

## **BIOLOGY**

# BOOKS - PRADEEP BIOLOGY (HINGLISH)

#### THE LIVING WORLD

**Ncert Exercises With Answers** 

1. Why are living organisms classified?



**2.** Why are the classification systems changing every now and then?



**Watch Video Solution** 

**3.** What different criteria would you choose to classify people that you meet often?



**4.** What do we learn from identification of individuals and populations?



**Watch Video Solution** 

5. Given below is the scientific name of Mango.

Identify the correctly written name.

Mangifera Indica

Mangifera indica



**6.** Define a taxon. Give some examples of taxa at different hierarchical levels.



**Watch Video Solution** 

**7.** Can you identify the correct sequence of taxonomical categories?

(a) Species ightarrow Order ightarrow Phylum ightarrow

Kingdom

(b) Genus ightarrow Species ightarrow Order ightarrow

Kingdom

(c) Species ightarrow Genus ightarrow Order ightarrow Phylum

**8.** Try to collect all the currently accepted meanings for the word 'species'. Discuss with your teacher the meaning of species in case of higher plants and animals on one hand and bacteria on the other hand.



- 9. Define and understand the following terms:
- (i) Phylum (ii) Class (iii) Family (iv) Order (v)
  Genus



**10.** How is a key helpful in the identification and classification of an organism?



**11.** Illustrate the taxonomical hierarchy with suitable examples of a plant and an animal.



**Watch Video Solution** 

Additional Question Very Short Answer
Questions

1. Define systematics.



2. What is taxonomy?

Watch Video Solution

3. Name the 3 main systems of classification.



**4.** Who proposed binomial nomenclature?



5. What is a type specimen?



**Watch Video Solution** 

**6.** Which system of classification is based on the evolutionary and genetic relationships of organisms?



**Watch Video Solution** 

**7.** Give the number and names of obligatory tuonomic categories.



8. Define a taxon.



Watch Video Solution

9. What does ICZN stand for?



**10.** Why the scientific names are derived from latin or are latinized ?



**Watch Video Solution** 

**11.** Is the interspecific breeding possible? Does it yield sterile or fertile progeny?



12. What is a polytypic genus? Cite one example.



**Watch Video Solution** 

13. What was Linnaeus's unlati.nised name?



**Watch Video Solution** 

**14.** How many zoological parks occur in India?



15. Name the four main categories of zoos.



Watch Video Solution

**16.** Where was the ftrst zoological museum started?



**17.** Does a zoological museum display animate or inanimate objects?



**Watch Video Solution** 

## **Additional Questions Short Answer Questions**

**1.** Name the 3 fields of systematics.



**2.** Give the approximate number of living animal and plant species.



**Watch Video Solution** 

**3.** How is man responsible for the extinction of animals and plants ?



**4.** What is meant by identification of a species



?

Watch Video Solution

**5.** Cite 2 cases of sterile and 2 cases of fertile interspecific hybrids.



**Watch Video Solution** 

**6.** What is speciation ?-



**7.** Who is regarded the father of taxonomy and why?



**8.** What is molecular homology? Cite one example



**9.** Name the 3 international codes of biological nomenclature.



**Watch Video Solution** 

10. What are correlated characters?



**Watch Video Solution** 

**11.** Why is the criterion of interbreeding not practicable for all species ?





12. Why do the species included in a genus resemble in many features?



**Watch Video Solution** 

13. What is meant by revision of a group?



14. Mention three aims of a zoological park.



**Watch Video Solution** 

15. Mark the odd ones in the series.



**Watch Video Solution** 

**16.** Name the major categories used in taxonomy and arrange them in an hierarchical manner.

**17.** Write down a suitable defmition of a species.



**18.** Explain the terms systematics and hierarchical classification.



- **19.** Which of the following cover the greater number of organisms .
- (a) Phylum or genus (b) Family or phylum (c)
  Family or order (d) Class or phylum



**Watch Video Solution** 

**20.** The common name of rice is simpler then its technical Oryza sativa. What then is the advantage of a technical name?



