## VIDYA BHAWAN BALIKA VIDYAPEETH

## STUDY MATERIAL SCIENCE CLASS-VIII

<u>Date: 29-04-2021</u> Teacher: Poonam Kumari

## Microorganisms: Friends & Foe

Microorganisms are too small and are not visible with the naked eye. They can live in all kinds of environment, ranging from ice cold climate to hot springs, deserts and marshy lands. Microorganisms are found in air, water and in the bodies of plants and animals. They may be unicellular or multicellular.

Microorganisms include bacteria, fungi, protozoa and some algae. Viruses though different from the above-mentioned living organisms are referred to as microbes. Viruses are quite different from other microorganisms. They reproduce only inside the cells of the host organism: bacterium, plant or animal.

## Friendly Microorganisms

The bacterium, Lactobacillus converts milk into curd.

Bacteria are also involved in the making of cheese, pickles and many other food items.

Acetobacter aceti bacteria is used for the production of acetic acid from alcohol.

Yeast is used for commercial production of alcohol and wine by growing them on natural sugars present in grains like barley, wheat, rice & crushed fruit juices etc.

Antibiotics are manufactured by growing specific microorganisms and are used to cure a variety of diseases.

Some microorganisms reside in the root nodules of leguminous plants. They can fix atmospheric nitrogen from the air into the soil and increase soil fertility.

Specialized bacteria convert nitrates and nitrites present in the soil into nitrogen gas which is released in the atmosphere.

Some microorganisms decompose organic wastes like dead plants and animals into simple substances and clean up the environment.