PRISM WORLD

Std.: 8 (English) General Science

Chapter: 1

Q.1 Match the pair 2

1 Find out my partner.

Column 'A'	Column 'B'
(i) Fungi	(a) Bacteriophage
(ii) Protozoa	(b) Candida
	(d) Amoeba

Ans

(i) Fungi	Candida
(ii) Protozoa	Amoeba

2 Find out my partner.

Column 'A'	Column 'B'
(i) Bacteria	(a) Candida
(ii) Protozoa	(b) Prokaryotic
	(d) Amoeba

Ans

(i) Bacteria	Prokaryotic
(ii) Protozoa	Amoeba

Q.2 State True or False 4

1 Cell wall of fungi is made of chitin.

Ans **True -** Cell wall of fungi is made of chitin.

2 Tomato wilt is a viral disease.

Ans **True -** Tomato wilt is a viral disease.

3 Lactobacilli are harmful bacteria.

Ans **False -** Lactobacilli are useful bacteria because they are found in curd or buttermilk.

4 Organ of locomotion in amoeba is pseudopodia.

Ans **True -** Organ of locomotion in amoeba is pseudopodia.

Q.3 Name the following 6

1 Who am I ?
I don't have true nucleus, cell organelles or plasma membrane.

Ans Prokaryote

2 Who am I ?
I am green, but don't have organs.

Ans Algae

3 Who am I ?
I reproduce mainly by cell division.

Ans Bacteria

4 Who am I ?
I have nucleus and membrane bound organelles.

Ans Eukaryote

5 Who am I ?
I can produce my replica.

Ans Virus

6 Who am I ?
I live on decaying organic matter.

Ans Fungus

Q.4 **Answer in one sentence** **2**

1 Arrange the following in ascending order of size. (Bacteria, Fungi, Viruses, Algae)

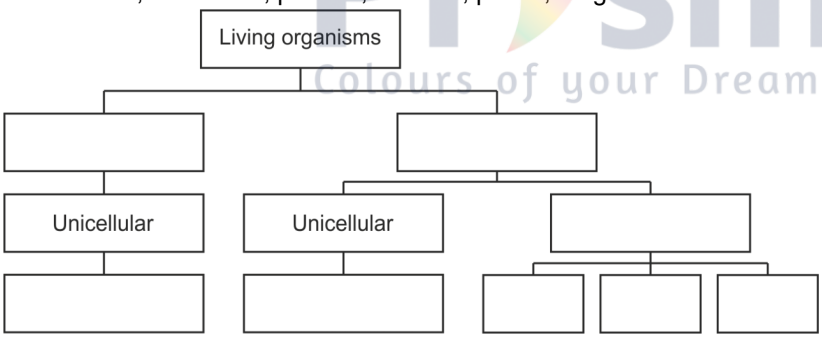
Ans Viruses → Bacteria → Algae → Fungi

2 Which living organisms are included in the Kingdom Monera?

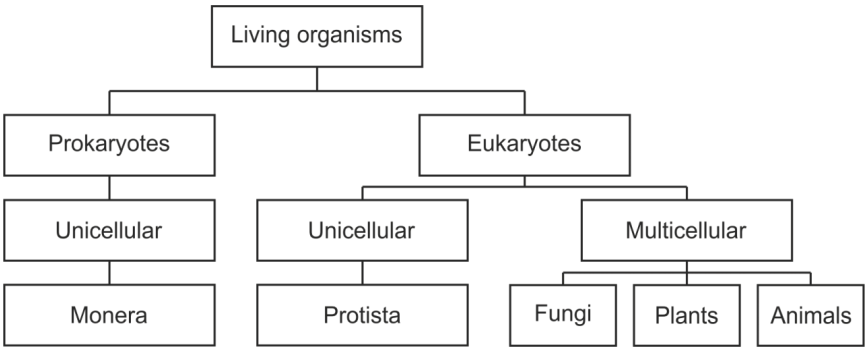
Ans All types of bacteria and blue green algae are included in the kingdom Monera.

Q.5 **Activity based question (3 mks)** **3**

1 Complete the five kingdom method of classification using living organisms, prokaryotes, eukaryotes, multicellular, unicellular, protista, animals, plants, fungi.