**21.** Which of the following have more characters in common:

(a) Phylum or family, (b) Species or genus, (c)
Class or order



**Watch Video Solution** 

22. Give Mayr's definition of a species.



**23.** Give the classificat f ion o man, mentioning at least one feature of each group (category).



**Watch Video Solution** 

**24.** Explain the terms-ancestral characters, derived characters, conservative characters analogy and law of priority.



**25.** Give a brief history of zoological parks or museums.



**Watch Video Solution** 

**26.** Match the items given in column I with appropriate items (one or more) of column II

#### Column I

- (i) Taxon
- (ii) Kingdom
- (iii) Category
- (iv) Pliny the Elder
- (v) Carolus Linnaeus

#### Column II

- (a) Artificial classification
- (b) Class
- (c) birds
- (d) —bionta
- (e) fishes
- (f) Historia Naturalis
- (g) Binomial nomenclature



- **27.** Differentiate between the following :
- (i) Botanical garden and herbarium (ii)

  Zoological garden and zoological museum.



**Watch Video Solution** 

28. International Code of Botanical Nomenclature (ICBN) has provided a code for classification of plants. Give hierarchy of units of classification, botanists follow while

classifying plants and mention different 'suffixes' used for the units.



**Watch Video Solution** 

**29.** A plant may have different names in different regions or the country of world. How do botanists solve this problem?



**30.** What is meant by living? Give any four defining features of life forms.



**Watch Video Solution** 

**31.** How do you prepare your own herbarium sheets? What are the different tools you carry with you while collecting plants for the preparation of a herbarium? What information should a preserved plant material on the

herbarium sheet provide for taxonomical studies?



## **Additional Questions Long Answer Questions**

**1.** Give an account of the development of systematics.



2. Discuss the utility of systematics.



**Watch Video Solution** 

**3.** Why have the animals been given difficult scientific names when they already had the easier common names?



**4.** Explain the binomial system of nomenclature.



**5.** List the rules of scientific names.



**6.** Give the advantages of scientific names.



**7.** What is the advantages of hierarchy of categories? Who proposed this system?



**Watch Video Solution** 

**8.** Give the taxonomic position of man, horse and mango plant.



**9.** Distinguish between : (a) Systematics and taxonomy (b) Species and taxon



**Watch Video Solution** 

**10.** Develop a taxonomic key for the following: Cat, dog, cow, buffalo, goat, sheep, parrot, hen, duck.



**11.** Describe the hierarchical system of classification currently being followed.



Watch Video Solution

**12.** Give a complete classification of cockroach and mango plant.



**13.** What is the role of keys in taxonomy? Illustrate with example.



**Watch Video Solution** 

**14.** How do the biologists arrive at the universally acceptable names of plants and animals? Discuss.



**15.** Binomial nomenclature is the most acceptable mode of naming organisms. Why '!



**Watch Video Solution** 

**16.** What do you understand by herbarium? Explain the various steps involved in preparing

a herbarium specimen.



**17.** Botanical gardens are living herbaria.

Comment.



**Watch Video Solution** 

**18.** Very briefly explain the following:

(z) Polytypic genus (ii) Hoiotype specimen (iii)

Neotype specimen (iv) Taxon (v) Categories (vi)

Artificial classification (vii) Phylogenetic classification (viii) Systematics (ix) Biological classification (x) Nomenclature. (x) Herbarium

(xii) Zoological park (xiii) Insectaria (xiv)



Zoological museum.



# 19. Fill in the blanks:

(ii) The system of classifying the animals and plants from the point of view of their utility

(value) to man is called..... ... classification. (iii) ...... classification is based on one or a few superficial resemblances rather than on natural or evolutionary relationships. It was (iv) ..... classification reflects the evolutionary relationships of organisms. (v) Present scientific method of naming of organisms is called ...... It was introduced by ...... ( vi) ..... is the branch of science that deals with the framing of laws and principles of classifying the organisms on the basis of their evolutionary relationships.

