

ST Mary's Coed School Harda(MP)

Class VIII

Subject - Science

Chapter 2 Micro Organism

Exercise

Q1 Fill in the blanks.

- 1 Naked Microscopic
- 2 Alcohol
- 3 Bacteria
- 4 kelp
- 5 Antibiotic
- 6 Mushroom 7 Lactobacillus
- 8 Protozoan 9 Antamoeba
- 10 Virus

Q2 MCQ

- 1 Malaria
- 2 Plants
- 3 Milk
- 4 Pseudopodia
- 5 Algae

Q3 Matching

- 1 Toxin
- 2 Cholera
- 3 AIDS
- 4 Sleeping sickness
- 5 Bread
- 6 Chitin

Q4 Define

- 1 Binary fission

In binary fission Amoeba divides into two daughter cell during unfavourable condition Amoeba undergoes encystation when the condition of favourable the cyst break open to release the baby Amoeba

- 2 Microbiologist

A Person who study about micro organism

- 3 Euttrification



The process by which a water body obtain a huge quantity of dissolved nutrients that increase the growth of aquatic plant life such as algae and this takeaway dissolved oxygen from water resulting in a dead and decaying lake

3 Symbiosis

The association between the bacteria and plant is known as Symbiosis it means they help each other to survive

Q5 Differentiate between

1 Aerobic and Anaerobic bacteria

The bacteria which require oxygen for their respiration are known as aerobic bacteria

The bacteria which can survive in the absence of oxygen are known as anaerobic bacteria

2 Refrigeration and freezing

In refrigeration process cold temperature slow down the rate of bacterial multiplication so food can be preserved for long time

In freezing process freezing temperature stop the growth of microbes completely by this process all the food can be preserved no effect on taste or texture

Q6 NCERT BASED FILL UP

1 nitrogen

2 Yeast

3 Bacteria

NCERT MCQ

1 Alcohol

2 Streptomycin

3 Female Anopheles mosquito

4 Ant

5 growth of yeast cell

6 fermentation

Q 7 Short answer type question

1 protozoans are unicellular microscopic organisms measure Rate of them move with the help of some locomotory organs like pseudopodia flagella or cilia

2 nitrogen cycle because the percentage of Nitrogen in any part of the world remain more or less the same constant value 78%

3 advantage of useful bacteria

(A) convert milk into curd

(B) some bacteria are used in tanning industry

(C) some used in purifying water

4 Three diseases caused by protozoan

Amoebic dysentery

Sleeping sickness

Malaria

5 Three locomotory organ of protozoan

Pseudopodia

Cilia

Flagella

Q7 Answer in detail

1 we can protect ourselves from cholera and typhoid by

Use handkerchief

Drinking boiled water

Covering food

2 Mango pickle not spoiled because salt or vinegar create an environment in which bacteria cannot survive in this method more salt needed

3 most dry item oil etc are marketed in sealed and airtight packing this is known as vacuum packing they fill the packet with Nitrogen gas which is inert in nature

4 useful fungi are

Mycorrhiza

Trichoderma

Penicillin

Q8

LONG ANSWER TYPE QUESTION

Answer 1

Food that is not preserve properly is exposed to microbes these microbes may leave certain toxin on the food when we consume Such food unknowingly it cause food poisoning the symptom of food poisoning are vomiting and subsequent diarrhoea the dehydration which is extreme cause may even lead to death

Food poisoning caused by microbes

The precaution that should be take to prevent the food from spoiling by

Cover the food

Use refrigeration method

Add preservatives

Use freezing method

Use drying and canning method

Answer 2 useful microorganism are following

Lactobacillus bacteria convert milk into curd

Streptococcus bacteria used by doctors in the removal of clot in the blood vessels

Zooplankton protozoan serve as food for many aquatic animals

Protozoans play an important role in enhancing the fertility of soil

Some fungi attack harmful insects and act as pesticides

Some fungi help us in making antibiotics

Algae reduce carbon dioxide in the atmosphere

Some algae have become promising supplements as they are rich in protein

Answer 3

When algae grow in abundance they become a threat to the aquatic animals. The cause for algae growth in abundance is the agricultural fertilizer that is washed off from the nearby field. The high production of algae in lakes and rivers is known as an algae bloom.

These floating algae cover the water surface and thereby prevent the reach of sunlight. This also causes the depletion of the dissolved oxygen that leads to the death of many aquatic animals. This leads to eutrophication which is harmful.

Answer 5

Five methods of preservation and their benefits are

1 Refrigeration

Cold temperature slows down the rate of bacterial multiplication so food can be preserved for a long time.

