

Microorganisms

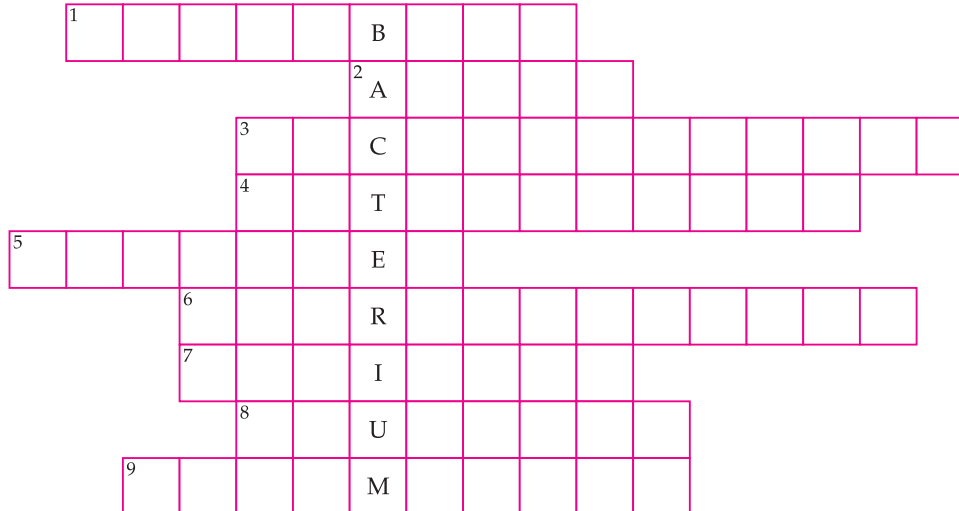
ORAL QUESTIONS

A. Answer these questions orally.

1. Name any three microorganisms.
2. Microorganisms are found only in air. True or false?
3. What are the bacteria which require oxygen for their growth called?
4. Name three common protozoans.
5. What is the entry of pathogens into the body of a healthy person called?
6. What is the mode of transmission of tuberculosis?
7. Name two preservatives.
8. What is the study of microorganisms called?
9. Name the five major groups of microorganisms.

PUZZLE/QUIZ

B. Complete the puzzle given below with the help of clues.



1. A nitrogen fixing bacteria.
2. Autotrophic microorganism living in water or moist soil.
3. This bacteria is used to make curd from milk.
4. A medicine used to kill or stop the growth of disease causing microorganisms.
5. A microorganism, plant or animal that causes a disease.
6. Process of conversion of ammonia and ammonia salts into nitrates.

7. A protein called immunoglobulin produced by lymphocyte to fight a foreign antigen.
8. A water-borne disease.
9. A common protozoan.

C. Unscramble the following jumbled words to make meaningful words.

1. E T Y S A

(This microorganism is used to make bread)

2. E I L N I P C I L N

(Alexander Fleming discovered this)

3. O E N H G T P A

(Disease-causing microorganism)

4. I G L S N T A

(Lemon and tamarind are preserved by this method)

5. S T O C N O

(A blue-green alga that fixes atmospheric nitrogen into nitrates)

CLASS TEST

D. MCQ– Tick (✓) the correct option.

1. Which of the following is a denitrifying bacterium?

(a) *Pseudomonas*

(b) *Nitrosomonas*

(c) *Nitrobacter*

(d) *Rhizobium*

2. Which of these is not a viral disease?

(a) Small pox

(b) Chicken pox

(c) Polio

(d) Pneumonia

3. Which of these is incorrect?

(a) Antibiotics are used to treat bacterial infection.

(b) Microorganisms can survive in all kinds of environment and temperature.

(c) *Rhizobium* lives in the nodules of the roots of leguminous plants.

(d) Female *Anopheles* mosquito acts as a carrier of dengue virus which causes dengue fever.

4. Which of these is used for commercial production of alcohol?
- | | | | |
|--------------|--------------------------|--------------|--------------------------|
| (a) Bacteria | <input type="checkbox"/> | (b) Virus | <input type="checkbox"/> |
| (c) Yeast | <input type="checkbox"/> | (d) Protozoa | <input type="checkbox"/> |
5. Which of these acts as a carrier of malarial parasite that causes malaria?
- | | | | |
|------------------|--------------------------|-----------------------------|--------------------------|
| (a) Female Hades | <input type="checkbox"/> | (b) Female <i>Anopheles</i> | <input type="checkbox"/> |
| (c) Chlorella | <input type="checkbox"/> | (d) Rhizopus | <input type="checkbox"/> |

E. Very short answer questions.

- What are microorganisms?

- Who are microbiologists?

- Who is known as the 'Father of Bacteriology'.

- Name the method by which bacteria reproduce.

- Name three common fungi.

- Name the microorganism which is regarded as a connecting link between nonliving and living things.

- Name 2 diseases against which vaccines have been developed.

- What do you understand by the term 'infection'?

F. Short answers questions.

- List any three characteristics of microorganisms.

2. How are bacteria classified on the basis of their shape?

3. What are the different habitats in which microorganisms are found?

4. Differentiate between.

(a) Aerobic Bacteria and Anaerobic Bacteria

| AEROBIC BACTERIA | ANAEROBIC BACTERIA |
|-------------------------|---------------------------|
| | |

(b) Bacteria and Fungi

| BACTERIA | FUNGI |
|-----------------|--------------|
| | |

5. What are fungi? Can they prepare their own food?

6. How do fungi reproduce?

7. What are algae? How are algae classified on the basis of the 'pigments' present in them? Give 2 examples of each.

8. Name some common viral diseases of plants.

9. How is curd formed?

10. What makes dough rise?

11. Name the fungus from which the antibiotic penicillin was prepared. What are antibiotics used for?

12. What is a vaccine? How do they work?

13. How do microorganisms help in cleaning of environment?

14. How do microorganisms help in increasing soil fertility?

15. Why are microbial diseases also called communicable diseases?

16. How do insects act as carrier of disease-causing microbes?

17. Name two each of the following:

(a) Two bacterial diseases of plants

(b) Two viral diseases of plants

(c) Two fungal diseases of plants

18. What is meant by food preservation?

19. What is pasteurisation?

20. What do you understand by nitrogen fixation?

21. What is ammonification?

G. Long answer questions.

1. Explain nitrogen cycle in nature.

2. Explain the various methods of food preservation.

3. List the mode of transmission, symptoms and preventive measures for the following diseases.

(a) Pneumonia

(b) Chicken pox

(c) Food poisoning

4. How are microorganisms beneficial in food industry?

5. How are algae used as source of food?

6. What are the industrial uses of microorganisms?

7. Write a short note on discovery of microorganisms.

HOME ASSIGNMENT

H. Think and answer.

1. Surabhi was suffering from common cold. She forgot to take a handkerchief along with her to school. Next day, her partner Ritu also got infected with common cold. How do you think the infection got spread?

2. After a few hours of having dinner in a restaurant, Gautam suffered from vomiting and diarrhoea. What could be the possible reason?

WORKSHEET

I. Give reasons for the following.

1. Antibiotics are mixed with the food of livestock and poultry.

2. We should not consume spoiled food.

3. Sugar syrup containing 68% of sugar is used for preservation of fruits and vegetables.

4. Oil and vinegar are used to make pickle.

5. We should keep the cooked food covered.

6. Vaccines are introduced in a healthy person.
