

Chapter-2 Microorganisms: Friend and Foe

Question: Can microorganisms be seen with the naked eye? If not, how can they be seen?

Answer: No, microorganisms cannot be seen with naked eyes. It can be seen with the help of a microscope.

Question: What are the major groups of microorganisms?

Answer: The major groups of microorganisms are:-

- i. Bacteria - Eg: Rhizobium
- ii. Fungi - Eg: Bread Mould
- iii. Protozoa - Eg: Amoeba, Paramecium
- iv. Algae - Eg: Spirogyra

Question: Name the microorganisms which can fix atmospheric nitrogen in the soil.

Answer: The microorganisms which fix atmospheric nitrogen are:

- i. Rhizobium
- ii. BGA (Blue Green Algae)

Question: Write 10 lines on the usefulness of microorganisms in our lives.

Answer: Microorganisms play an important role in our lives. Microorganisms are used in cleaning up of the environment. In agriculture they are used to increase soil fertility by fixing nitrogen. The bacterium lactobacillus promotes the formation of curd in milk. Microorganisms are also used in wine and beer industries, such as yeast. It is also used in baking industry. Microorganisms are also used in the making of antibiotics which protect our body from harmful microorganisms.

Question: Write a short paragraph on the harms caused by microorganisms.

Answer: Microorganisms are harmful in many ways. Some of the microorganisms also cause diseases in human beings, plants and animals. Such microorganisms are called pathogens. Pathogens cause many deadly

diseases in humans, like typhoid, cholera, measles, etc. Many microorganisms are also responsible for food poisoning.

Question: What are antibiotics? What precautions must be taken while taking antibiotics?

Answer: *The medicines which kill or stop the growth of a disease - causing microorganisms are called antibiotics. Precautions to be taken while taking antibiotics:-*

- v. *It should be taken only on the advice of qualified doctor.*
- vi. *It must not be taken unnecessarily because it may kill the beneficial bacteria in the body.*
- vii. *One must complete the course.*
- viii. *No wrong dose should be taken as it may make the drug less effective.*