



KALPAVRUKSHA MODEL SCHOOL

Answers Assignments-3

Class: VIII

Sub: Biology

Date: 06.07.2021

Topic: Microorganisms

I. Answer the following questions:

1. Name any four medicinal uses of microorganisms.

Ans: Medicinal uses of microorganisms are:

- i. used in making antibiotics
- ii. used in making vaccines
- iii. used in making of food supplements
- iv. They destroy disease causing microbes in human body.

2. How do microbes help in agriculture?

Ans: Blue-green algae and bacteria like Rhizobium (that live in the root nodules of leguminous plants like pea and soya bean) help in fixing atmospheric nitrogen and increasing soil fertility.

3. Describe some medicinal uses of microorganisms with examples.

Ans: **Making antibiotics:** Certain bacteria and fungi are used in the production of medicines called antibiotics that destroy certain disease-causing microbes. Penicillin (obtained from the fungus Penicillium), streptomycin, and tetracycline (both obtained from Streptomyces bacteria) are examples of antibiotics. Antibiotics are also used to control microbial diseases in animals and plants.

Making vaccines: When a disease-causing microbe enters our body, our body produces substances called antibodies. These antibodies fight and destroy the disease-causing microbe and remain in the body to fight future infections by the same microbes. A vaccine is a preparation of killed or weakened disease-causing microbes. When vaccine is introduced into the body of a healthy person, his/her body produces antibodies against these killed or weakened microbes. These antibodies remain in the body and protect us from future infections by the same microbes.

Making food supplements: Microbes like Chlorella (a type of algae) are rich in proteins and other nutrients and are used as food supplements.

In human body: Bacteria like Lactobacillus acidophilus and Escherichia coli live in human intestines, where they help to digest food and destroy disease-causing microbes.

4. Which microorganism is not affected by antibiotics?

5. Name certain diseases which can be prevented by vaccination.

Ans: Diseases such as cholera, tuberculosis, smallpox and hepatitis can be prevented by vaccination.

