

# 1. DIVERSITY OF LIVING WORLD

(1 x 2) + (1 x 4) = 6 Marks

## ROOT POINTS

1. **Zoology** (Animal Science) deals with the study of various aspects of different kinds of Animals.
2. **Diversity of Living World (Bio-diversity)** refers to all the diverse plants, animals and micro-organisms present on the Earth.
3. **Taxonomy** deals with identification, nomenclature and classification of organisms.
4. **ICZN** stands for International Code of Zoological Nomenclature.
5. **Classification** is the grouping of similar organisms.
6. **Hierarchy of classification:**  
(i) Kingdom (ii) Phylum (iii) Class (iv) Order (v) Family (vi) Genus (vii) Species
7. **Species** is the **basic unit** of classification.
8. **Trinomial nomenclature:** Naming of an organism with three words, for genus, species and subspecies is called trinomial nomenclature. **Ex:** Homo sapiens sapiens [IPE]
9. **Tautonymy** is the practice of naming the animals in which the generic name and specific name are the same. **Ex:** Naja naja- The Indian cobra. [IPE]
10. **Histology:** Histology is the study of microscopic structure of different tissues. [IPE]
11. **Biogenesis** is a theory of evolution which says 'life begets life' . [IPE]
12. **Protostomia** are eumetazoans in which the blastopore develops into mouth. [IPE]  
**Ex:** Annelida, Arthropoda, Mollusca
13. **Deuterostomia** are eumetazoans in which anus is formed from or near the blastopore. [IPE]  
**Ex:** Echinodermata, Hemichordata, Chordata
14. The '**evil quartet**' refers to 'four major threats' of biodiversity. They are [IPE]  
(i) Habitat loss and fragmentation (ii) Over exploitation.  
(iii) Invasion of Alien species (iv) Co-extinctions
15. **Biodiversity hot spot** is a 'Biogeographic region' with a significant reservoir of biodiversity that is under threat of extinction from humans. [IPE]
16. '**Rivet Popper hypothesis**' explains the consequences that happen when some species are lost in an ecosystem. [IPE]

**FRUITY Qs of IPE****(1 x 2) + (1 x 4) = 6 Marks**

1. What does ICZN stand for?
2. What is biogenesis?
3. What is trinomial nomenclature? Give an example.
4. What is meant by tautonymy? Give two examples.
5. Differentiate between Protostomia and Deuterostomia.
6. Define species richness.
7. Define species. Explain the various aspects of 'species'.
8. What are the reasons for greater biodiversity in the tropics?
9. What is the 'evil quartet'?
10. Explain 'Rivet Popper' hypothesis.