

12 chapter - why classification ?

① What are the bases of classification for human beings ?

- (a) shape (b) colour (c) size (d) All of these.

Ans → (d) All of these.

② What Criteria can be used for classifying organism (eg. Dog & cat)

→ size, beauty, speed, sharp incisors & claws that criteria used for classification.

③ _____ are the scientific indicators used for identifying and classifying plants & animals.

- (a) Taxonomic key (b) size (c) speed (d) ~~use~~ dichotomous key.

→ Ans (a) Taxonomic key.

④ _____ key has two possibilities of selection.

- (a) Dichotomous (b) Trichotomous (c) peculiarities (d) classification.

→ Ans (a) Dichotomous.

⑤ _____ is the branch of biology that identifies organism; classifies them on the basis of similarities and differences & them scientifically.

- (a) classification (b) Diversity (c) Nomenclature (d) Taxonomy.

ans → (d) Taxonomy.

⑥ _____ known as father of Taxonomy.

- (a) Aristotle (b) Carl Linnaeus (c) John Ray (d) Theophrastus

→ Ans (b) Carl Linnaeus.

7) According to biological identification, _____ is a group of organisms that can produce fertile offsprings through sexual reproduction.

- (a) genus (b) species (c) families (d) class.

Ans → (b) species.

8) _____ is the highest level of taxonomic hierarchy.

- (a) phylum (b) class (c) order (d) kingdom.

→ Ans. (d) Kingdom.

9) The first word of the scientific name indicates the _____ + second word indicates _____

- (a) genus + species (b) phylum + class.
(c) family + genus (d) phylum + species.

→ Ans (a) genus + species.

10) Find the scientific name of organism

10) _____ are unicellular organisms with a nucleus.

- (a) Bacteria (b) Amoeba (c) fungi (d) plants.

→ Ans (b) Amoeba.

11) _____ are heterotrophic multicellular organisms that have the capacity of locomotion.

- (a) protista (b) plantae (c) fungi (d) animalia

→ Ans - (d) Animalia

12) _____ kingdom include unicellular organisms with the nucleus.

- (a) monera (b) plantae (c) fungi (d) protista

Ans - (d) Protista

① Define - Taxonomy :-
→ Taxonomy is the branch of biology that identifies organisms, classifies them on the basis of similarities and differences and names them scientifically.

② Explain the five kingdom classification ?
→ Five Kingdom -

- (A) Monera
- (B) Protista
- (C) Fungi
- (D) Plantae.
- (E) Animalia.

(A) Kingdom - Monera :-

- These are the unicellular organisms without nucleus.
- movement by flagella.
- Nutrition by Absorptive or photosynthetic.
- eg - Bacteria, cyano bacteria (Blue green algae)

(B) Kingdom - Protista :-

- These are the unicellular organisms with a nucleus.
- Nutrition - photosynthetic or absorptive.
- eg. Amoeba.
- movement by flagella, cilia.

(C) Kingdom - Fungi :-

- These are unicellular / multicellular organisms.
- They are non-motile.
- They are Heterotrophic organisms.
- eg. mushrooms, yeasts moulds.

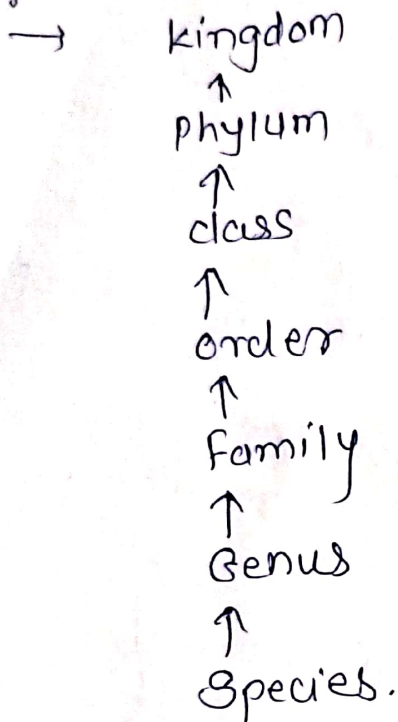
(D) Kingdom Plantae :-

- These are multicellular, organisms.
- Non-motile.
- Nutrition by Autotrophic.
- eg. plants

② Kingdom Animalia :-

- These are multicellular organisms.
- Heterotrophic in nutrition.
- They have the capacity of locomotion.
- eg animals.

Q.3 Explain Taxonomic hierarchy.



- Species is the basic level of classification
- The group of individuals / population with fundamental similarities are referred to as species.
- Organisms of species constitutes the genus.
- Similar genus constitute the family & families join to form the order.
- Various order constitute class.
- Related classes join to form phylum.
- All phyla constitute the kingdom
- Kingdom which is the highest level.