sugarcane, sunflower.

22. Give three examples of cash crops.

Ans. Cotton, sugarcane and rubber.

23. What are the two main crop seasons? Give three examples of the crops grown during each season

Ans. The two main crop seasons in India are:

(i) **Rabi seasons:** Sown in the beginning of winter and harvested in March/April. These are winter season crops. Examples: Wheat, barley, gram, potato and mustard.

(ii) **Kharif season:** Sown in beginning of monsoon and harvested in September/October. These are summer season crops. Examples: Rice, maize, groundnut, pulses, cotton and jowar.

24. Differentiate between rabi season crops and kharif season crops.

Ans. Rabi season crops

(i) These are winter season crops.

(ii) Sown in the beginning of winter (October to November).

(iii) Harvested by March or April.

(iv) Examples: Wheat, barley, gram, potato and mustard.

Kharif season crops

(i) These are summer season crops.

(ii) Sown in the beginning of monsoon (June to July).

(iii) Harvested by September or October.

(iv) Examples: Rice, maize, groundnut, jowar, pulses and cotton.

25. Put a tick mark (✓) against the correct alternative in the following statement:

The plants that live for more than two years are called:

(i) Annuals

(ii) Perennials

(iii) Biennials

(iv) Triennials

Ans. 2. Perennials