Its advantage

No effect on food taste

2 Freezing

Freezing temperature stops the growth of microbes completely and its advantage is no effect on taste or texture.

3 Salting

Covering food with salt forces water to leave all cells, including the cells of microbes and meat. Due to osmosis, the microbes die due to lack of water. Its advantage is it can be preserved for a long time.

4 Canning

Food is cooked and sealed in cans under sterile conditions.

Advantage

Canned food can store for a long time.

5 Drying

It is a common method of reducing the water so that microbes cannot enter.

Advantage

It is the least expensive.

HOTS

1 Because it decomposes organic matter.

2 Without bacteria around to break down biological waste, it would build up and dead organisms would not return their nutrients.

Q. Can microorganism be seen with the naked eye? If not, how can they be seen?

Answer

No, because they are very small we can see by microscope.

Q. What are the major groups of microorganisms?

Answer

Major groups of microorganisms are

Bacteria

Virus

Protozoa

Algae

Fungi

Q Write a short paragraph on the harms caused by microorganisms.

Answer

Some protozoans cause disease like Entamoeba cause dysentery

Many bacteria destroy plants

Some fungi spoil the food by forming mould

Many fungi cause disease In plant and animals

Algae grow in water and affect aquatic animal

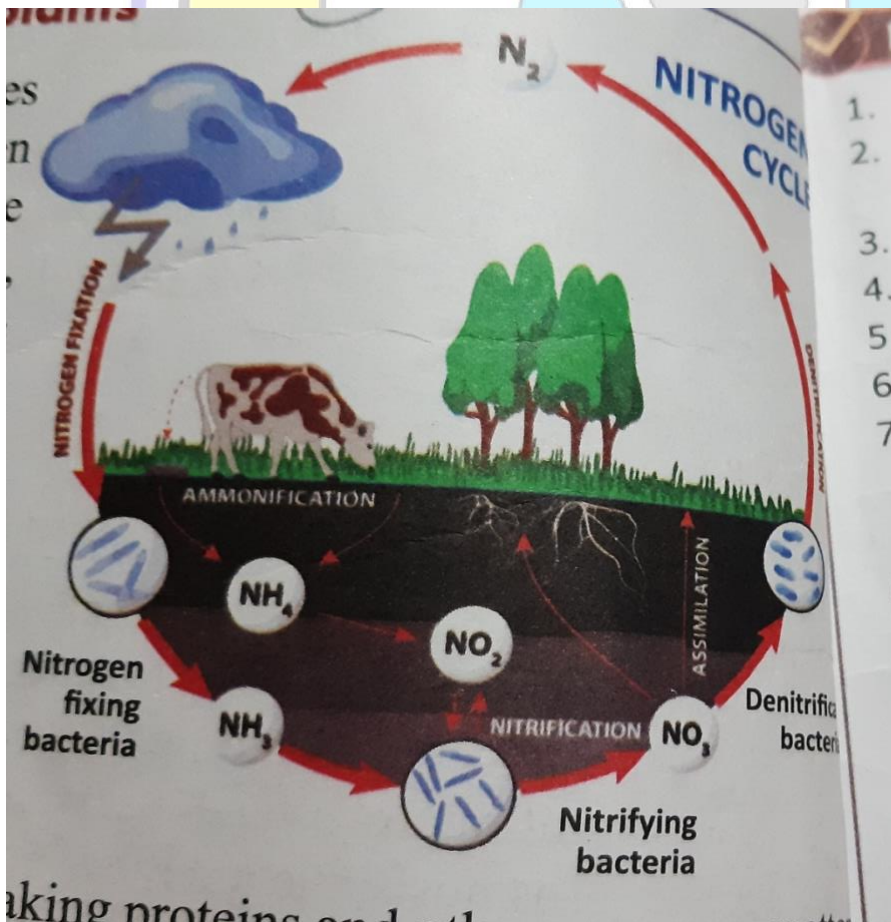
Q what are antibiotics? What precaution must be taken while taking antibiotics?

Answer

The medicine such as penicillin that are used to treat the infections by killing or stopping the growth of disease causing microbes are called antibiotics

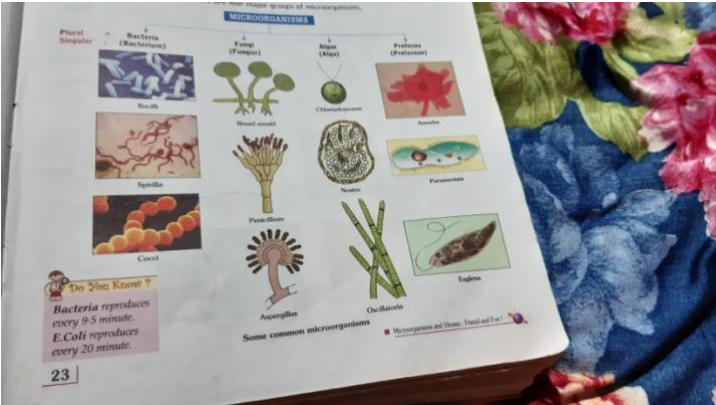
Before taking antibiotics we should consult with doctor