( vii) A natural ...... refers to a group of similar, genetically related organisms having certain characters distinct from those of other groups.

(ix) The term ...... refers to a set of alternate characters in such a manner that helps in the identification of plants and animals by selecting and eliminating the characters according to their presence or absence in the organism under study.

(x) A. .....: at present is a place where plants frQm various groups are grown fur scientific study, conservation, public education, aesthetics and recreation.

(xii) Various tools for collection and preservation of plants include cutters, digger,

....., plant press and............



**20.** What are taxonomical aids? Give the importance of herbaria and museums. How are Botanical gardens and Zoological parks useful in conserving biodiversity?



**Watch Video Solution** 

21. Define a taxon. What is meant by taxonomic hierarchy? Give a flow dlqram from the lowest to the hlpest cateaory for a plant and an animal. What happens to the number of

individuals and no. of shared characten as we

10 up the taxonomical hierarchy?



**Watch Video Solution** 

# **Analytical Questions With Answers**

1. How do old zoos and modern zoos differ?



**2.** How are a mule and a hinny produced? Are they fertile or sterile?



**Watch Video Solution** 

3. Expand the following abbreviations:

SSC, CBSG, IUCN, WZCS



- 4. (a) What are the aims of establishing zoological parks?
- (b) Which group/organization is helping the zoos in the protection of wildlife from extinction by conserving natural habitats and ecosystems, and captive breeding of species.



**Watch Video Solution** 

5. What is meant by 'adaptation'? Give atleast three short term and long term adaptations in living organisms.



**Watch Video Solution** 

**6.** Naming of organism is essential to distinguish one organism from the other. Why was 'Binomial Nomenclature' devised? Explain.



**Watch Video Solution** 

**7.** (a) What is herbarium ? What is its importance?

(b) List two important herbaria in India along with the places where they are located.



**8.** Why is Amoeba living and a sand particle is non-living matter? Explain



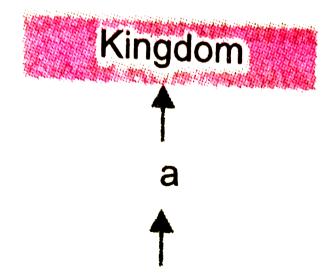
**9.** Give one distinct characteristic which separates human beings from all other living

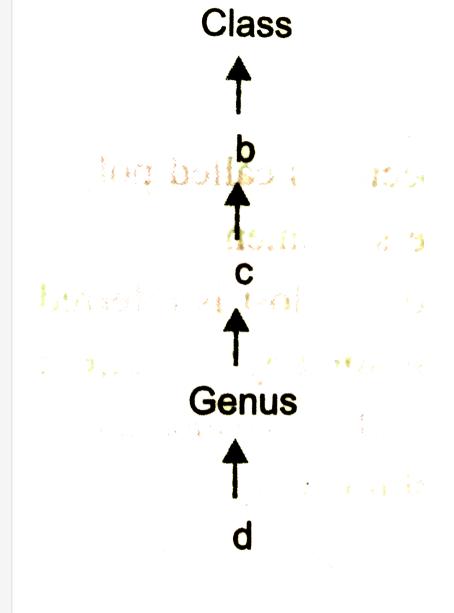
organisms.



**Watch Video Solution** 

**10.** Taxonomic categories showing hierarchial arrangement in ascending order are shown below. FilJ the appropriate categories in blank spaces marked 'a', 'b', 'c' and 'd'







**11.** Do you think zoological parks, museums and botanical gardens are meant for recreational purpose or they have some scientific value?



