



# BSCZOP 182: ANIMAL DIVERSITY-II

DR K SANTHOSH KUMAR M.Sc., B.Ed.,  
Ph.D.

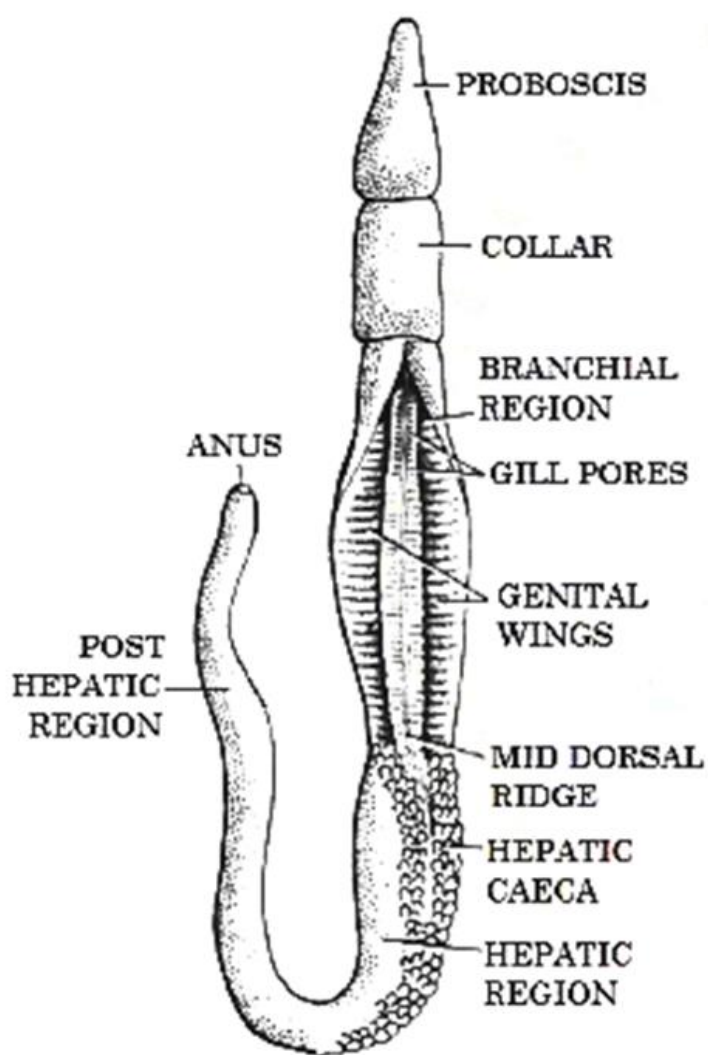
DEPARTMENT OF ZOOLOGY

POORNAPRAJNA COLLEGE, UDUPI