Q long answer 6



Q

Long answer 4



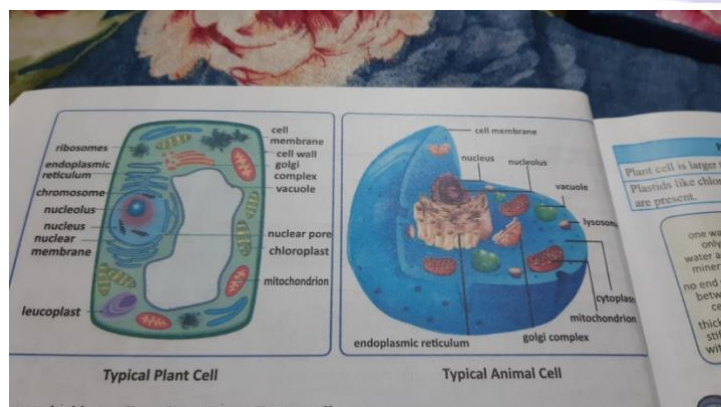
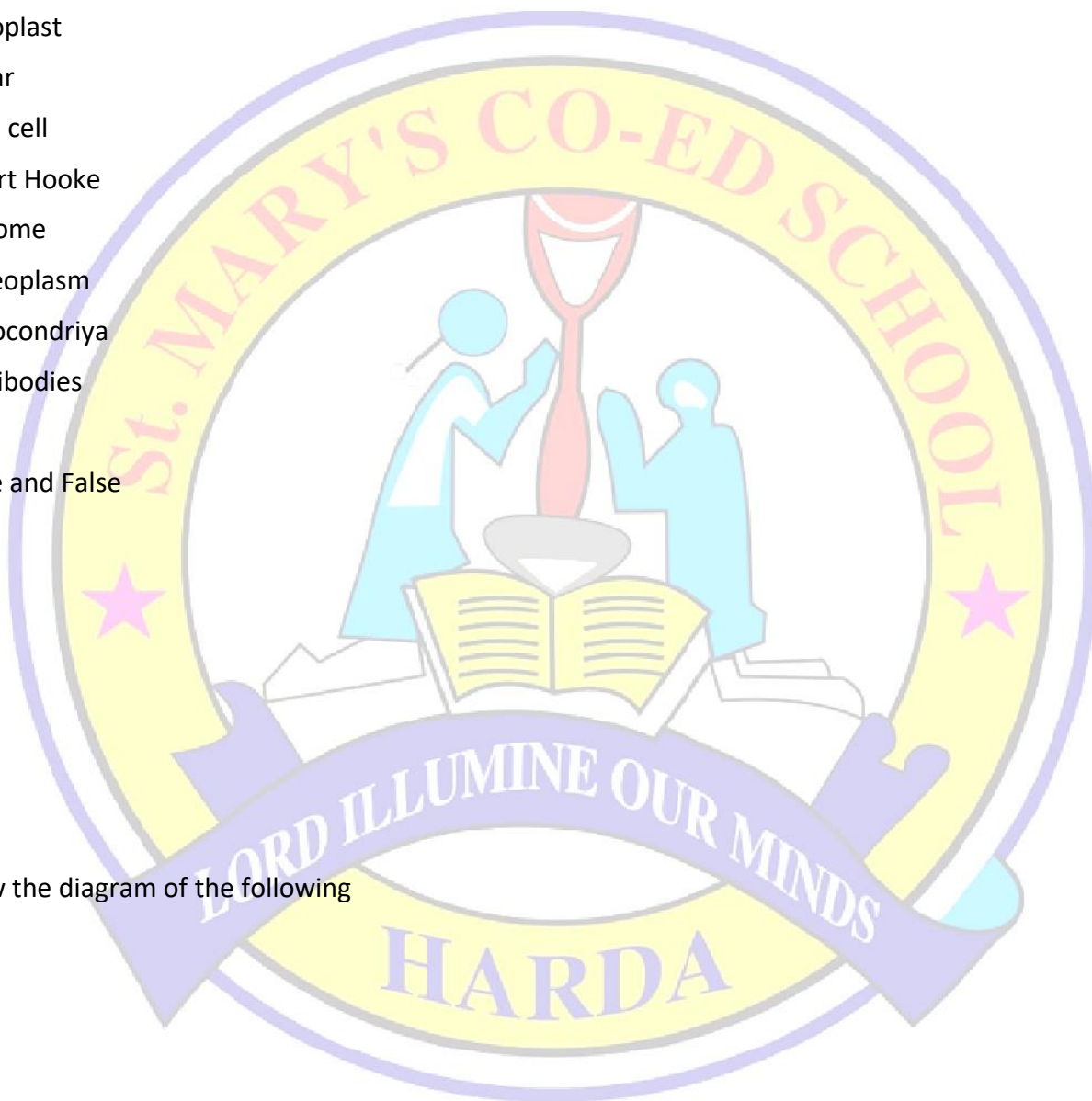
Q1 Fill in the blanks