Watch Video Solution

**12.** Study the following table of organisms with their taxonomic categories. Some of the columns are left blank and denoted by A, B, C

# and D. Write the correct options in each case.

Common name	Biological name	Class	Phylum/Division
A	Homo sapiens	Mammalia	Chordata
Mango	В	Dicotyledonae	Angiospermae
Housefly	Musca domestica	С	Arthropoda
Wheat	Triticum aestivum	Monocotyledonae	D



**13.** What changes are needed to convert a sand particle into a prokaryotic cell?



- 14. (i) Name atleast three taxonomic aids.
- (ii) What is a botanical garden?
- (iii) Name two famous botanical gardens of India.
- (iii) Indian Botanical Garden, Kolkota.
- Llyod Botanical Garden, Darje.eling.



**15.** (i) What is meant by scientific nomenclature?

(ii) What is the advantage of using scientific names?



Watch Video Solution

- **16.** Very briefly explain the following:
- (i) Polytypic genus
- (ii) Holotype speciman
- (iii) Neotype specimen.



**17.** How would you define the term 'taxonomic key'? Name two types of keys.



**Watch Video Solution** 

**18.** Name atleast five simple tools that are needed for the collection and preservation of plants or their parts.



**19.** Why are the species considered dynamic groups and not static?



**Watch Video Solution** 

**Practice Questions Multiple Choice Questions** 

1. Binomial nomenclature means

A. One name given by two scientists

- B. One name comprising a generic and a specific epithet
- C. Two names, one latinised, other of a person
- D. Two names, one scientific, other local

#### **Answer: B**



**Watch Video Solution** 

2. Phylogenetic classification is based on

- A. Utility of organisms
- B. Habits of organisms
- C. Similarities of organisms
- D. Common evolutionary descent

#### **Answer: D**



**Watch Video Solution** 

**3.** Binomial nomenclature consists of two words

- A. Genus and species
- B. Order and family
- C. Species and variety
- D. Family and genus

#### **Answer: A**



**Watch Video Solution** 

**4.** Taxonomy without phylogeny is similar to bones without flesh is the statement of

- A. John Hutchinson
- B. Takhtajan
- C. Oswald Tippo
- D. Bentham and Hooker

# **Answer: B**



**Watch Video Solution** 

**5.** Specimen used for original publication by the author is

- A. Isotype
- B. Syntype
- C. Holotype
- D. Lectotype

## **Answer: C**



**Watch Video Solution** 

**6.** Species living in same or overlapping geographical areas are called.

- A. Sibling
- B. Sympatric
- C. Allopatric
- D. Subspecies

## **Answer: B**



**Watch Video Solution** 

**7.** Floral features are commonly used for identification of angiosperms because

- A. Reproductive parts are more
  - conservative
  - B. Flowers are nice to work with
  - C. Flowers have various colours and scents
- D. Flowers can be safely pressed

# Answer: A



**Watch Video Solution** 

8. Which of the following is a category?

A. Order
B. Family
C. Genus
D. All of these
Answer: D  Watch Video Solution
<b>9.</b> Phenetic classification of organisms is based
on

- A. the ancestral lineage of existing organisms
- B. dendrogram based on DNA characteristics
- C. sexual characteristics
- D. observable, characteristics of existing organisms.

### Answer: D



**10.** Identify from the following the only taxonomic category that has a real existence.

- A. Genus
- **B.** Species
- C. Phylum
- D. Kingdom

**Answer: B** 



- 11. The science of ageing is referred to as
  - A. Developmental biology
  - B. Ontogeny
  - C. Phylogeny
  - D. Gerontology

# **Answer: D**



**12.** The maintenance of constant temperature inside the body is an example of

- A. Homeostasis
- B. Negative feedback loop
- C. Both (a) and (b)
- D. None of these

