

4. ANIMAL DIVERSITY -II

PHYLUM CHORDATA

(1 x 2) + (1 x 4) = 6 Marks

ROOT POINTS

- In this chapter we study about Phylum chordata and some related sub phylums and classes.
- 'Hallmark' characters of chordates:** [IPE]
 - Notocord
 - Nerve cord
 - Pharyngeal slits
 - Post anal tail
- Phylum (etymological meaning) - Examples:**

(i) Chordata (cord)	-	Blue Whale
(ii) Urochordata (Tail cord)	-	Ascidia, Salpa
(iii) Cephalochordata (Head cord)	-	Branchiostoma
(iv) Vertebrata (joint of the spine)	-	Fishes, Amphibians, Birds, Mammals
(v) Agnatha (without jaw)	-	Petromyzon
(vi) Cyclostomata (circular mouth)	-	Slime eel
(vii) Gnathostomata (Jaw mouth)	-	Jawed fishes
(viii) Pisces (Fishes)	-	Sharks
(ix) Chondrichthyes (cartilage fish)	-	Saw fish
(x) Osteichthyes (bony fish)	-	Catla
(xi) Amphibia (both life)	-	Frog
(xii) Reptilia (crawling)	-	Snake
(xiii) Aves (Bird)	-	Birds
(xiv) Mammalia (Breast mother)	-	Cows
- In sharks, **caudal fin** is heterocercal and scales are placoid [IPE]
- In catla fish, **caudal fin** is homocercal and scales are cycloid or ctenoid [IPE]
- Poisonous snakes:** Naja naja (cobra), Viper russelli (chain viper). [IPE]
- Non-poisonous snakes:** Ptyas (rat snake), Tropidonotus (pond snake) [IPE]
- Cartilaginous fishes are mostly marine. Excretion is ureotelic. [IPE]
- Bony fishes are found in all aquatic habitats. Excretion is ammonotelic. [IPE]

FRUITY Qs OF IPE**(1 x 2) + (1 x 4) = 6 Marks**

1. What are claspers? Which group of fishes possesses them?
2. Distinguish between milt and spawn.
3. Name two poisonous and non poisonous snakes found in South India.
4. Name the four extra embryonic membranes.
5. What are pneumatic bones? How do they help birds?
6. Name the four 'hallmarks' of chordates and explain the principal function of each of them.
7. Compare and contrast cartilaginous and bony fishes.
8. Write eight salient features of the class Amphibia.
9. What are the modifications that are observed in birds that help them in flight?
10. What are the features peculiar to ratite birds? Give two examples of ratite birds.