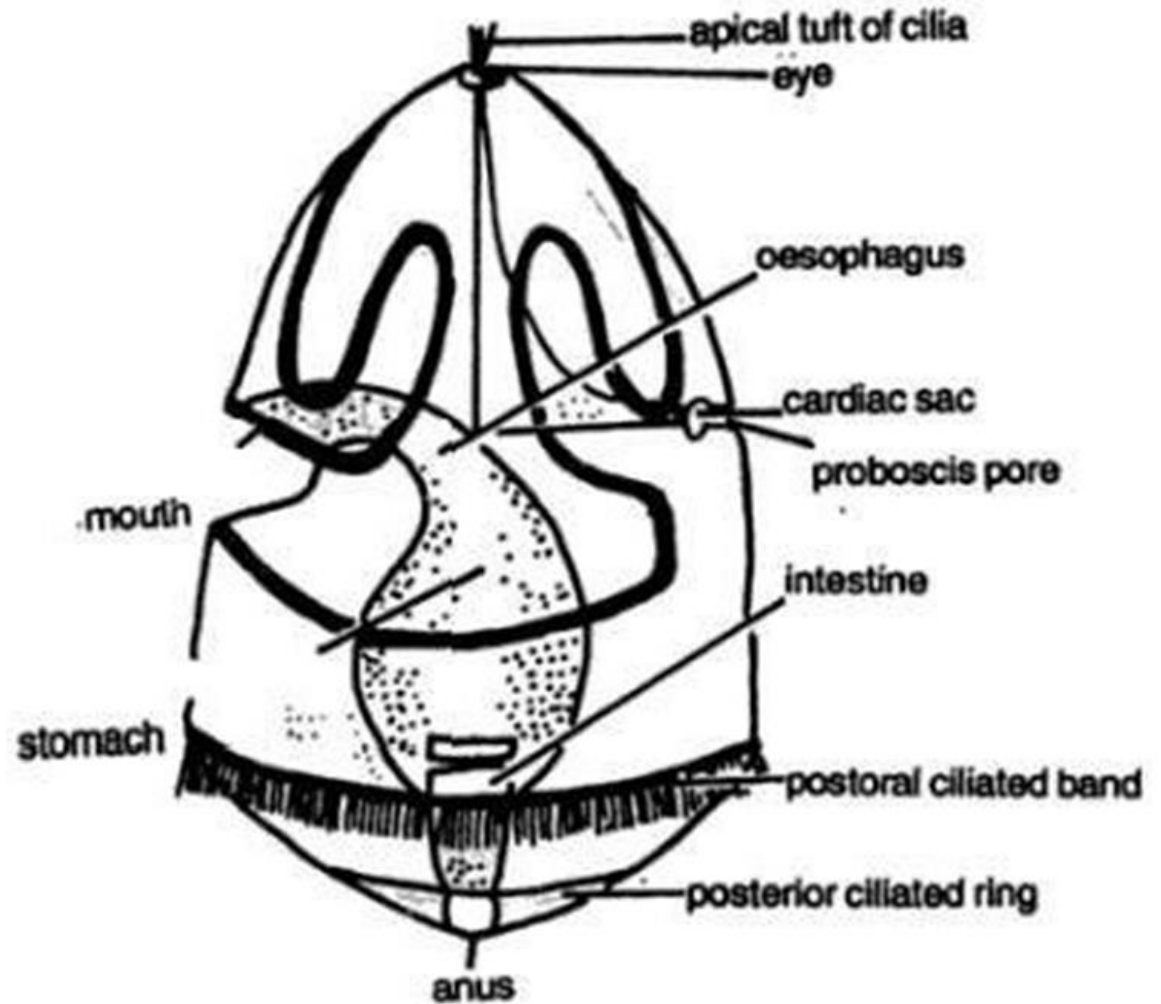
# A. Museum specimens and slides

**PROTOCHORDATA**

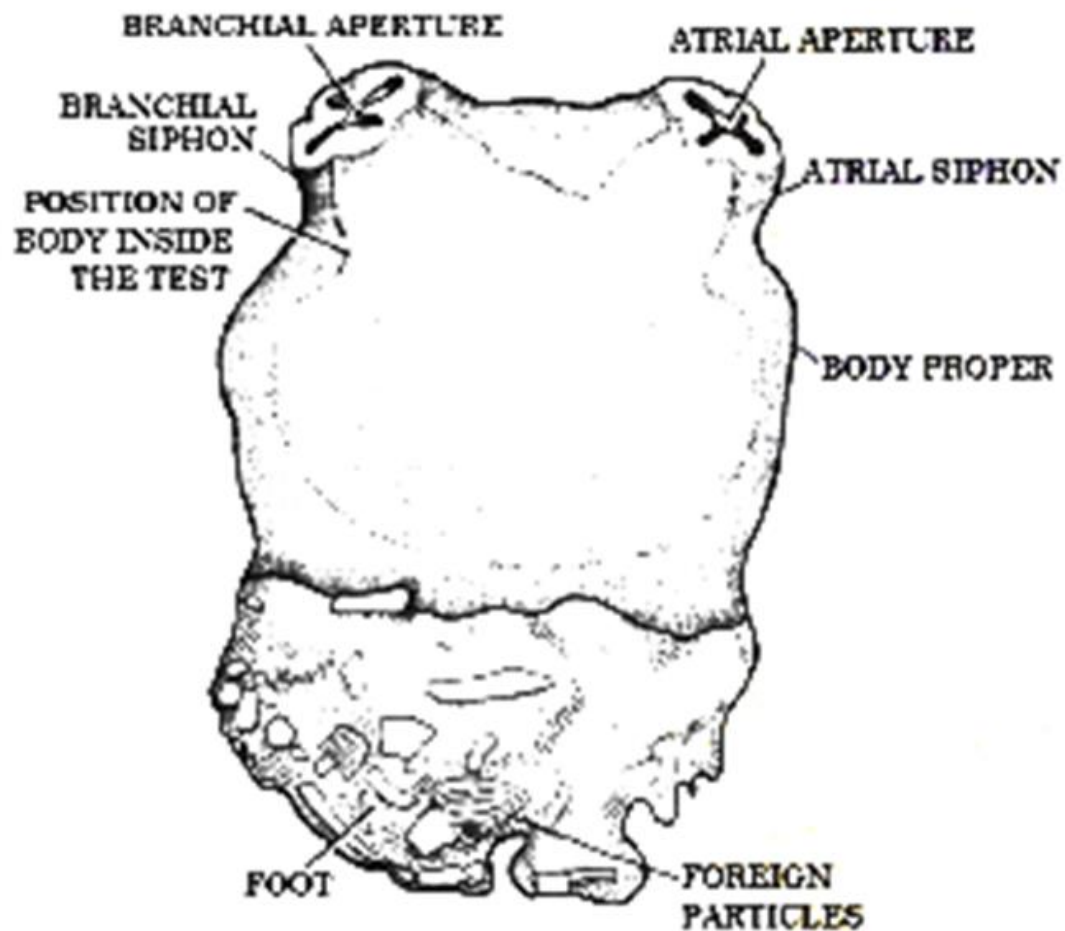
PHYLUM: HEMICHORDATA  
CLASS: ENTEROPNEUSTA  
