

# CHAPTER 1

## Animal Kingdom

### Basis of Classification

1. Bilaterally symmetrical and acoelomate animals are exemplified by: (2020)
  - a. Platyhelminthes
  - b. Aschelminthes
  - c. Annelida
  - d. Ctenophora
2. Consider following features
  - A. Organ system level of organisation
  - B. Bilateral symmetry
  - C. True coelomates with segmentation of body
 Select the correct option of animal groups which possess all the above characteristics (2019)
  - a. Annelida, Arthropoda and Chordata
  - b. Annelida, Arthropoda and Mollusca
  - c. Arthropoda, Mollusca and Chordata
  - d. Annelida, Mollusca and Chordata

### Porifera, Coelenterata, Ctenophora, Platyhelminthes, Aschelminthes

3. In case of poriferans, the spongocoel is lined with flagellated cells called: (2017-Delhi)
  - a. Ostia
  - b. Oscula
  - c. Choanocytes
  - d. Mesenchymal cells
4. Which of the following endoparasites of humans does show viviparity? [OS] (2015)
  - a. *Trichinella spiralis*
  - b. *Ascaris lumbricoides*
  - c. *Ancylostoma duodenale*
  - d. *Enterobius vermicularis*
5. Metagenesis refers to: (2015 Re)
  - a. Alternation of generation between asexual and sexual phases of organisms
  - b. Occurrence of a drastic change in form during post-embryonic development
  - c. Presence of a segmented body and parthenogenetic mode of reproduction
  - d. Presence of different morphic forms
6. *Planaria* possess high capacity of: (2014)
  - a. Bioluminescence
  - b. Metamorphosis
  - c. Regeneration
  - d. Alternation of generation

### Annelida, Arthropoda, Mollusca, Echinodermata

7. Match List-I with List-II (2021)

List-I		List-II	
(A)	Metamerism	(i)	Coelenterata
(B)	Canal system	(ii)	Ctenophora
(C)	Comb plates	(iii)	Annelida
(D)	Cnidoblasts	(iv)	Porifera

Choose the correct answer from the options given below.

- a. A-iii B-iv C-i D-ii
  - b. A-iii B-iv C-ii D-i
  - c. A-iv B-i C-ii D-iii
  - d. A-iv B-iii C-i D-ii
8. Match the following: (2021)

List-I		List-II	
(A)	<i>Physalia</i>	(i)	Pearl oyster
(B)	<i>Limulus</i>	(ii)	Portuguese Man of War
(C)	<i>Ancylostoma</i>	(iii)	Living fossil
(D)	<i>Pinctada</i>	(iv)	Hookworm

Choose the correct answer from the options given below.

- a. A-iv B-i C-iii D-ii
  - b. A-ii B-iii C-iv D-i
  - c. A-i B-iv C-iii D-ii
  - d. A-ii B-iii C-i D-iv
9. Read the following statements. (2021)
    - A. Metagenesis is observed in Helminths.
    - B. Echinoderms are triploblastic and coelomate animals.
    - C. Roundwormshaveorgan-systemlevelofbodyorganization.
    - D. Comb plates present in ctenophores help in digestion.
    - E. Water vascular system is characteristic of Echinoderms.
 Choose the correct answer from the options given below.
    - a. A, B and C are correct
    - b. A, D and E are correct
    - c. B, C and E are correct
    - d. C, D and E are correct

10. Match the following columns and select the correct option. (2020)

Column-I		Column-II	
(A)	Gregarious, polyphagous pest	(i)	<i>Asterias</i>
(B)	Adult with radial symmetry and larva with bilateral symmetry	(ii)	Scorpion
(C)	Book lungs	(iii)	<i>Ctenoplane</i>
(D)	Bioluminescence	(iv)	<i>Locusta</i>