**Answer: A** 



13. Two plants can be conclusively said to belong to the same species if they

A. have more than 90 percent similar genes

B. look similar and possess identical secondary metabolites

C. have same number of chromosomes

D. can reproduce freely with each other and form seeds

# Answer: D



**14.** Identify the odd combination of the habitat and the particular animal concerned

A. Periyar ..... Elephant

B. Rann of Kutch ........... .. Wild Ass

C. Dachigam National Park ..... Snow

Leopard

D. Sunderbans ...... Bengal tiger

**Answer: C** 

**15.** Choose the correct sequence of taxonomic categories in Linnaean Hierarchy

A. Species - Genus - Family - Order - Class Division

B. Division - Order - Class - Family - Genus -

Species

C. Division - Class - Family - Order - Genus -

Species

D. Division - Class - Order - Family - Genus -

Species

#### **Answer: D**



**Watch Video Solution** 

**16.** Phylogenetic system was given by

A. Engler and Prantl

B. Pliny

C. John Ray

D. R.H. Whittaker

#### **Answer: A**



Watch Video Solution

# 17. Systema naturae was written by

- A. Aristotle
- B. Linnaeus
- C. Hippocrates
- D. Darwin

#### **Answer: B**



# **Watch Video Solution**

**18.** In which book, binomial nomenclature was issued by Linnaeus

- A. Systema Naturae
- B. Genera Plantarum
- C. Genera Animalium
- D. Historia Plantarum

#### **Answer: A**



- **19.** Taxonomic categories showing correct hierarchical arrangement in ascending order is
  - A. Kingdom, phylum, class, order, family, genus, species
  - B. Kingdom, phylum, class, family, order, genus, species

C. Division, class, kingdom, order, species, family

D. Division, kingdom, family, class, order, species

### **Answer: A**



**Watch Video Solution** 

**20.** Biological Concept of species is mainly based on

- A. Morphology and methods of reproduction
  - B. Methods of reproduction only
- C. Morphological features only
- D. Reproductive isolation

#### **Answer: D**



**Watch Video Solution** 

21. The botanical name of soyabean is:

- A. Cajanus cajan
- B. Glycine max
- C. Glycyrrhiza glabra
- D. Abrus precatorius

#### **Answer: B**



**Watch Video Solution** 

**22.** Oryza sativa is the binomial name of the rice plant, the sativa stands for

- A. Specific name
- B. Specific epithet
- C. Species name
- D. Specific nomenclature

## **Answer: B**



**Watch Video Solution** 

**23.** Which is the first national park established in India

A. Kanha	
B. Jim Corbett	
C. Kaziranga	
D. Gir	
Answer: B	



**Watch Video Solution** 

**24.** List of endangered species was released by

A. IUCN

B. BBC

C. WCC

D. UN

## **Answer: A**



**Watch Video Solution** 

25. Taxonomic hierarchy refers to

- A. Step wise arrangement of all categories for classification of plants and animals.
- B. A group of senior taxonomists who decide the nomenclature of plants and animals
- C. A list of botanists or zoologists who have worked on taxonomy of a species or group.
- D. Classification of a species based on fossil record.

#### **Answer: A**



**Watch Video Solution** 

# 26. The life span of honey bee drone is

A. 3-4 months

B. 1-2 month

C. 6-7 months

D. 10-12 months

**Answer: D** 



**27.** The Famous botanical garden of Kew is located in

A. India

B. England

C. Germany

D. France

**Answer: B** 



## Watch Video Solution

**28.** Which term can be used for any taxonomic rank?

A. Class

B. Order

C. Taxon

D. Phylum

**Answer: C** 



29. Largest herbarium in India is at

A. National botanical garden, Lucknow

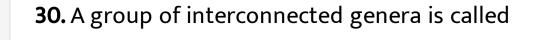
B. Lloyd botanical garden, Darjeeling

C. Indian botanical garden, Sibpur, Howrah

D. Forest research institute, Dehradun

**Answer: C** 





- A. Family
- B. Order
- C. Phylum
- D. Class

## Answer: A



**31.** As we go from species to kingdom in a taxonomic hierarchy, the number of common characteristics

- A. Will decreas
- B. Will increase
- C. Remain same
- D. May increase or decrease

### **Answer: A**



**32.** Which of the following 'suffixes' used for units of classification in plants indicates a taxonomic category of 'family'?

