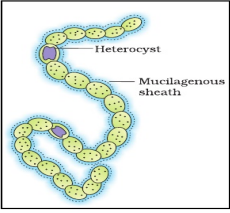


**PREVIOUS QUESTIONS XI 2012-2024 : Chapter 1-Biological Classification**

**1Mark Questions**

1. 'Diatoms, the chief producers in the oceans, are useful to us even after their death.' Evaluate the statement. 2012 March
2. Based on the relationship fill in the blanks.  
Euglena : protista  
Mycoplasma : \_\_\_\_\_ 2012 Imp.
3. Suggest the correct scientific term for the following:  
Algal partner in lichens 2012 Imp.
4. Botany teacher brought a diseased plant in the classroom. Manoj identified the pathogen as a virus. Can you list any two symptoms of disease, that helped him to identify the pathogen. 2013 March
5. Observe the relationship between the first pair and fill up the blanks using appropriate terms:
  - a) Carolus Linnaeus - Two kingdom classification  
R H Whittaker - .....
  - b) Thermoacidophiles - Extreme heat  
Halophiles - .....2013 Imp.
6. Identify the statement which is applicable to cyanobacteria.
  - a) Important decomposers
  - b) Form blooms in polluted water
  - c) Presence of prominent nucleus
  - d) Completely lack of a cellwall2014 March
7. Name one word for the following:
  - a) Symbiotic association of algae and fungi
  - b) Viruses that attack bacteria2014 Imp.
8. The class of fungi known as imperfect fungi is .....
  - a) Ascomycetes
  - b) Phycomycetes
  - c) Deuteromycetes
  - d) Basidiomycetes2015 March
9. Observe the relationship between the first pair and fill in the blanks using appropriate terms:  
Bacillus Bacteria - Rod shaped  
Coccus Bacteria - ..... 2015 Imp.
10. The name 'Virus' that means venom or poisonous fluid was given by .....
  - a) Pasteur
  - b) Ivanowsky
  - c) Beijerinck
  - d) Stanley2016 March
11. Cell wall deposits of diatoms are called diatomaceous earth. Write any two uses of it. 2016 Imp.
12. Read the following statements and select the correct statements from the given choices.
  - i) Methanogens are present in the guts of ruminant animals.
  - ii) Mycoplasma has distinct cell wall.
  - iii) Viroids are infectious naked DNA molecules.
  - iv) Algal component of lichen is phycobiont.
  - a) (ii) and (iii)
  - b) (i) and (iv)
  - c) (i) and (iii)
  - d) (ii) and (iv)2017 March
13. Identify the kingdom based on the clues given below.
  - a) Organisms are Eukaryotic.
  - b) Their cell wall is made up of chitin.2017 Imp.
14. Observe the figure given below and identify the blue green alga.
 



The diagram shows a single filament of a blue-green alga. It consists of a series of oval-shaped cells. One cell is significantly larger and darker than the others, labeled as a 'Heterocyst'. The entire filament is surrounded by a thick, wavy, light-colored layer labeled as a 'Mucilaginous sheath'.

2018 Model
15. Fill in the blank.  
In Anabaena specialized cells called .... help in nitrogen fixation. 2018 March
16. Which one of the following features is applicable to bacteriophages?
  - i) a) and b)
  - ii) b) and c)
  - iii) a) and c)
  - iv) All of the above2018 Imp.

**PREVIOUS QUESTIONS XI 2012-2024 : Chapter 1-Biological Classification**

17. \_\_\_\_\_ are the smallest living cells.

*2018 2nd term*

18. Characteristic features of a protist are given below. Identify the group of protist.

- (a) Saprophytic protist
- (b) Under suitable condition, they form an aggregation called plasmodium.

*2019 Model*

19. Observe the relationship between the first two terms and fill in the blank.

- a) Mushroom : Agaricus
- b) Bread mould : .....

