

QB365 Question Bank Software

11th Biology CBSE case study questions for Biological Classification- 2024

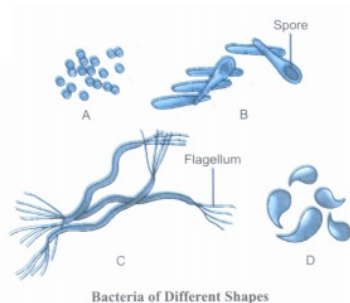
11th Standard

Biology

SECTION - A

4 x 4 = 16

1)



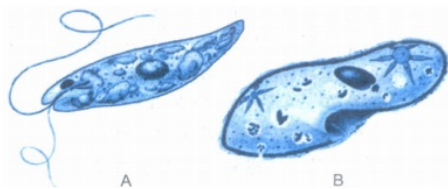
- (a) Name the four groups of bacteria (A-D) shown in the figure given above.
(b) Name one disease caused by bacteria (i) in plants and (ii) in human beings, respectively.

Answer : (a) A - Cocci, B - Bacilli, C - Spirilli, D - Vibrio

(b) (i) Citruscanker

(ii) Cholera/Typhoid/Tetanus

2)



Two organisms of Kingdom Protista are shown above.

(a) Identify the organisms (A) and (B) and assign them to their respective phyla.

(b) Write any two differences between them.

Answer : (a) A - Euglena - It belongs to Euglenophyta.

B - Paramecium - It belongs to Protozoa.

(b) Differences

Euglena	Paramecium
It has photosynthetic pigments similar to green plants.	It does not have any photosynthetic pigment.
It has flagella for locomotion.	It has cilia for locomotion.

3) Read the following passage and answer the questions that follows.

The members of kingdom - Fungi are eukaryotic, heterotrophic and achlorophyllous. They are either unicellular or multicellular forms that are made up of hyphae. The network of hyphae forms the mycelium. These cell wall exhibiting organisms reproduce by both sexual and asexual modes. On the basis of spore formation, fungi are classified as Phycomycetes, Ascomycetes, Basidiomycetes and Deuteromycetes. Based on the mode of nutrition, fungi are classified as saprophytic and parasitic forms. These are also found in symbiotic association with plants.

(i) Fungal cell wall is composed of

(a) cellulose and pectins

(b) chitin and glycoproteins

(c) chitin, glycoproteins and glucans

(d) pectins, chitin and cellulose

(ii) Club-fungi is

(a) Phycomycetes

(b) Deuteromycetes

Phycomycetes Deuteromycetes

(c) (d)

Basidiomycetes Ascomycetes

(iii) The spores that help fungi to undergo asexual reproduction during favourable conditions is

(a) (b)

zoospores aplanospores

(c) (d) All of

conidia these

(iv) Sexual reproduction in Ascomycetes occurs through

(a) **somatogamy of zoospores**

(b) **isogamy of zoospores**

(c) **anisogamy of ascospores**

(d) **Both (b) and (c)**

(v) **Assertion (A)** : Mycelium in Deuteromycetes is aseptate.

Reason (R) : Phycomycetes possess septate and branched mycelium.

(a) **Both A and R are true and R is the correct explanation of A**

(b) **Both A and R are true, but R is not the correct explanation of A**

(c) **A is true, but R is false**

(d) **Both A and R are false**

Answer : (i) (c)

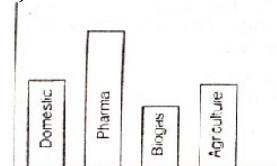
(ii) (c)

(iii) (d)

(iv) (c)

(v) (d)

4) The histogram given below shows the use of bacteria in different fields of our lives.



Study the graph and answer the following questions.

(i) Give one example where bacteria can be used in household purposes.

(ii) Bacteria are species with both harm and benefits. Comment.

(iii) Why is bar C the least when compared to others ?

(iv) Write the importance of cyanobacteria in agriculture.

Answer : (i) Lactobacillus is used to convert milk to curd.

(ii) Bacteria can be both beneficial for us and cause harm.

Benefits include

(a) Certain bacteria like Methanobacterium are used in production of biogas (a cheaper fuel).

(b) Bacteria like Nostoc, prevent soil erosion, thus used in agriculture.

Harmful effects

(a) Bacteria as causative agents of many disease like pneumonia, typhoid.

(b) Some saprophytic bacteria spoil our food.

(iii) Bar 'C' represents biogas production. It is low since biogas production is only done in rural areas where cattle dung is available.

(iv) Importance of cyanobacteria are

(a) Anabaena is capable of fixing atmospheric nitrogen. Hence, is used by farmers in fields.

(b) Nostoc secretes acidic chemicals that counteract the alkaline nature of user soil.