- A. Ales
- B. Onae
- C. Aceae
- D.-Ae

#### **Answer: C**



- 33. The term 'systematics' refers to
  - A. Identification and classification of plants and animals
  - B. Nomenclature and identification of plants and animals
  - C. Diversity of kinds of organisms and their relationship
  - D. Different kinds of organisms and their classification



**Watch Video Solution** 

## **34.** Genus represents

- A. An individual plant or animal
- B. A collection of plants or animals
- C. Group of closely related species of plants or animals
- D. None of thes



**Watch Video Solution** 

**35.** The taxonomic unit 'Phylum' in the classification of animals is equivalent to which hierarchial level in classification of plants?

- A. Class
- B. Order
- C. Division
- D. Family



## **Watch Video Solution**

**36.** Botanical gardens and zoological parks have

- A. Collection of endemic living species only
- B. Collection of exotic living species only
- C. Collection of endemic and exotic living species

D. Collection of only local plants and animals

**Answer: C** 



**Watch Video Solution** 

**37.** Taxonomic key is one of the taxonomic tools in the identification and classification of plants and animals. It is used in the preparation of

- A. Monographs
- B. Flora
- C. Both a & b
- D. None of these



**Watch Video Solution** 

**38.** All living organisms are linked to one another because

A. They have common genetic material of the same type

B. They share common genetic material but to varying degrees

C. All have common cellular organization

D. All of above

**Answer: D** 



**39.** Which of the following is a defining characteristic of living organisms?

- A. Growth
- B. Ability to make sound
- C. Reproduction
- D. Response to external stimuli

**Answer: D** 



**40.** Microscopic aquatic organisms lacking locomotory ability and drifting with water current are

- A. Plankton
- B. Nekton
- C. Pleuston
- D. Saston

**Answer: A** 



41. Binomial nomenclature was introduced by	y
---	---

- A. R.H. Whittaker
- B. Linnaeus
- C. Aristotle
- D. Theophrastus

#### **Answer: B**



**Watch Video Solution** 

42. Taxa diffects from "taxon" due to

A. this being a higher taxonomic category than tax.on

B. this being a lower taxonomic category than taxon

C. this being the plural of taxon

D. this being the singular of tax.on

**Answer: C** 



**43.** A group of related genera, with still less number of similarities as compared to the genus and species consititutes

- A. order
- B. class
- C. family
- D. division

#### **Answer: C**



**44.** Classification of organisms based on evolutionary as well as gentic relationships is called

A. Biosystematics

**B.** Phenetics

C. Numerical taxonomy

D. Cladistics

**Answer: D** 



**45.** Which one of the following animals is correctly matched with its particular named taxonomic category

- A. tiger tigris, species
- B. cuttlefish mollusca, class
- C. humans primata, family
- D. housefly Musca, order

#### **Answer: A**



- **46.** Which one of the following aspects is a exclusive characteristic of living things?
  - A. isolated metabolic reactions occur in vitro.
  - B. increase in mass from inside only

environment and their memory.

- C. perception of events happening in the
- D. increase in mass by accumulation of
- material both on surface as well as

internally.

#### **Answer: C**



**Watch Video Solution** 

**47.** The hierachical arrangement of taxonomic categories in descending order is

A. kingdom, phylum, class, order, family~ genus, species

B. kingdom, division, phylum, order, family, genus, species

C. kingdom, class, phylum, order, family, genus

D. division, kingdom, class, phylum, order, family, genus, species

## Answer: A



48. When genetic name is repeated in specific name of a plant it is called or
In fish catla catla the specific name is identical with the generic name, thus it is an example of

- A. autonym
- B. tautonym
- C. synonym
- D. homonym

#### **Answer: B**



Istch Video Solution

Water video Solution

**49.** The biologist who has been called the "Darwin of the  $20^{th}$  cantury", was

- A. Linnaeus
- B. Ernst Mayr
- C. Diener
- D. Whittaker

**Answer: B** 



**50.** Which one of the following organisms is scientifically correctly named. Corretly printed according to the Intermational Rules, of Nomenclature, and correctly described

