

STD VIIICHAPTER - 1THE INVISIBLE LIVING WORLD
BEYOND OUR NAKED EYE

I. VERY SHORT ANSWER TYPE (2 Marks)

1. Name the groups in which Microorganisms are broadly classified. (T. bk Q1)

Ans Microorganisms are broadly classified into five major groups Bacteria, fungi, Protozoa, Algae and Viruses.

2. Name the type of microorganism that is smaller than bacteria. (T. Bk Q2)

Ans Viruses are significantly smaller than bacteria and can only be seen under an electron microscope.

3. Write the name of a bacterium that helps in the formation of curd. (T. Bk Q3)

Ans Lactobacillus

4. Write a use of yeast (T. Bk Q4)

Ans ⇒ Yeast is a fungus that grows best in warm conditions and feeds on sugar.

⇒ It respires to release carbon dioxide gas, creating bubbles that cause dough to rise and become soft and puffy.

5. What does yeast produce during respiration? (T. Bk Q5)

Ans During respiration, yeast produces carbon dioxide and alcohol along with a small amount of energy.

6. Who invented the microscope? Mention one Scientist who improved it (T. Bk Q 6)

Ans Zacharias Janssen invented the microscope. Antonie van Leeuwenhoek improved it by making more powerful microscopes and studying microscopic organisms.

7. Define food preservation (T. Bk Q 7)

Ans Food preservation is the method of preventing the spoilage of food and increasing its shelf life.

8. Write any two differences between plant cell and animal cell. (T. Bk Q 8)

	Plant cell	Animal cell
<u>Ans</u> i)	A plant cell is surrounded by a rigid cell wall.	An animal cell does not have a cell wall.

ii)	Plant cells have plastids.	Animal cells do not have plastids.
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II. SHORT ANSWER TYPE (3 MARKS)

1. What are microorganisms? Give four examples. (T. Bk Q 1)

Ans Microorganisms are tiny living organisms that cannot be seen with naked eyes. They are seen only under a microscope.

Examples: Bacteria, fungi, Algae & Protozoa

2. Classify bacteria on the basis of their shapes. (T. Bk Q 2)

Bacteria are Classified into 4 types based on Shape:
 Cocci: Spherical Eg: Streptococcus
 Bacillus: Rod Shaped Eg: Bacillus
 Spirillum: Spiral Shaped, Eg: Spirillum
 Vibrio: Comma-Shaped Eg: Vibrio Cholerae

3. Explain the functions of any three cell organelles (Plant/animal cell)

Mitochondria: Powerhouse of the cell Produces energy in the form of ATP through respiration.

Chloroplast: Present only in plant cells contains chlorophyll for photosynthesis.

Nucleus: Controls all cell activities and contains DNA which carries genetic information.

III. LONG ANSWER TYPE (5 MARKS)

1. Write a short note on the Microscope invention and how it helped biology develop.

Ans. ⇒ A Microscope is an instrument used to see very small objects.

⇒ Robert Hooke discovered cells using a Microscope in 1665.

⇒ Antonie Van Leeuwenhoek improved the Microscope and observed microorganisms.

⇒ The Microscope helped scientists study cells and living organisms in detail.

⇒ It greatly contributed to the development of biology and medical science.