- (A) (B) (C) (D)  
 a. (iv) (i) (ii) (iii)  
 b. (iii) (ii) (i) (iv)  
 c. (ii) (i) (iii) (iv)  
 d. (i) (iii) (ii) (iv)
11. Which of the following options does correctly represent the characteristic features of phylum Annelida? (2020-Covid)  
 a. Triploblastic, segmented body and bilaterally symmetrical  
 b. Triploblastic, flattened body and acoelomate condition  
 c. Diploblastic, mostly marine and radially symmetrical  
 d. Triploblastic, unsegmented body and bilaterally symmetrical
12. Match the following organisms with their respective characteristics : (2019)
- |                         |                        |
|-------------------------|------------------------|
| A. <i>Pila</i>          | i. Flame cells         |
| B. <i>Bombyx</i>        | ii. Comb plates        |
| C. <i>Pleurobrachia</i> | iii. Radula            |
| D. <i>Taenia</i>        | iv. Malpighian tubules |
- Select the correct option from the following:
- (A) (B) (C) (D)  
 a. (iii) (ii) (i) (iv)  
 b. (iii) (iv) (ii) (i)  
 c. (ii) (iv) (iii) (i)  
 d. (iii) (ii) (iv) (i)
13. Which of the following animals does not undergo metamorphosis? (2018)  
 a. Earthworm                      b. Tunicate  
 c. Moth                              d. Starfish
14. Which of the following features is not present in the Phylum-Arthropoda? (2016-I)  
 a. Chitinous exoskeleton      b. Metameric segmentation  
 c. Parapodia                      d. Jointed appendages
15. Which of the following characteristics is mainly responsible for diversification of insects on land? [OS] (2015)  
 a. Exoskeleton                      b. Eyes  
 c. Segmentation                      d. Bilateral symmetry
16. Body having mesh-work of cell, internal cavities lined with food filtering flagellated cells and indirect development are the characteristics of phylum: (2015 Re)  
 a. Porifera                              b. Mollusca  
 c. Protozoa                              d. Coelenterate

17. One of the representatives of Phylum Arthropoda is: (2013)  
 a. Flying fish                      b. Cuttlefish  
 c. Silverfish                      d. Pufferfish
18. Which of the following are correctly matched with respect to their taxonomic classification? (2013)  
 a. Spiny anteater, sea urchin, sea cucumber – Echinodermata  
 b. Flying fish, cuttlefish, silverfish, – Pisces  
 c. Centipede, millipede, spider, scorpion – Insecta  
 d. House fly, butterfly, *tsetsefly*, silverfish – Insecta
19. Which group of animals belongs to the same phylum? (2013)  
 a. Sponge, Sea anemone, Starfish  
 b. Malarial parasite, *Amoeba*, Mosquito  
 c. Earthworm, Pinworm, Tapeworm  
 d. Prawn, Scorpion, *Locusta*

## Hemichordata and Chordata

20. Given below are two statements: one is labelled as Assertion (A) and the other is labelled as Reason (R). (2022)
- Assertion (A):** All vertebrates are chordates but all chordates are not vertebrates.
- Reason (R):** Notochord is replaced by vertebral column in the adult vertebrates
- In the light of the above statements, choose the correct answer from the options given below.
- a. (A) is not correct but (R) is correct  
 b. Both (A) and (R) are correct and (R) is the correct explanation of (A)  
 c. Both (A) and (R) are correct but (R) is not the correct explanation of (A)  
 d. (A) is correct but (R) is not correct
21. Which of the following statements are true for the phylum-Chordata? (2020)  
 a. In Urochordata notochord extends from head to tail and it is present throughout their life.  
 b. In Vertebrata notochord is present during the embryonic period only.  
 c. Central nervous system is dorsal and hollow.  
 d. Chordata is divided into 3 subphyla: Hemichordata, Tunicata and Cephalochordata.
22. All vertebrates are chordates but all chordates are **not** vertebrates, why? (2020-Covid)  
 a. Ventral hollow nerve cord remains throughout life in some chordates  
 b. all chordates possess vertebral column  
 c. All chordates possess notochord throughout their life  
 d. Notochord is replaced by vertebral column in adult of some chordates

