

**CLASS-11**  
**Subject-BIOLOGY**  
**Chapter-THE LIVING WORLD**

**ANSWER KEY**

**SHORT ANSWER TYPE**

1. Herbaria- depository of dry specimens of plant materials.

Taxonomical keys- simple tool to identify plant or animal species, based on similarities and dissimilarities in characters.

Botanical garden- any establishment which grows and cultures plant specimens for educational, aesthetic, research and public viewing. It may also have herbaria in its premises for scientific research.

Systematics- Discipline dealing with diversity of organisms & their comparative & evolutionary relationship. The use of characters present in the living being is utilized for classifying and understanding the evolutionary trends i.e., primitive features and advanced features.

2. CHEMOTAXONOMY- It deals with utilizing the composition of bio chemical substances present in the living beings .the similarities and dissimilarities among the components is used to classify the living beings.

3. PHYLUM- CHORDATA

CLASS -MAMMALIA

ORDER- PRIMATES

FAMILY-HOMINIDAE

GENUS-*Homo*

SPECIES-*sapiens*

4. The basic difference between systematic and taxonomy is that taxonomy is a requisite of systematics. Taxonomy helps in framing the rules for classification by which allows systematic to operate.
5. Species- A group of organisms which can interbreed among themselves. It is the basic unit of classification. It was given by JOHN RAY.

**LONG ANSWER TYPE**

1. Rules Of Binomial Nomenclature-

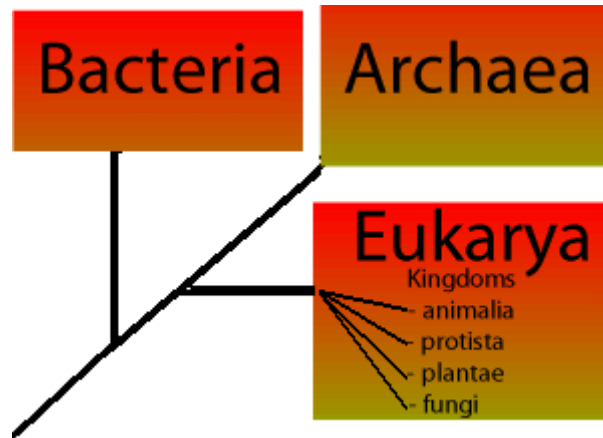
- a) Botanical nomenclature is independent of zoological nomenclature
- b) Priority of publication forms the basics of nomenclature of a taxonomic rank.
- c) Each taxonomic group can bear only one correct name which is in two parts- genus and species name.
- d) Scientific names are always in LATIN.
- e) The rules of nomenclature are RETROACTIVE. the names can be changed given sufficient scientific proof.

2. Utility of MUSEUM- research, education, documentation, conservation, exhibition.

Example of ZOOLOGICAL PARK-Padmaja Naidu Himalayan Zoological park.

3. Three Domains of Life-Living organisms are classified into 3 domains.

1. DOMAIN EUKARYA
2. DOMAIN BACTERIA
3. DOMAIN ARCHAEA



4. Characteristics of living being: the most important aspect is that all living beings have the same structural and functional unit- CELL.

They can perform metabolic functions like respiration, excretion, reproduction etc.

Need for Classification-

- To organise vast groups of living beings into categories and groups to study them.
- It helps in understanding evolutionary trends.
- Facilitate identification and interpretation.