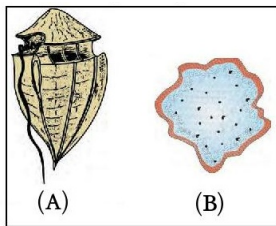
*2019 March*

20. Which among the following is an example for flagellated protozoan?

- (a) Amoeba
- (b) Trypanosoma
- (c) Paramecium
- (d) Plasmodium

*2019 Imp.*

21. Observe the given figures A and B. Identify the protista class in which these organisms belong.



*2019 1st term*

22. Name the agent which cause Bovine Spongiform Encephalopathy (mad cow disease).

*2019 1st term*

23. Observe the relationship between the first pair and fill up the blanks using appropriate terms.

- a) Rod shaped bacteria: bacillus;  
Comma shaped bacteria : .....
- b) Trypanosoma : flagellated protozoan;  
Paramecium : .....

*2019 2nd term*

24. Which among the following produce biogas from the dung of ruminant animals ?

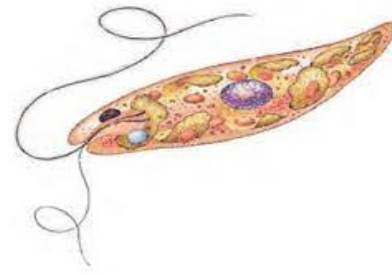
- (a) Thermoacidophiles
- (b) Cyanobacteria
- (c) Methanogens
- (d) Halophiles

*2020 Model*

25. Observe the relation, and fill up the blank.  
Trypanosoma : Flagellated Protozoan  
.....: Ciliated protozoan

*2020 Model*

26. Observe the figure given below. Name the organism.



*2020 March*

27. Fill in the blank.

Archaeobacteria which can survive in hot springs are called \_\_\_\_\_

*2020 Imp.*

28. Network of hyphae in fungi is called \_\_\_\_\_

*2021 Model*

29. Choose the correct answer from the following.

AIDS in human being is caused by \_\_\_\_\_.

- (a) Bacterium
- (b) Fungus
- (c) Virus
- (d) Mycoplasma

*2021 Model*

30. Observe the first pair and fill in the blank.

Lichen: association with fungi and algae.

\_\_\_\_\_ : association of fungi with roots of higher plants.

*2021 Sept*

31. Name the unicellular fungus used for making bread.

*2021 Sept*

32. Observe the first pair and fill in the blank.

Monera : Prokaryote

Protista : \_\_\_\_\_

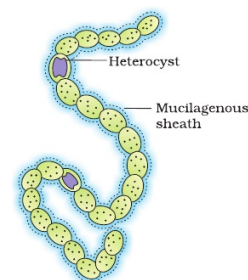
*2021 Imp.*

33. Choose the correct pair.

- (i) Lichen : association of Fungi and root of higher plants
- (ii) Saprophytes : absorb organic matter from dead substrates
- (iii) Mycorrhiza : association of Fungi and algae

*2021 Imp.*

34. Observe the figure given below and identify the blue green alga.



*2022 2nd term*

35. Observe the relationship between the first two terms and fill in the blank.

Mushroom : Agaricus

Bread mould: \_\_\_\_\_

*2023 Model*

**PREVIOUS QUESTIONS XI 2012-2024 : Chapter 1-Biological Classification**

36. Fill in the blank:

The algal component in lichen is known as \_\_\_\_\_.

*2023 March*

37. Which of these organisms cause 'Mad Cow Disease' in cattles ?

- (a) Virus      (b) Viroids  
(c) Prions      (d) Bacteria

*2023 Imp*

38. Select the correct pair.

*2023 2nd term*

A	B
Methanogen	Survive without oxygen
Halophiles	Salty areas
Thermoacidophiles	Marshy areas
Mycoplasma	Hot springs

2. R.H.Whittaker classified organisms into five kingdoms based on certain criteria. Write any four criteria.

*2017 2nd term*

3. Some organisms show associations which are mutually benefited.

- a) Which are the components of Lichens?  
b) What is the ecological significance of lichens?

