

**Subject:- Science**

**Class- VIII**

**Chapter-2**

**Microorganism: Friends & Foe**

**Exercises:**

1. Fill in the blanks.

(a) Microorganisms can be seen with the help of a \_\_\_\_\_.

(b) Blue green algae fix \_\_\_\_\_ directly from air and enhance fertility of soil.

(c) Alcohol is produced with the help of \_\_\_\_\_.

(d) Cholera is caused by \_\_\_\_\_.

Sol: (a) microscope, (b) nitrogen, (c) yeast, (d) bacteria.

2. Tick the correct answer.

(a) Yeast is used in the production of

(i) sugar (ii) alcohol (iii) hydrochloric acid (iv) oxygen

Sol: (a) (ii).

(b) The following is an antibiotic

(i) Sodium bicarbonate (ii) Streptomycin (iii) Alcohol (iv) Yeast.

Sol:- (b) (ii).

(c) Carrier of malaria-causing protozoan is

(i) female *Anopheles* mosquito (ii) cockroach

(iii) housefly (iv) butterfly

Sol:- (c) (i).

(d) The most common carrier of communicable diseases is

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

Sol:- (d) (ii).

(e) The bread or *idli* dough rises because of

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

Sol:- (e) (iii).

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

(i) nitrogen fixation (ii) moulding (iii) fermentation (iv) infection

Sol:- (f) (iii).

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

A'	'B'
(i) Bacteria	(a) Fixing nitrogen
(ii) <i>Rhizobium</i>	(b) Setting of curd
(iii) <i>Lactobacillus</i>	(c) Baking of bread
(iv) Yeast	(d) Causing malaria
(v) A protozoan	(e) Causing cholera
(vi) A virus	(f) Causing AIDS
	(g) Producing antibodies

Sol:- (i) (e), (ii) (a), (iii) (b), (iv) (c), (v) (d), (vi) (f).

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

Sol:- No, we cannot see them with unaided eyes. They can be seen with the help of microscope.

**5. What are the major groups of microorganisms?**

Sol:- There are four major group of microorganism such as bacteria, fungi, protozoa and some algae.

**6. Name the microorganisms which can fix atmospheric nitrogen in the soil.**

Sol:- They are rhizobium, azotobacter, blue - green algae (such as anabaena and nostoc) etc.

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

Sol:- **Usefulness of microorganisms are as follows:-**

- Lactobacillus, a bacterium is useful in formation of curd.
- In the Making of chesse, pickle etc.
- In cleaning up of environment.
- In agriculture to increase soil fertility by fixing nitrogen.
- Microorganisms like yeast are used for the production alcohol.
- They are used to make vaccine.
- Used to make antibiotics.
- Used to make manures.
- Some microorganisms are used to make preservatives.
- It also helps in the fixation of nitrogen into the atmosphere.

**8. Write a short paragraph on the harmful effects of microorganisms.**

Sol:- The harm causes by microorganisms are as follows:

- Many communicable diseases like cholera, common cold, chicken pox and tuberculosis etc. are caused by microorganisms.
- Malaria is caused by a microorganisms called plasmodium carried by female anopheles mosquito.
- Female Aedes mosquito acts as carrier of dengue virus.
- Anthrax is a dangerous human and cattle disease caused by a bacterium called Bacillus anthracis.

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

Sol:- The medicines that kill or stop the growth of the disease causing microorganisms are called antibiotics. Streptomycin, tetracycline etc. The precautions to be taken in using antibiotics are as follows:-

- Medicines should be taken only on the advice of a qualified doctor.
- One must finish the course prescribed by the doctor.
- Antibiotics taken unnecessarily may kill the beneficial bacteria in the body.

-----Thanks-----

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