

UNIT I: DIVERSITY IN THE LIVING WORLD

1. THE LIVING WORLD

1 VSAQ [2M]

ROOT POINTS

1. **Botany** is the scientific study of plants.
2. The **living World** consists of all kinds of organisms ranging from very small microscopic algae, fungi to gaint sized coniferous redwood trees.
3. All living organisms exhibit **birth, growth, reproduction, ability to sense the environment, self-replication, metabolism, evolution, ageing and mortality**.
4. The diversity in the life forms of various organisms is called **Bio-diversity**.
5. **Taxonomy** deals with **identification, nomenclature and classification** of organisms.
6. **ICBN** stands for **I**nternational **C**ode for **B**otanical **N**omenclature
7. Based on the resemblances and differences, each organism is identified and assigned a correct scientific name comprising two words; **generic name** (Genus) and **specific name** (Species).
8. The taxonomic studies of plants and animals are useful for **agriculture, forestry, industry** and for knowing our bio-resources and biodiversity.
9. **Live specimens** of plants are found in **botanical gardens**.
10. **Herbaria and museums** contain dead but **preserved specimens**.
11. **Taxon** is a group of plants or animals with similar traits of any rank. [NEET-1992]
12. **Botanical gardens** have collection of living plants for reference. [NEET-2013]
13. Definition of Biological species was given by **Ernst Mayr**. [NEET-2016]
14. The label of herbarium sheet does not carry information on
15. The **correctly written scientific name of Mango** which was first described by **Carolus Linnaeus is Mangifera indica**. [NEET-2019]
16. **List of endangered species** was released by **IUCN**. [NEET 2024]
17. Reductionist biology referts to physico-chemical approach to study and understand living organisms. [NEET 2025]