

UNIT I: DIVERSITY IN THE LIVING WORLD

1. THE LIVING WORLD

1 OMQ + 1 VSAQ [1 M + 2M = 3 M]

ROOT POINTS

1. **Zoology** (Animal Science) deals with the study of various aspects of different kinds of Animals. The **living world** is simply the world around us. It comprises all living creatures, plants and micro organisms.
2. Main contents of this chapter are i) Diversity in the living world ii) Taxonomic categories.
3. **Biodiversity**: Bio means life; diversity means variety. So biodiversity refers to variety of life on earth. It includes species diversity, genetic diversity and ecosystem diversity.
4. Biodiversity is the variety of life of all living organisms, their genetic makeup, and the ecosystems they inhabit. [VSAQ]
5. The process of classification of organisms is called **Taxonomy**. [FIB]
6. **Basic processes in taxonomy are** Characterisation, Identification, Classification and Nomenclature. [VSAQ]
7. The first process in taxonomy is **Characterisation**. [MCQ]
8. **ICZN** stands for **International Code of Zoological Nomenclature**.
9. The book "**Systema Naturae**" was written by **Linnaeus**. [FIB]
10. **Systematics** is the scientific study of different kinds of organisms, their diversity and relationships.
11. **Latin word 'Systema'** means **systematic arrangement of organisms**. [VSAQ]
12. **Linnaeus** proposed binomial **nomenclature**. [OWQ]
13. **Binomial nomenclature** is the system of scientific naming of organisms in two word format.
14. The **first word** in binomial nomenclature represents **Genus**. [FIB]
15. The **second word** in Binomial nomenclature represents **species**. [MCQ]
16. In binomial nomenclature, the word denoting the **genus** starts with a **Capital letter**. [FIB]
17. **Biological names** are printed in **Italics**. [MCQ]
18. Scientific name of the human beings is **Homo sapiens**. [MCQ]
19. The scientific name of lion is **Panthera leo**. [FIB]

20. **Classification** is the grouping of similar organisms.
21. **Taxon** is the name of a category or rank of organisms in the scientific classification. [VSAQ]
22. **Hierarchy of classification:**
(i) Species (ii) Genus (iii) Family (iv) Order (v) Class (vi) Phylum (vii) Kingdom
23. **Species** is the **basic unit** of classification.
24. The **lowest taxonomic category** is **species**. [MCQ]
25. The group of **individual organisms** with **fundamental similarities** is called **Species**. [FIB]
26. **Genus** comprises a group of **related species**. [OWQ]
27. **Generic name** of **tiger** is **Panthera**. [OWQ]
28. **Housefly** belongs to the **family Muscidae**. [MCQ]
29. **Immediate higher category of “family”** in the taxonomic hierarchy is **Order**. [OWQ]
30. **Class** taxonomic category includes **related orders**. [OWQ]
31. The **highest category** in taxonomic hierarchy is **Kingdom**. [OWQ]
32. **Phylogenetic system of classification** is based on **evolutionary relationships**. [2009 PMT]
33. The **Earth Summit** held in **Rio de Janiero** in 1992 was called for **conservation** of **biodiversity** and **sustainable utilisation of its benefits**.
[NEET 2019, Phase II 2023]
34. **Housefly** belongs to family **Muscidae**. [NEET 2021, Phase II 2023]
35. Taxonomical Hierarchy : [NEET 2022]
Kingdom → **Phylum** → **Class** → **Order** → **Family** → **Genus** → **Species**.
36. **List of endangered species** was released by **IUCN**. [NEET 2024]
37. **Reductionist biology** refers to **physico-chemical approach** to study and **understand living organisms**. [NEET 2025]