

Topic :- The Living World

- 1 **(a)**
John Ray introduced the term 'Species' in its present sense for the first time. He also published a book *Historia Generalis Plantarum*
- 2 **(c)**
Taxonomy is applicable for both plants and animals.
- 3 **(b)**
Reproduction by fragmentation can be best observed in protonema of mosses, filamentous algae and in the fungi
- 4 **(d)**
In biological taxonomy, a monograph is a comprehensive treatment of a taxon which revises all known species within a group, adds any newly discovered species and collects and synthesises available information on various aspects, eg. ecological association, geographic distributions and morphological variations within the group.
- 5 **(c)**
Taxa is plural of taxon. A taxon represents a grouping in a systematic classification of organism (whatever its rank)
- 6 **(c)**
In hierarchical system of classification phylum and division occupy the same position which are used in classification of animal and plant, respectively
- 7 **(b)**
Taxon is used to represent any rank in taxonomic hierarchy.
- 8 **(c)**
Phylogenetic system involves the classification of plants, according to the evolutionary and genetic affinities. This system of classification was proposed by **Engler** in 1886, by **Hutchinson** in 1926 and by **Tippo** in 1942.
- 9 **(c)**
John Ray (1627-1705) an English biologist described about 18,500 plants in three volumes of his book of *Historia Generalis Plantarum*
- 10 **(d)**
Taxon is used to represent any rank in taxonomic hierarchy, *i.e.*, any level of grouping of organism based on observable feature like dog (species), monocot (class). According to

Simpson, taxon is a group of real organisms recognized at a formal unit at any level in hierarchy

11 **(b)**

The genus *Felis* is used to represent cats

12 **(a)**

Aristotle (384-322 BC) described structure, habit, reproduction and classification of animals in his book *Historia Animalium*. He is regarded as father of zoology and biology

13 **(a)**

The correct labelling place on a herbarium sheet is lower corner of page of RHS and generally its size is 7 × 12 cm

14 **(c)**

The sum total of all the genes present in a crop and its related species constitutes its germplasm. It is ordinarily represented by a collection of various strains and species.

15 **(c)**

Bentham and Hooker did not know the affinities of the families placed under Ordines Anomali and these families were tentatively grouped together.

16 **(d)**

Growth also occur in unicellular organisms by cell division. It can be observed in *vitro* culture by counting the number of cell under microscope

17 **(c)**

Increase in mass and increase in number of individuals are considered the twin characteristic of growth in living organisms

18 **(a)**

Number and type of organisms it includes

19 **(b)**

Binomial system of nomenclature was proposed by Carolus Linnaeus. The system of nomenclature was first issued in *Species Plantarum*. Binomial system approve two name for an organism, i.e., generic and specific name

20 **(c)**

Reproduction.

Regeneration was first observed in *Hydra*. *Planaria* exhibits true regeneration. All these organisms show regeneration as a key feature

ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	A	C	B	D	C	C	B	C	C	D
Q.	11	12	13	14	15	16	17	18	19	20
A.	B	A	A	C	C	D	C	A	B	C

PE