

# 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

9<sup>TH</sup> & 10<sup>TH</sup> MATHS / SCIENCE

11<sup>TH</sup> & 12<sup>TH</sup> – PHYSICS / CHEMISTRY / MATHS / BIOLOGY

EXCLUSIVE BATCH FOR NEET / JEE ASPIRANTS

Ph. no. 9696 500 500 / 9696 400 400

## CHAPTER-1

### THE LIVING WORLD

#### (1 MARK)

Q1. Linnaeus is considered as father of taxonomy. Name two other botanists known for their contribution to the field of plant taxonomy?

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Q2. What does ICZN stand for?

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Q3. Expand ICBN

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Q4. Name the person who proposed the system of binomial nomenclature.

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Q5. Rearrange the following taxonomic categories in a proper sequence from smaller taxon to higher one:

Class, Genus, Phylum, Order, Species, Kingdom, Family

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Q6. Fill in the blanks (A) and (B):

Species → (A) → Family → Order → (B) → Phylum.

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Q7. Name the highest category in the hierarchical system of classification.

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Q8. Given below is the scientific name of Mango. Identify the correctly written name.

(i) Mangifera Indica

(ii) Mangifera indica

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Q9. Brinjal and potato belong to the same genus. *Solanum*, but to two different species. What defines them as separate species?

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**(2 Mark)**

Q10. Do non-living things exhibit growth? Justify your answer.

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Q11. Why are living organisms classified?

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Q12. Why are the classification systems changing every now and then?

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Q13. In a given habitat we have 20 plant species and 20 animal species. Should we call this as 'diversity' or 'biodiversity'? Justify your answer.

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Q14. What are the rules of binomial nomenclature?

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Q15. What do you mean by taxonomic hierarchy? Give classification of mango upto species.

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Q16. Genus Panthera includes leo, pardus, tigris etc. What does leo, pardus and tigris refer to?

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Q17. How is a key helpful in the identification and classification of an organism?

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Q18. Which is the largest botanical garden in the world? Name a few well known botanical gardens in India.

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Q19. Plants and animals grow by mitotic cell divisions. What differences do they exhibit in their growth?

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Q20. Amoeba multiplies by mitotic cell division. Is this phenomenon growth or reproduction? Explain

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Q21. A plant may have different names in different regions of the country or world. How do botanists solve this problem?

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**(3 Mark)**

Q22. What is the similarity and dissimilarity between "whole moong dal" and "broken moong dal" in terms of respiration and growth? Based on these parameters classify them into living or non-living?

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Q23. A ball of snow when rolled over snow increases in mass, volume and size. Is this comparable to growth as seen in living organisms? Why?

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Q24. Properties of cell organelles are not always found in the molecular constituents of cell organelles. Justify.

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Q25. International Code of Botanical Nomenclature (ICBN) has provided a code for classification of plants. Give hierarchy of units of classification botanists follow while classifying plants and mention different 'Suffixes' used for the units.

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Q26. What is the difference between flora, fauna and vegetation? Eichhornia crassipes is called as an exotic species while Rauwolfia serpentina is an endemic species in India. What do these terms exotic and endemic refer to?

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Q27. A student of taxonomy was puzzled when told by his professor to look for a key to identify a plant. He went to his friend to clarify what 'key' the professor was referring to? What would the friend explain to him?

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Q28. *Brassica campestris* Linn.

(a) Give the common name of the plant.

(b) What do the first two parts of the name denote?

(c) Why are they written in italics?

(d) What is the meaning of Linn. Written at the end of the name?







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Q42. Taxonomy is not something new, human beings are interested in knowing more and more about the various kinds of organisms, especially with reference to their own use; hence the earliest classifications were based on the uses of various organisms.

(a) What is systematics?

(b) What is the scope of systematics as of today?

(c) What forms the basis of modern taxonomy?

(d) Indicate the value shown by this branch of biology.

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