

## BRAIN INTERNATIONAL SCHOOL

Science Assignment

Class: VIII

April'21

### Chapter-1: Crop Production and Management

Read the following paragraph and answer the questions that follow:

When plants of the same kind are grown and cultivated at one place on a large scale, it is called a crop. For example, crop of wheat means that all the plants grown in a field are that of wheat. Crops are of different types like cereals, vegetables and fruits. These can be classified on the basis of the season in which they grow. India is a vast country. The climatic conditions like temperature, humidity and rainfall vary from one region to another. We get our food from plants, or animals, or both. Food has to be produced on a large scale. Despite this diversity, two broad cropping patterns can be identified.

1. Explain transplantation. Which crops are sown by this method?
2. What is drip irrigation method? Why is it considered advantageous over other methods?
3. Why should seeds be treated with fungicides before sowing?
4. How are perishable foods stored on the commercial scale?

### Chapter-2: Microorganisms: Friend and Foe

Read the following paragraph and answer the questions that follow:

Microorganisms are used for the large-scale production of alcohol, wine and acetic acid (vinegar). Yeast is used for commercial production of alcohol and wine. For this purpose, yeast is grown on natural sugars present in grains like barley, wheat, rice etc.

- Q1. How do the blue-green algae and symbiotic bacteria convert atmospheric nitrogen into nitrogen compounds?
- Q2. Why is yeast added to the mixture made for making cake? Explain.
- Q3. How are the diseases caused by microorganisms classified? Explain by giving suitable examples.
- Q4. What are the advantages of food preservation?

**Q5.** *In each of the following questions, a statement of Assertion is given by the corresponding statement of Reason. Of the statements, mark the correct answer as*

- (a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
- (b) If both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.

(c) If Assertion is true, but Reason is false.

(d) If Assertion is false, but Reason is true.

(e) If Assertion and Reason both are false.

(i) **Assertion (A):** Microorganisms are beneficial to us.

**Reason (R):** Microorganisms cause diseases.

### **Chapter-11: Force and Pressure**

Read the following paragraph and answer the questions that follow:

Objects or things fall towards the earth because it pulls them. This force is called the force of gravity, or just gravity. This is an attractive force. The force of gravity acts on all objects. The force of gravity acts on all of us all the time without our being aware of it. Water begins to flow towards the ground as soon as we open a tap. Water in rivers flows downward due to the force of gravity. Try cutting vegetables with a blunt knife and then with a sharp knife. Which is easier? Do you get the feeling that the area over which the force is applied (for example, the pointed end of the nail) plays a role in making these tasks easier? The force acting on a unit area of a surface is called pressure.  $\text{pressure} = \text{force} / \text{area on which it acts}$  At this stage we consider only those forces which act perpendicular to the surface on which the pressure is to be computed.

Q1. Why do mountaineers at high altitude sometimes experience bleeding through their nose?

Q2. Why do all cutting instruments have sharp surface? Give reason.

Q3. How does pressure due to a liquid held in a container vary with:

(a) depth      (b) amount      (c) shape and size of the container

Q4. What is meant by the term atmospheric pressure?

Q5. Define force. Describe with suitable examples, the contact force and a non-contact force.