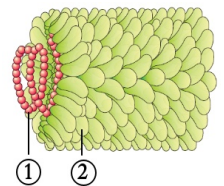
*2018 2nd term*

4. Dead remains of diatoms are known as 'diatomaceous earth'. Write down two uses of 'diatomaceous earth'

*2019 1st term*

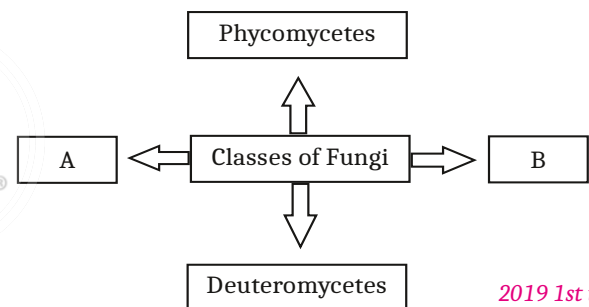
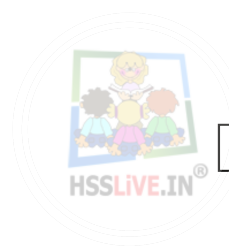
5. Observe the figure .

- a) Identify the organism.  
b) Mark the parts labelled as 1 and 2.



*2019 1st term*

6. Identify the two classes of fungi marked as A and B.



*2019 1st term*

7. What is the role of fungus in mycorrhiza?

*2020 Model*

8. Define diatomaceous earth. Mention any one use of diatomaceous earth.

*2022 Model*

9. Define Mycorrhiza. How is Mycorrhizal association helpful to plants ?

*2022 June*

10. Write any two uses of Bacteria.

*2022 June*

11. Bacteria are classified into different types based on their shape. Write the name and shape of each of them.

*2022 Imp*

12. a) Define prions.

b) Name a disease caused by prions.

*2022 2nd term*

13. Cell wall deposits of diatoms are called diatomaceous earth.

a) Write two uses of it.

b) Name the group in which diatoms belong to.

*2022 2nd term*

**2 Marks Questions**

1. The symbiotic association of fungi with roots of higher plants is called mycorrhizae. How is mycorrhizal association helpful to plants?

*2014 Imp.*

**PREVIOUS QUESTIONS XI 2012-2024 : Chapter1-Biological Classification**

14. Diatoms, the chief producers in the ocean are useful in many ways. Evaluate the statement.

*2023 Model*

15. Match the following:

A	B
Amoeboid Protozoans	Paramoecium
Flagellated Protozoans	Entamoeba
Ciliated Protozoans	Plasmodium
Sporozoans	Trypanosoma

*2023 March*

16. Match the following:

A	B
Amoeboid Protozoans	Paramoecium
Flagellated Protozoans	Plasmodium
Ciliated Protozoans	Entamoeba
Sporozoans	Trypanosoma

*2023 Imp*

17. Write two characteristic features of Euglenoids

*2023 2nd term*

18. Cell wall deposits of diatoms are called diatomaceous earth. Write any two uses of it.

*2024 Model*

**3 Marks Questions**

- Who proposed five kingdom classification? Write down the criteria for this classification. (5 criteria). *2019 1st term*
- Diatoms are the chief producers in the ocean.
  - Name the group to which diatoms belong.
  - What is diatomaceous earth?
  - Write two uses of diatomaceous earth. *2023 2nd term*

