

Topic :- The Living World

- 1 (c)
Binomial nomenclature provide a distinct and proper scientific name to organism, each consisting of two words, first generic name and second specific name, which are derived from Latin language.
Scientific names are printed in italics and hand written name is underlined (zig zag)
- 2 (d)
→ A taxon is the taxonomic group of any rank in the system of classification
- 3 (c)
Species is basic/lowest/smallest unit of taxonomy. According to Earnst Mayr species are group of interbreeding natural populations. Which are reproductively isolated from other such groups. It contains most similar organisms
- 4 (a)
Presence of visceral slits is exhibited by both Chordata and adult Tunicata members
- 5 (b)
The given figure shows flowering plant so, plant belongs to angiosperm. And the leaf venation is reticulate so plant is dicot
- 6 (d)
The discipline of biology which deals with the kind and diversity of all organisms and the existing relationship amongst them is called systematics. The word 'systematics' is derived from Latin word *systema* which means systematic arrangement of organisms. It was first used by **Carolus Linnaeus**. He used **Systema Naturae** as the title of his publication. The scope of systematics was later enlarged to include identification, nomenclature and classification. Systematic takes into account evolutionary relationships between organisms.
- 7 (d)
→ A taxon is the taxonomic group of any rank in the system of classification
- 8 (d)
The concept that monocots are more primitive than dicots was proposed by **Engler and Prantl**.
- 9 (c)
All living organism from prokaryotes to the most complex eukaryotes can respond external stimuli. The non-living things do not have this property at all
- 10 (b)
Present Indian Board of Wildlife is former Central Board of Wildlife is former Central Board of

Wildlife. IBWL concerned with conservation of wildlife and run project to save wildlife and public awareness

11 (c)

A species is a group of organisms that interbreed freely in their natural setting and do not interbreed with other population. In simple words, members of one species are reproductively isolated from members of other species. Species is the real basic unit for understanding taxonomy as well as evolution.

12 (c)

In plant growth occurs by cell division or multiplication continuously in all parts throughout their life span

13 (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

14 (c)

Largest herbarium in the world is herbarium of Royal Botanical Garden, Kew (London) which contains more than 6,00,000 specimens

15 (a)

Taxonomic hierarchy refers to stepwise arrangement of all categories for classification of plants and animals. The categories in taxonomic hierarchy are: Kingdom → Division (Phylum) → Class → Order → Family → Genus → Species

16 (c)

According to phylogenetic system of classification, **primitive characters** are perennial and shrubby nature, solitary flower, numerous stamens multiple or aggregate fruit, while **advanced characters** are compound leaves, zygomorphic flowers, epigynous flowers, fused stamens (dichlamydeous condition) and albuminous seeds.

Thus, the ratio of advanced and primitive characters according to question is 1:1.

17 (a)

Germplasm is a collection seeds/plants which consists diverse alleles of all gene in a crop

18 (b)

Species is group of interbreeding populations according to biological concept of species (proposed by Mayr) and new species is formed from existing species

19 (b)

Binomial system of classification was based on morphological characteristic of an organism

20 (a)

Species, phylum and class are all taxonomic categories, while Asteraceae/Fabaceae are families

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

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