

## 7. Diversity in Living Organisms

Q 1 Name the branch of the biology that deals with the classification.

Mark (1)

Q 2 Who was the first to propose the two-kingdom system of classification?

Mark (1)

Q 3 Who proposed three-kingdom classification?

Mark (1)

Q 4 What is meant by triploblastic?

Mark (1)

Q 5 What is haemocoel ?

Mark (1)

Q 6 Name the person who has given the five-kingdom classification.

Mark (1)

Q 7 Which is the largest phylum of animal kingdom?

Mark (1)

Q 8 What is the function of canal system in sponges?

Mark (1)

Q 9 What are Gymnosperms?

Mark (1)

Q 10 What is the purpose of classification?

Marks (2)

Q 11 What do you mean by evolution?

Marks (2)

Q 12 What are the bases due to which plants and animals are classified as different categories?

Marks (2)

Q 13 What are the four main characteristics of chordates?

Marks (2)

Q 14 Draw the hierarchy of the classification?

Marks (2)

Q 15 Give the names of different groups of Plant Kingdom.

Marks (2)

Q 16 Will advanced organisms be the same as complex organisms? Why?  
Marks (2)

Q 17 Give one example each of Hemichordata, Urochordata, Cephalochordata and Vertebrata.  
Marks (2)

Q 18 Pick the odd one out and justify your choice by giving reasons.  
i) Coelenterates, Echinoderms, Vertebrates, Molluscs 1 mark  
ii) Chicken, Bat, Ostrich, Penguin 1 mark  
Marks (2)

Q 19 Pick the odd one out and justify your choice by giving reasons.  
i) *Riccia*, *Marsilea*, *Marchantia*, *Funaria* 1 mark  
ii) Crocodile, *Salamander*, Sparrow, Bat 1 mark  
Marks (2)

Q 20 To which major group do the following belong?  
i) Bat  
ii) Cycas  
iii) Plasmodium  
iv) Mosquito

Marks (2)

Q 21 Give two points of difference between Chondrichthyes and Osteichthyes.  
Marks (2)

Q 22 Differentiate between Poriferans and Coelentrates.  
Marks (3)

Q 23 Give two examples of Bryophytes and Pteridophytes.  
Marks (3)

Q 24 Define advantage of using scientific name instead of common name?  
Marks (3)

Q 25 Define the main characteristics of Vertebrates.  
Marks (3)

Q 26 Bat can fly still it is placed in mammals. Why?  
Marks (3)

Q 27 Why thallophytes, bryophytes and pteridophytes are called 'cryptogams'?  
Marks (3)

Q 28 Show the diagrammatic representation of five-kingdom classification.  
Marks (3)

Q 29 Draw a flowchart to depict classification of Kingdom Plantae.

Marks (3)

Q 30 a) Identify four features possessed by all Chordates.

$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$  marks

b) In which class would you place any organism which has:

- i. a scaly exoskeleton and a bony endoskeleton.
- ii. a scaly exoskeleton and lay eggs outside water.  $\frac{1}{2} + \frac{1}{2}$  marks

Marks (3)

Q 31 Give one point of difference between:

- i) Bilateral and radial symmetry
- ii) Notochord and nerve cord

Marks (3)

Q 32 (a) Name the locomotary organs of echinoderms.

(b) Distinguish between-

1. Tapeworm and earthworm
2. Mite and termite

Marks (3)

Q 33 Point out differences between the following:

- (a) Bony and cartilaginous fishes.
- (b) Bilateral and radial symmetry.
- (c) Notochord and nerve chord.

Marks (5)

Q 34 Give a brief account of angiosperms.

Marks (5)

Q 35 What are the bases by which Vertebrata are divided into sub-groups?

Marks (5)

Q 36 Identify the below given organism and write four major characteristics of its phylum.



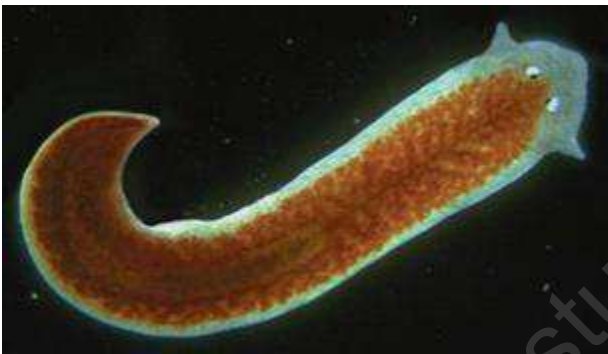
Marks (5)

Q 37 Identify the below given organism and give four major characteristics of its phylum:



Marks (5)

Q 38 Identify the below given organism and give any four major characteristics of its phylum:



Marks (5)

Q 39 Identify the below given organism and give four major characteristics of its phylum:



Marks (5)

Q 40 Identify the below given organism, and give four major characteristics of its phylum:



Marks (5)

Q 41 Identify the below given organism and give four major characteristics of its phylum:



Marks (5)

#### Most Important Questions

Q 1 Name the character included by Aristotle for biological classification?

Q 2 Name one edible fungus?

Q 3 Write a short note on distribution of bacteria.

Q 4 What are mycoplasma?

Q 5 What is alternation of generation?

Q 6 Who proposed five-kingdom classification? What are the names of kingdoms?

Q 7 What are the criteria used by Whittaker for five kingdom classification?

Q 8 Draw the different shapes of bacteria.

Q 9 What are lichens?

Q 10 Write the advantages and disadvantage of binomial system of classification.

Q 11 Name the amphibians of the plant kingdom?

Q 12 Write any four common features of algae.

Q 13 What is the meaning of the word 'Cryptogamae'.

Q 14 How are angiosperms different from gymnosperms , give two main points.

Q 15 What are the two classes of angiosperms? What is the basis of division?

Q 16 Name the organisms responsible for the fixation of carbon dioxide in water bodies?

Q 17 How are cones formed in gymnosperms?

Q 18 Name the group of the following organisms:

- (a) Sponges
- (b) flatworms

Q 19 Write two features of group arthropoda. Give an example of an arthropod.

Q 20 What are the differences between animals belonging to the Aves group and those in the Mammalia?

Q 21 Distinguish between open type and closed type of circulatory system.

Q 22 What is notochord? How are animals divided on the basis of notochord?

Q 23 Write any two important features found in platyhelminthes.

Q 24 Differentiate the two body forms exhibited by coelentrates .

Q 25 Describe the body structure of sponges.

Q 26 Describe the 4 characteristic features of the largest phylum of kingdom Animalia.

Q 27 Describe the class Mammalia.

Q 28 Define bilateral symmetry?

Q 29 Name the second largest animal phylum.

Q 30 Which phylum shows the presence of spongin fibres in its organisms?

Q 31 Describe coelom, celomate, pseudocoelomate and acopelomate.

Q 32 Identify the phylum which shows the presence of notochord, dorsal nerve chord and gill-slits?

Q 33 Which phylum shows the presence of mucus glands in the skin and three chambered heart?

Q 34 Which reptile has four-chambered heart?