- 1 Cytoplasm
- 2 chloroplast
- 3 Nuclear
- 4 Nerve cell
- 5 Robert Hooke
- 6 Lysosome
- 7 Nucleoplasm
- 8 Mitochondria
- 9 Golgi bodies
- 10 Cell

Q2 True and False

- 1 False
- 2 True
- 3 True
- 4 False
- 5 True
- 6 True
- 7 False

Q3 Draw the diagram of the following



Q4 Match the column

- 1 Mitochondria
- 2 Chloroplast
- 3 Ribosome
- 4 Lysosome
- 5 Cell membrane
- 6 Gene's

Q5 MCQ

- 1 Nerve cell
- 2 Plant cell
- 3 Plant cell
- 4 Chloroplast
- 5 Centrioles

Q6 Answer the following in short

- 1 Robert Brown discover the nucleus
- 2 The function of the cell wall to protect plants
- 3 single cell organisms are called unicellular organisms

Example Amoeba

Paramoecium

- 4 The mitochondria called the power house of the cell because it store energy in the form of ATP.
- 5 Cell theory

- 1 All living organisms are composed of cells and their product
- 2 All cell arise from pre existing cells

Q7 HOTS

- 1 Plants have cell wall and vacuole

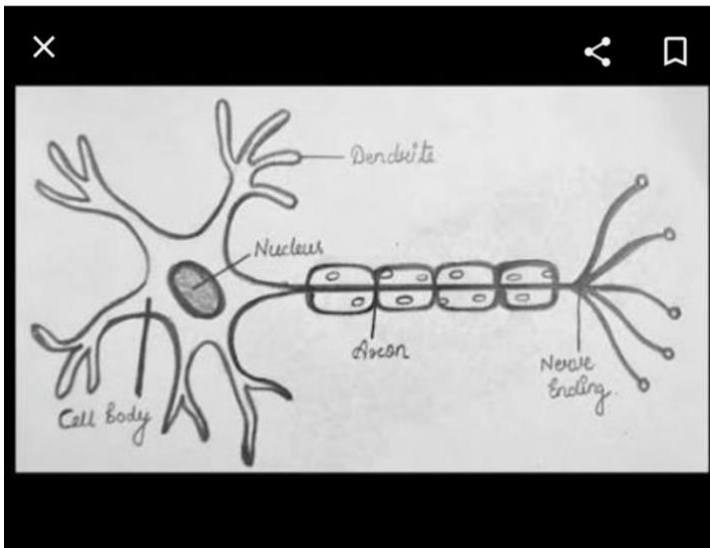
Because cell wall give definite shape to the plant
and vacuole store water salts and nutrients

- 2 Ribosome help in protein synthesis so it's important in our cells
- 3 Because chloroplast give different colour to the flower
- 4 If electron microscope was not invented by scientists because with the help of microscope we can study micro organisms

Q8 NCERT BASED TRUE AND FALSE

- 1 True
- 2 False
- 3 False
- 4 True

Q9



Q

Nerve cell send message to brain and also give message to all parts of body

Q Which part of cell contain organelles?

Answer Cytoplasm

Q Where chromosome are found in cell? state their function.

Answer Chromosome are present inside the nucleus

They are responsible for passing on characteristics of the species from parents to the offspring

Q State the difference between Eukaryotes and prokaryotes

Answer

Eukaryotes

The cells which have a well organized nucleus with nuclear membrane

All organism other than bacteria and blue green algae have eukaryotes

Prokaryotes

The cell which do not have a well organized nuclear region due to the absence of nuclear membrane

Example bacteria

Blue green algae

Q Explain why chloroplasts are found in plant cells?

Answer

It present in plants because due to chloroplast leaves are green and help in photosynthesis.

Q Cell are basic structural and functional unit of living organisms explain

Answer

Because all organism composed by cell

Cell is building block of body