

3. ANIMAL DIVERSITY-I INVERTEBRATE PHYLA

1VSAQ+1SAQ [2M + 4M] = 6 MARKS

FRUIT POINTS

- Invertebrate Phyla** includes the animals which are **without back bone**.
- The invertebrates constitute about **90%** of the known animals.
- Invertebrates are characterised by
(i) a segmented body (ii) Jointed appendages (iii) Exoskeleton (iv) Brain
- Invertebrate Phyla (Etymological meaning) - Examples:**
 - Porifera (Pore bearing)- Sponges
 - Cnidaria (stinging nettle) - Hydra, Jellyfish, coral
 - Ctenophora (Comb bearing)-Comb Jellies
 - Platyhelminthes(Flat Worm) - Flat Worms
 - Nematoda (Thread like)-Round Worms
 - Annelida (Ringed) - Leeches
 - Arthropoda (Jointed Legs) - Spiders, Insects
 - Mollusca (Soft) - Octopus, Squid, Pila
 - Echinodermata (Spiny skinned) - Star Fish
 - Hemichordata (Half cordates) - Acorn Worms
- Anthozoans are commonly called as **sea anemones**. [IPE]
They are sedentary marine animals.
- Polychaetes** are marine annelids. They are commonly called as bristle worms or clam worms. [IPE]
- Limulus**(king crab) is the living fossil of arthropod. The respiratory organs are book gills.[IPE]
- Crustaceans** are aquatic mandibulate arthropods. [IPE]
- Aristotle's lantern** is a complex 5 jawed masticatory apparatus present in [IPE]
buccal cavity of sea urchins. **Ex:** Echinus (Sea urchin)
- Echinoidea** is a class of phylum echinodermata. [IPE]

11. **Ascaris** is characterised by presence of neither true coelom nor metamerism. [2008 PMT]
12. A group of animals **Aschelminthes (round worms)** is bilaterally symmetrical and triploblastic. [2009 PMT]
13. If a live earthworm is pricked with a needle on its outer surface without damaging its gut, the fluid that comes out is **coelomic fluid**. [2009 PMT]
14. **Flatworms** are triploblastic. [2010 PMT]
15. An example of animal having a single opening to the outside that serves both as mouth as well as anus is **Fasciola**. [2010 PMT]
16. One very special feature in the earth worm Pheretima is that **the typhlosole greatly increases the effective absorption area of the digested food in the intestine**. [2011 PMT]
17. Pheretima and its close relatives derive nourishment from **decaying fallen leaves and soil organic matter**. [2012 PMT]
18. One of the representatives of phylum arthropoda is **silver fish**. [NEET-2013]
19. Planaria possesses high capacity of **regeneration**. [NEET-2014]
20. **Cnidaria** represents both marine and fresh water species. [NEET-2014]
21. Metagenesis refers to **alternation of generation between asexual and sexual phases of an organism**. [NEET-2015]
22. **Exoskeleton** is mainly responsible for diversification of insects on land. [NEET-2015]
23. **Trichinella spiralis** endoparasites of humans does show viviparity. [NEET-2015]
24. In case of poriferans, the spongocoel is lined with flagellated cells called **choanocytes**. [NEET-2017]
25. Important characteristic that hemichordates share with chordates is **pharynx with gill slits**. [NEET-2017]
26. Platyhelminthes are bilaterally symmetrical and acoelomates. [NEET-2020]
27. Radial Symmetry is not found in adults of phylum Hemichordata. [NEET-2023]