EXAMPLE: *BALANOGLOSSUS*



# Tornaria larva



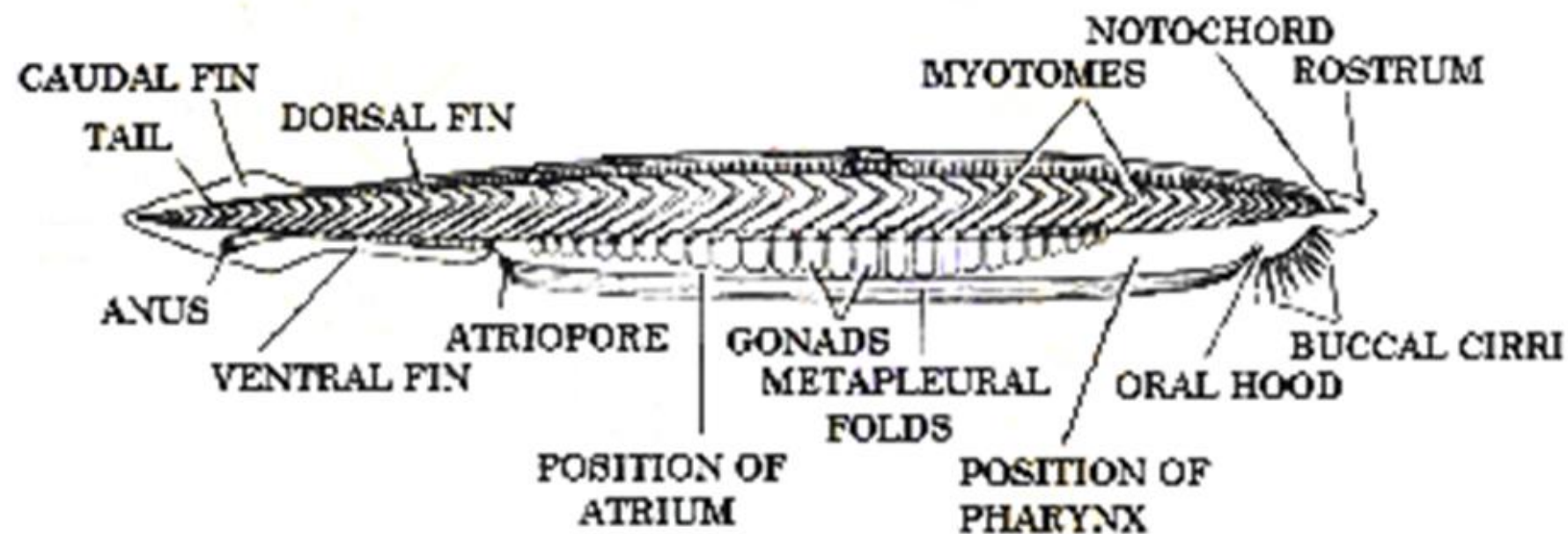
PHYLUM: CHORDATA  
SUB PHYLUM: UROCHORDATA  
CLASS: ASCIDIACEA  
EXAMPLE: *HERDMANIA*



