

Topic :- The Living World

- 1 (c)
Taxon is used represent any rank in taxonomic hierarchy.
Royal Botanical Garden is located at (Kew) London in England.
There are about 492 (approximately 504) wildlife sanctuaries and 89 national park in India.
Rest three statement are true
- 2 (b)
Organization or living being starts with atomic, *i.e.*, sub-microscopic level and reaches to cells (microscopic level), then become visible or microscopic with tissue and organs and then reaches to conceptual level
- Atoms → Molecules → Biomolecules → Cells
System organ ← Organ ← Tissues
Organism → Population (conceptual level)
- 3 (c)
Increase in mass and increase in number of individuals are considered the twin characteristic of growth in living organisms
- 4 (c)
The system of classification proposed by **Linnaeus** was artificial. It was mainly based on floral characters.
- 5 (b)
According to Earnt Mayr species are group of interbreeding natural populations that are reproductively isolated from other such groups. It contains most similar organisms
- 6 (a)
Binomial system of nomenclature was proposed by Linnaeus. According to the system an organism is provided a distinct and proper name consisting of two words first generic name and second specific name which present genus and species, respectively
- 7 (d)
When the specific name repeats the unaltered generic name this is called tautonym, e.g., *Malus malus*.
- 8 (c)
Generally size of a herbarium sheet is 30 × 45 cm. Which is slightly small than the size of American herbarium (29 × 41 cm) and label size is 7 × 12
- 9 (b)

The given figure shows flowering plant so, plant belongs to angiosperm. And the leaf venation is reticulate so plant is dicot

10 **(b)**

Mangifera indica, scientific name consists of two words a generic and another specific name. It is binomial system of nomenclature.

The first word denoting the genus start with capital letter, while specific epithets start with small letter

11 **(b)**

New systematics or biosystematics is concept of systematics which brings out taxonomic affinities on the basis of evolutionary, genetic and morphological traits. New systematics brings out cladistics or phylogenetic classification

12 **(d)**

In taxonomical hierarchy similarity increases from highest/largest category to lowest categories. Therefore, division has least similar feature as compared to lower categories (species)

13 **(d)**

Dr. NW Pjrie and Dr. FC Bawden proved that virus are composition of nucleoprotein, *i.e.*, made up of nucleic acid and protein

14 **(a)**

Eukaryotes are assigned the kingdom-Protista, Fungi, Plantae and Animalia, while prokaryotes occupy space only in kingdom-Monera

15 **(d)**

Increase in mass and increase in number of individuals are considered twin characteristics of growth, metabolic reaction can also be demonstrated *in vitro* and consciousness is considered as a determining property of livings

16 **(a)**

Mangifera is the generic name of mango

17 **(b)**

In majority of the higher organisms (plant and animals) reproduction and growth characteristic are mutually exclusive events as increase in the body size of living being do not alters the rate of reproduction or *vice-versa*

18 **(a)**

Binomial system of nomenclature was proposed by Linnaeus. According to the system an organism is provided a distinct and proper name consisting of two words first generic name and second specific name which present genus and species, respectively

19 **(c)**

Taxonomic aid monograph is treatise having complete information about a particular rank level of a taxonomic category. Key or taxonomic key contain list of traits or characters and their alternate which are helpful in taxonomic studies. Catalogue registers the species present in a particular place with brief description

20 **(b)**

Mayr (1942) defined species as an array of actually or potentially interbreeding natural populations that are reproductively isolated from other such groups under natural conditions.

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

PE