

SARASWATI



HEAD OFFICE

208, CD, LOCAL SHOPPING CENTER
AGGARWAL SHOPPING PLAZA, PITAMPURA

BRANCH-1

AYODHYA CHOWK
SEC – 3 , ROHINI

BRANCH-2

DC CHOWK
SEC – 9, ROHINI

9TH & 10TH MATHS / SCIENCE

11TH & 12TH – PHYSICS / CHEMISTRY / MATHS / BIOLOGY

EXCLUSIVE BATCH FOR NEET / JEE ASPIRANTS

Ph no. 9696 500 500 / 9696 400 400

BIOLOGY

CHAPTER-2 BIOLOGICAL CLASSIFICATION

(1 MARK)

Q1. In the five kingdom system of Whittaker, how many kingdoms are eukaryotes?

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Q2. In the five-kingdom classification of Whittaker's some acellular organisms are not included. What are these organisms?

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Q3. What are viroids?

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Q4. What are component of lichens?

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Q5. Fill in the blanks. (A) and (B). Classification proposed by Whittakar includes:

Monera, (A), Fungi, (B), and Animalia.

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Q6. Why were bacteria cyanobacteria and fungi included in plant kingdom, in the earlier classification systems?

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Q7. Name the substance present in the cell wall of diatoms. What makes them hard and indestructible?

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Q8. Select one of these which is not a eukaryote:

Euglena, Spirogyra, Nostoc, Amoeba.

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Q9. Why are Plasmodium (malarial parasite)-like protozoans called sporozoans?

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Q10. What is the basic major difference between conidia and sporangiospores?

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Q11. How do lichens act as pollution indicators?

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(2 Mark)

Q12. Plants are autotrophic. Can you think of some plants that are partially heterotrophic?

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Q13. How is the five-kingdom classification advantageous over the two kingdom classification?

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Q14. What is the principle underlying the use of cyanobacteria in agricultural fields for crop improvement?

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Q15. Polluted water bodies have usually very high abundance of plants like Nostoc and Oscillatoria. Give reasons.

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Q16. Are chemosynthetic bacteria autotrophic or heterotrophic?

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Q17.What is the nature of cell wall in diatoms?

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Q18.What is bioluminescence? Give an example?

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Q19. List out the major groups of protozoans.

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Q20. Define mycorrhiza. How is it beneficial to the organisms?

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Q21.Why are viruses called obligate intracellular parasites?

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Q22. How are viroids different from viruses?

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Q23.What do the terms phycobiont and mycobiont signify?

(3 Mark)

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Q24.Who proposed the five kingdom classification? Name the five Kingdoms.

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Q25.State two economically important uses of :

(a) Heterotrophic Bacteria.

(b) Archaeobacteria

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Q26. What are the characteristic feature of euglenoids?

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Q27.find out what do the terms 'algal bloom' and 'red tides' signify.

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Q28. Neurospora : an ascomycetes fungus has been used as a biological tool to understand the mechanism of plant genetics much in the same way as Drosophila has been used to study animal genetics. What makes Neurospora so important as a genetic tool?

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Q29. There is a myth that immediately after heavy rains in forest, mushrooms appear in large number and make a very large ring or circle, which may be several metres in diameter. These are called as 'Fairy rings. Can you explain this myth of fairy rings in biological terms?

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Q30 .Why are Deuteromycetes commonly known as imperfect fungi? Mention two characteristic of mycelium of such fungi.

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(5 Mark)

Q31.Biological classification is a dynamic and ever evolving phenomenon which keeps changing with our understanding of life forms. Justify the statement taking any two examples.

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Q36. Though bacteria have the simplest structure, they are very complex in behaviour. Bacteria as a group, show the extensive metabolic diversity.

- (a) Give two points to substantiate that bacteria show extensive metabolic diversity.
- (b) Which of the two- autotrophs or heterotrophs - are abundant in nature?
- (c) What value do the heterotrophic bacteria indicate to us?

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Q37 The boundaries of Kingdom Protista are not well- defined. This kingdom forms a link with other kingdoms of Fungi, Plantae and Animalia.

- (a) Why is Kingdom Protista considered an artificial assemblage of organisms?
- (b) How do slime moulds resemble fungi on one hand and Amoeba-like organisms on the other?
- (c) What value is shown by slime moulds?

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Q38. Fungi are saprotrophs, parasites and symbionts. They show a great diversity in morphology and habitat; in some the fruiting bodies are macroscopic, while many others are microscopic.

- (a) Give two examples where fungi are found as symbionts.
- (b) What value is learnt from the symbionts?

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Q39. Since the dawn of civilisation, there have been many attempts to classify living organisms; but it was done instinctively, not using scientific criteria, but based on the use of organisms for human welfare. Aristotle was the first to use scientific basis for classification.

- (a) What is the need for classifying organisms?
- (b) How did Aristotle classify (i) plants and (ii) animals?

(c) What is two-kingdom classification? Who proposed it?

(d) Indicate the value learnt from classification.

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Q40. The two-kingdom classification propose by Linnaeus that was used for long starte undergoing changes. Three, four am five-kingdom classifications have be developed.

(a) Why was the two-kingdoms found to insufficient?

(b) What value is shown by these changes?

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