

CHAPTER 2-MICROORGANISMS: FRIEND AND FOE

Home Assignment : Class 8th : Subject- Science

GSSS Machhike and Bilaspur (MOGA)

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Question 1. Fill in the blanks.

- (a) Microorganisms can be seen with the help of a **microscope**.
- (b) Blue-green algae fix **nitrogen** directly from air to enhance fertility.
- (c) Alcohol is produced with the help of **yeast**.
- (d) Cholera is caused by **bacteria**.

Question 2. Tick the correct answer.

(a) Yeast is used in the production of

- (i) Sugar (ii) alcohol (✓)
(iii) hydrochloric acid (iv) oxygen

(b) The following is an antibiotic

- (i) Sodium carbonate (ii) Streptomycin (✓)
(iii) Alcohol (iv) Yeast

(c) Carrier of malaria-causing protozoan is

- (i) Female Anopheles mosquito (✓) (ii) cockroach
(iii) housefly (iv) butterfly

(d) The most common carrier of communicable diseases is

- (i) ant (ii) housefly (✓)
(iii) dragonfly (iv) spider

(e) The bread or idli dough rises because of

- (i) heat (ii) grinding
(iii) growth of yeast cells (✓) (iv) kneading

(f) The process of conversion of sugar into alcohol is called

- (i) nitrogen fixation (ii) moulding

(iii) fermentation (✓)

(iv) infection.

Question 3 Match the organisms in Column A with their action in Column B.

A

B

- | | | |
|---------------------|---|---------------------|
| (i) Bacteria | → | (a) Fixing nitrogen |
| (ii) Rhizobium | → | (b) Setting curd |
| (iii) Lactobacillus | → | (c) Baking bread |
| (iv) Yeast | → | (d) Causing malaria |
| (v) A protozoan | → | (e) Causing cholera |
| (vi) A virus | → | (f) Causing AIDS |

Question 4. Can microorganisms be seen with the naked eyes? If not, how can they be seen?

ANSWER- No, we cannot see them with naked eyes. They can be seen with the help of a microscope.

Question 5. What are the major groups of microorganisms?

ANSWER- The major groups of microorganisms are:-

- Bacteria
- Fungi
- Protozoa
- Some algae

Question 6- Name the microorganism which can fix atmospheric nitrogen in the soil.

ANSWER- The microorganisms which can fix atmospheric nitrogen are Rhizobium, Azatobactor, Blue green algae etc.

Question 7. Write 10 lines on the usefulness of microorganisms in our lives.

ANSWER- The usefulness of microorganisms are as follows:

- Lactobacillus- a bacterium useful in making curd etc.
- Bacteria are useful in formation of bread and cheese.
- They are used in cleaning of environment.
- Yeasts are used in production of alcohol.
- They are used in making antibiotics.
- They are used in making vaccines.

- g. Microorganisms are used to make manure.
- h. Bacteria are main nitrogen fixing agent.
- i. They fix the carbon dioxide into useful sugar.

Question 8. Write a short paragraph on the harms caused by microorganisms.

ANSWER- The harm caused by microorganisms are as follows-

- a. They cause many communicable diseases like cholera, common cold, tuberculosis etc.
- b. Malaria is caused by a microorganism called plasmodium.
- c. Several plants diseases are caused by bacteria and fungi.
- d. Food poisoning is caused by microorganism.
- e. They are responsible for spoiling of food.

Question 9. What are antibiotics? What precautions must be taken while taking antibiotics?

ANSWER- The medicines that kill or stop the growth of the disease-causing microorganism are called **antibiotics**. Streptomycin, tetracycline, erythromycin etc. are common antibiotics.

Following precautions must be taken in using antibiotics-

- (i) These medicines should be taken only on the advice of a qualified doctor.
- (ii) One must finish the course prescribed by the doctor.
- (iii) If anybody takes antibiotics when not needed, his or her body may develop resistance against that antibiotic.

ONE MARK MCQs

1-Today Paheli's science teacher brings an instrument in the class. He tells students that it helps us to see magnified and clear view of micro-organisms. Paheli wants to know the name of this instrument. Help her to choose the correct option.

- a) Telescope b) Periscope c) Microscope(✓) d) Kaleidoscope

2-Reena wants to know if micro-organisms are our friends or foe. Help her by choosing the correct answer.

- a) Friend b) Both Friends and foe (✓) c) Foe d) Neither Friends nor foe

3-We find a lot of bacteria in the curd that we eat. Which bacteria helps in converting milk into curd.

- a) Rhizobium b) Lactobacillus (✓) c) Bacillus Anthracis d) All of these.

4-Packed milk does not get spoiled for longer time, why?

- a) Because it is packed b)Because it is pure milk
c)Having more fat d) Being Pasteurized (✓)

5-Which of the following is prepared by using yeast?

- a) Sugar b) Alcohol (✓) c) Hydrochloric acid d) Oxygen

6-Which of the following is used as antibiotic medicine?

- a) Sodium Bicarbonate b) Streptomycin (✓) c) Alcohol d) Yeast

7-Which of following is the carrier of protozoa that causes malaria?

- a) Female Anopheles mosquito (✓) b) Cockroach c) House fly d) Butterfly

8-Which out of the following is the common carrier of communicable diseases?

- a) Ant b) House fly (✓) c) Grasshopper d) Spider

9-Sanjeev's mother is preparing for making "Bhatura". She has kneaded the flour using luke warm water after adding some yeast powder in it. The kneaded flour swells up after some time. What is the reason behind it?

- a) Heat b) Grinding c) Increase in yeast cell (✓) d) Kneading

10-The process of converting sugar into alcohol is known as _____

- a) Nitrogen fixation b) Preservation c) Fermentation (✓) d) Pasteurization

11-Rahul has put some drops of pond water on glass slide and is preparing to see it under a microscope.

According to you, which of the following microorganisms he may see?

- a) Amoeba b) Paramecium c) Spirogyra d) All of these (✓)

12-How can we preserve food for longer times in our houses?

- a) By making pickle b) By making murabba
c) By storing food in fridge d) By all these methods (✓)

13-Which of the following microorganism reproduce only in the cells of host organisms?

- a) Bacteria b) Algae c) Virus (✓) d) Fungi

14-Who discovered the vaccination for prevention of small pox?

- a) Louis Pasteur b) Alexander Fleming c) Edward Jenner (✓) d) Robert Koch

15-Which of the natural process helps in nitrogen fixation?

- a) Sea storm b) Lightening (✓) c) Earthquake d) Flood

16-The chemical used to protect food from spoiling is called as _____

- a) Carrier b) Antigens c) Antibiotics d) Preservatives (✓)

17-Which of the following causes the Rust of wheat?

- a) Bacteria b) Virus c) Fungi (✓) d) None of the above

18-Santosh watches an advertisement on television in which it is advised to get children vaccinated with "two drops of life" essentially on a particular day for 1 to 5 years old children. From which disease, these drops prevent the child?