A. Musca domestica - the common house lizard, a reptile

B. Plasmodium falciparum - a protozoan pathogen causing the most serious type of malaria

C. Felis tigris - the Indian tiger, well protected in Gir forests

D. E. coli - full name Entamoeba coli, a commonly occurring bacterium in human intestine.

# Answer: B



- **51.** Nomenclature is governed by certain universal rules. Which one of the following is contrary to the rules of nomenclature?
  - A. The first word in a biological name represents the genus name, and the second is a specific epithet
    - B. The names are written in Latin and are italicised
  - C. When written by hand, the names are to be underlined

D. Biological names can be written in any language

**Answer: D** 



**Watch Video Solution** 

**52.** The label of a herbarium sheet does not carry information on

A. date of collection

B. name of collector

C. local names

D. height of the plant

**Answer: D** 



**Watch Video Solution** 

# **Assertion Reason Type Questions**

**1.** Assertion. Systematics is an important branch of biology .

Reason. Systematics names the organisms and

divides them into groups and subgroups according to set rules to make their study easy.

A. If both A and R are true and R is the correct explanation of A.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

Answer: A

**2.** Assertion. Members of a species breed only with others ,of the same species.

Reason. In some cases, members of different species may also breed, producing sterile or fertile offspring.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

# **Answer: B**



Watch Video Solution

**3.** Assertion. Species are static units in classification.

Reason. Species do not change with time.

A. If both A and R are true and R is the correct explanation of A.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

### **Answer: D**



**Watch Video Solution** 

**4.** Assertion. Linnaeus is regarded the father of taxonomy.

Reason. He gave a scheme of classification which, with a few additions, is still used.

A. If both A and R are true and R is the correct explanation of A.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

### **Answer: A**



# **Watch Video Solution**

**5.** Assertion. Conservative characters are more useful in classification.

Reason. These characters do not change during evolution. Therefore, their similarities show relationships among organisms.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

# **Answer: A**



Watch Video Solution

**6.** Assertion. Linnaeus insisted that the scientific names should be latinized.

Reason. This gives beauty to the names.

A. If both A and R are true and R is the correct explanation of A.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

# **Answer: C**



**Watch Video Solution** 

- **7.** Assertion. There is no difference between the terms tax.on and category.
- Reason. Aves is a taxon that includes the category "birds".
  - A. If both A and R are true and R is the correct explanation of A.
  - B. If both A and R are true but R is not the correct explanation of A.
  - C. If A is true but R is false.
  - D. If both A and R are false.

#### **Answer: D**



# **Watch Video Solution**

**8.** Assertion. These are only seven obligate categories in taxnomy.

Reason. Others are called intermediate categories.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

# **Answer: B**



**Watch Video Solution** 

Assertion. Hierarchial system of 9. classification is useful in that it reduces the volume of description in a catatogue of animals and plants.

Reason. Characters given for a larger category
(say a phylum) need not be repeated for
smaller categories (say classes, orders, etc.)

A. If both A and R are true and R is the correct explanation of A.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

### **Answer: A**



# **Watch Video Solution**

**10.** Assertion. Phylogenetic and natural classifications are similar.

Reason. The organisms related evolutionarily are usually similar morphologically also.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

### **Answer: A**



**Watch Video Solution** 

11. Assertion. A morphology based approach to taxonomy is called alpha taxonomy and it is old fashioned.

Reason. A multidisciplinary approach to taxonomy called omega taxonomy is favoured in recent years as it excludes morphological features.

A. If both A and R are true and R is the correct explanation of A.

B. If both A and R are true but R is not the correct explanation of A.

C. If A is true but R is false.

D. If both A and R are false.

# **Answer: C**



Watch Video Solution