PHYLUM: CHORDATA

SUB PHYLUM: CEPHALOCHORDATA

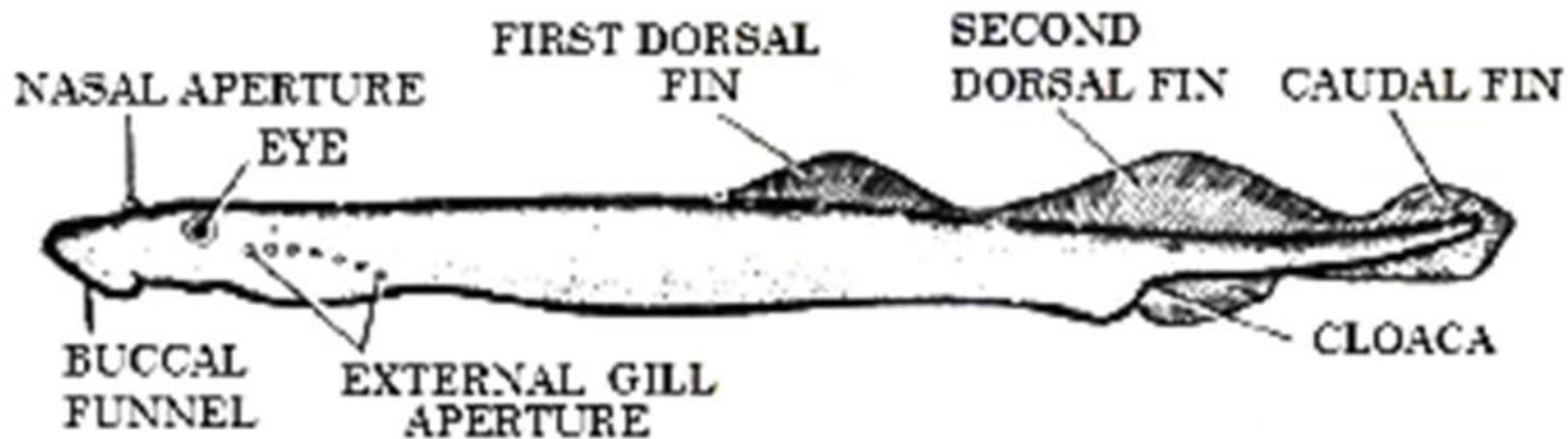
EXAMPLE: *AMPHIOXUS*



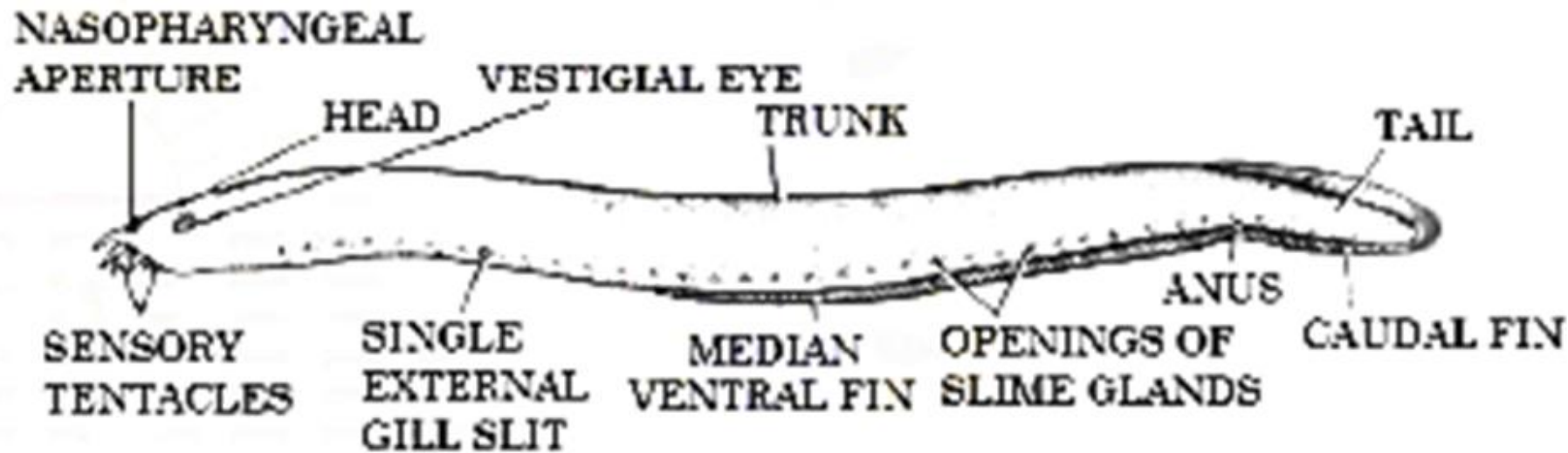
**CYCLOSTOMATA**



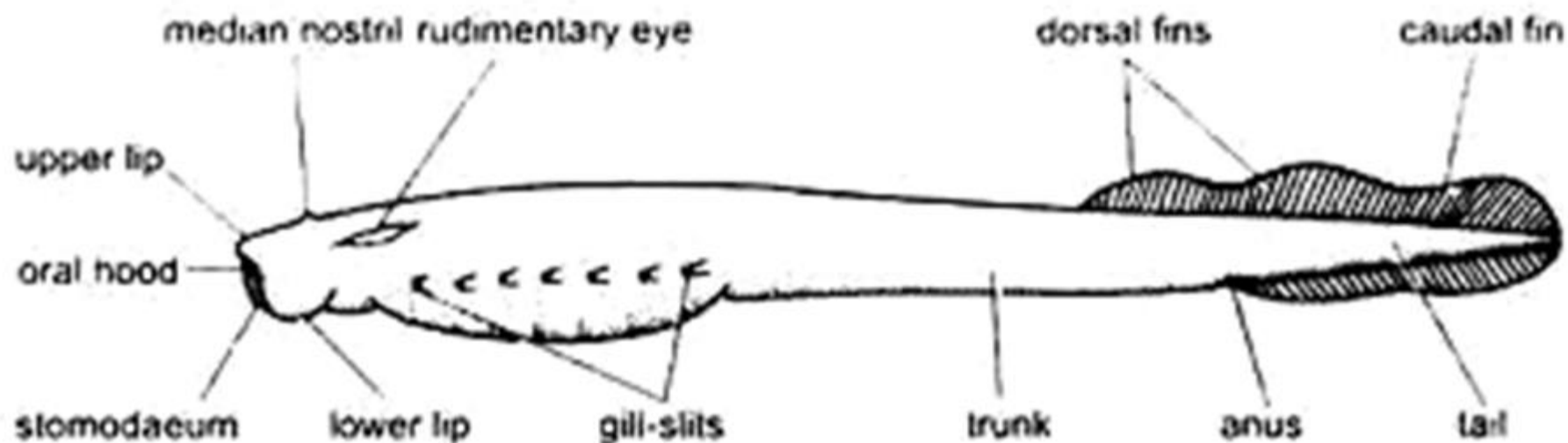
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: CYCLOSTOMATA**  