23. An important characteristic that hemichordates share with chordates is: (2017-Delhi)
- Absence of notochord
  - Ventral tubular nerve cord
  - Pharynx with gill slits
  - Pharynx without gill slits
24. Select the taxon mentioned that represents both marine and fresh water species: (2014)
- Cnidaria
  - Echinoderms
  - Ctenophora
  - Cephalochordata

### Class Cyclostomata, Chondrichythes, Osteichythes

25. Match the following columns and select the correct option. (2020)

Column-I		Column-II	
(A)	6-15 pairs of gill slits	(i)	<i>Trygon</i>
(B)	Heterocercal caudal fin	(ii)	<i>Cyclostomes</i>
(C)	Air bladder	(iii)	<i>Chondrichthytes</i>
(D)	Poison sting	(iv)	<i>Osteichthytes</i>

- (A) (B) (C) (D)
- (iii) (iv) (i) (ii)
  - (iv) (ii) (iii) (i)
  - (i) (iv) (iii) (ii)
  - (ii) (iii) (iv) (i)
26. A jawless fish, which lays eggs in freshwater and whose ammocoetes larvae after metamorphosis return to the ocean is: (2015 Re)
- Myxine*
  - Neomyxine*
  - Petromyzon*
  - Eptatretus*
27. A marine cartilaginous fish that can produce electric current is: (2014)
- Scoltodon*
  - Pristis*
  - Torpedo*
  - Trygon*

### Class Amphibia, Reptilia, Aves, Mammalia

28. In which of the following animals, digestive tract has additional chambers like crop and gizzard? (2022)
- Pavo*, *Psittacula*, *Corvus*
  - Corvus*, *Columba*, *Chameleon*
  - Bufo*, *Balaenoptera*, *Bangarus*
  - Catla*, *Columba*, *Crocodilus*

29. Which one of the following organisms bears hollow and pneumatic long bones? (2021)
- Hemidactylus*
  - Macropus*
  - Ornithorhynchus*
  - Neophron*

30. Match the following columns and select the correct option: (2020-Covid)

Column-I		Column-II	
(A)	<i>Aptenodytes</i>	(i)	Flying fox
(B)	<i>Pteropus</i>	(ii)	Angel fish
(C)	<i>Pterophyllum</i>	(iii)	Lamprey
(D)	<i>Petromyzon</i>	(iv)	Penguin

- (A) (B) (C) (D)
- (iii) (iv) (i) (ii)
  - (iv) (i) (ii) (iii)
  - (ii) (i) (iv) (iii)
  - (iii) (iv) (ii) (i)
31. Match the following group of organisms with their respective distinctive characteristics and select the correct option: (2020-Covid)

Organisms		Characteristics	
(A)	Platyhelminthes	(i)	Cylindrical body with no segmentation
(B)	Echinoderms	(ii)	Warm blooded animals with direct development
(C)	Hemichordates	(iii)	Bilateral symmetry with incomplete digestive system
(D)	Aves	(iv)	Radial symmetry with indirect development

- (A) (B) (C) (D)
- (ii) (iii) (iv) (i)
  - (iv) (i) (ii) (iii)
  - (i) (ii) (iii) (iv)
  - (iii) (iv) (i) (ii)
32. Which one of these animals is not a homeotherm? (2018)
- Macropus*
  - Chelone*
  - Camelus*
  - Psittacula*
33. Identify the vertebrate group of animals characterised by crop and gizzard in its digestive system. (2018)
- Amphibia
  - Reptilia
  - Aves
  - Osteichthytes
34. Which among these is the correct combination of aquatic mammals? (2017-Delhi)
- Seals, Dolphins, Sharks
  - Dolphins, Seals, Trygon
  - Whales, Dolphins, Seals
  - Trygon, Whales, Seals
35. Which of the following represents order of 'Horse'? [OS] (2017-Delhi)
- Equidae
  - Perissodactyla
  - Caballus
  - Ferus