## Answer key

### 1 Mark Questions

1. Diatomaceous earth is used in polishing, filtration of oils and syrups
2. Monera
3. Phycobiont
4. Mosaic formation/leaf rolling and curling/ yellowing and vein clearing/ dwarfing and stunted growth(**any two**)
5. a) Five kingdom classification  
b) Extreme salty areas
6. b) Form blooms in polluted water
7. a) Lichen                      b) Bacteriophage
8. c) Deuteromycetes
9. Spherical
10. c) Beijerinck
11. Diatomaceous earth is used in polishing, filtration of oils and syrups
12. b) (i) and (iv)
13. Kingdom Fungi
14. Nostoc
15. Heterocyst
16. iv) All of the above
17. Mycoplasma
18. Slime mould
19. Rhizopus
20. (b) Trypanosoma
21. (A) Dinoflagellates                      (B) Slime mould
22. Prions
23. a) Vibrium/Vibrio                      b) Ciliated protozoans
24. (c) Methanogens
25. Paramecium
26. Euglena
27. Thermoacidophiles
28. Mycelium
29. (c) Virus
30. Mycorrhiza
31. Yeast
32. Eukaryote
33. (ii) Saprophytes : absorb organic matter from dead substrates
34. Nostoc
35. Rhizopus
36. Phycobiont
37. (c) Prions
38. 

Halophiles	Salty areas
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### 2 Marks Questions

1. Fungi help to absorb water and nutrients from large areas of soil
2. Cell structure, body organisation, mode of nutrition, reproduction, phylogenetic-relationships. (**any four**)
3. a) Phycobiont and Mycobiont/Algae and Fungi  
b) Lichens are very good pollution indicators – they do not grow in polluted areas.
4. Polishing, filtration of oils and syrups
5. a) Tobacco Mosaic Virus (TMV)  
b) 1. RNA                      2. Capsid
6. A. Ascomycetes                      B. Basidiomycetes
7. Help to absorb water and nutrients from large areas of soil
8. Diatoms have left behind large amount of cell wall deposits in their habitat; this accumulation over billions of years is referred to as 'diatomaceous earth'.  
It is used in polishing, filtration of oils and syrups. (**any one use**)
9. Symbiotic association of fungi with roots of higher plants.  
Fungi help to absorb water and nutrients from large areas of soil
10. Helpful in making curd from milk, production of antibiotics, fixing nitrogen in legume roots (**any two**)
11. Spherical - Coccus (pl.: cocci), the rod-shaped - Bacillus (pl.: bacilli), the comma-shaped - Vibrium (pl.: vibrio) and the spiral - Spirillum (pl.: spirilla)
12. a) Prions are abnormally folded protein similar in size to viruses.  
b) Bovine Spongiform Encephalopathy/BSE/ Mad cow disease in cattle/Cr-Jacob disease (CJD) in humans
13. a) Polishing, filtration of oils and syrups.  
b) Chrysophytes
14. Diatoms have left behind large amount of cell wall deposits in their habitat; this accumulation over billions of years is referred to as 'diatomaceous earth'.  
It is used in polishing, filtration of oils and syrups

**Answer key**

15.

A	B
Amoeboid Protozoans	Entamoeba
Flagellated Protozoans	Trypanosoma
Ciliated Protozoans	Paramecium
Sporozoans	Plasmodium

16.

A	B
Amoeboid Protozoans	Entamoeba
Flagellated Protozoans	Trypanosoma
Ciliated Protozoans	Paramecium
Sporozoans	Plasmodium

17. Majority of them are fresh water organisms found in stagnant water/Instead of a cell wall, they have a protein rich layer called pellicle which makes their body flexible/They have two flagella, a short and a long one/Though they are photosynthetic in the presence of sunlight, when deprived of sunlight they behave like heterotrophs by preying on other smaller organisms/pigments of euglenoids are identical to those present in higher plants (**any two**)

18. Polishing, filtration of oils and syrups.

**3 Marks Questions**

- R.H. Whittaker  
Cell structure, body organisation, mode of nutrition, reproduction, phylogenetic-relationships.
- Chrysophytes
  - Cell wall deposits of diatoms over billions of years is referred to as 'diatomaceous earth'.
  - Polishing, filtration of oils and syrups.