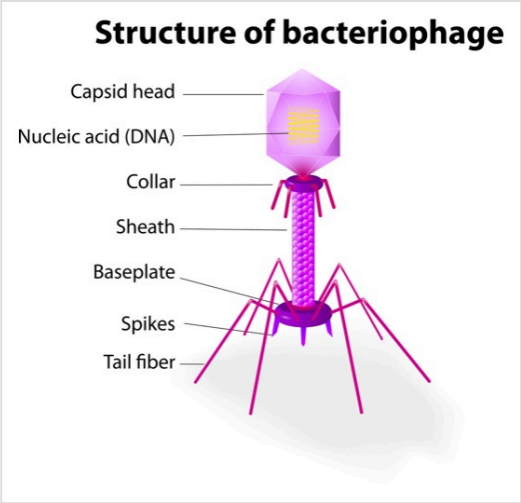
Ans



Q.6 **Draw / Label the diagram** **6**

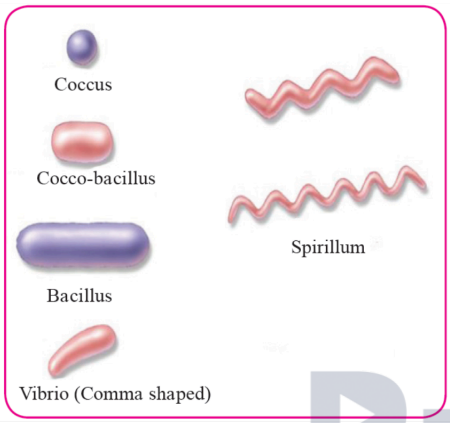
1 Bacteriophage

Ans



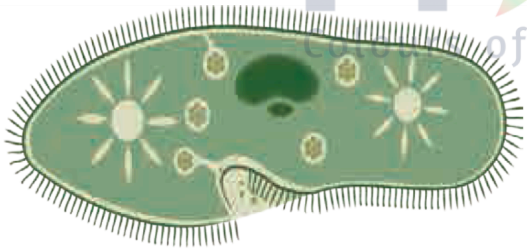
2 Different types of bacteria.

Ans



3 Paramoecium

Ans



Q.7 **Answer the following** **15**

1 Write the characteristics of viruses.

Ans i. Viruses are extremely small with size ranging from 10 nm to 100 nm and can be seen only with electron microscope.
ii. They are found in the form of independent particles.
iii. Virus is a long molecule of DNA (Deoxyribo Nuclei Acid) or RNA (Ribo Nucleic Acid) covered by a protein coat.
iv. Viruses survive only in living plant or animal cells and produce their own proteins with the help of host cell and create their numerous replica.
They then destroy the host cell and become free. These free viruses again infect new cells.
v. Viruses can cause many diseases to plant and animals.

2 State the merits of Whittaker's method of classification.

Ans i. R.H. Whittaker proposed a five kingdom classification. The kingdoms were named as Monera, Protista, Fungi, Plantae and Animalia.
ii. The merits of this classification are:
a. The main criteria used by Whittaker included cell structure, mode of nutrition, thallus organization, reproduction and phylogenetic relationship.
b. Unicellular and Multicellular organisms were grouped separately.

c. All prokaryotic organisms were grouped together under kingdom Monera and the unicellular eukaryotic organisms were placed in kingdom Protista.
d. All bacteria are included in kingdom Monera.
e. Autotrophs and Heterotrophs were placed separately.

3 Which living organisms are included in the kingdom monera?

Ans i. They reproduce by simple binary fission.
ii. Streptococcus pneumoniae, Clostridium titani, Treponema pallidum, Vibrio cholerae, Legionella pneumophila, Salmonella typhi, Clostridium botulinum, Staphylococcus aureus, etc.

4 Explain the nutrition in fungi.

Ans i. Fungi are non-green and eukaryotic in nature.
ii. They are heterotrophic organisms i.e. they cannot prepare their own food.
iii. They are found on decaying organic matter and dead bodies of plants and animals.
iv. Fungi shows saprophytic mode of nutrition i.e. they derive nutrition from dead organisms.
v. For example: Mushrooms grow on decaying organic matter.

5 Use Whittaker method to classify bacteria, protozoa, fungi, algae, prokaryotic and eukaryotic microbes.

Ans