**Ex.: PETROMYZON**



**PHYLUM: CHORDATA**  
**SUBPHYLIM: VERTEBRATA**  
**CLASS: CYCLOSTOMATA**  
**Ex.: MYXINE**



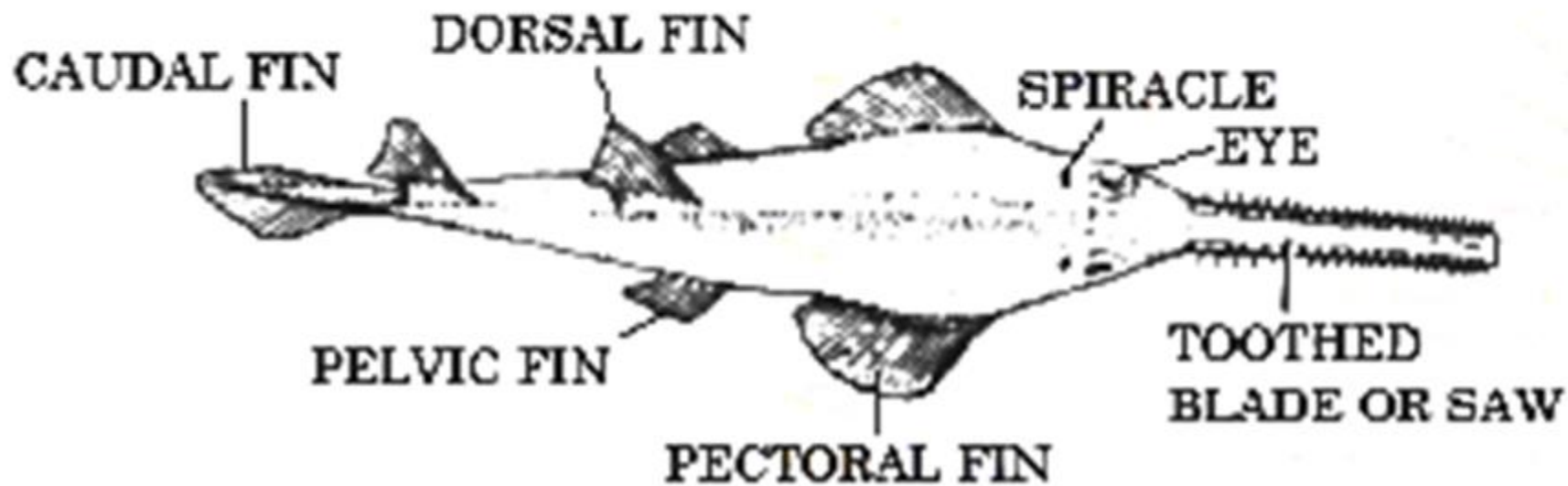
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: CYCLOSTOMATA**  
**Ex.: AMMOCOETE LARVA**



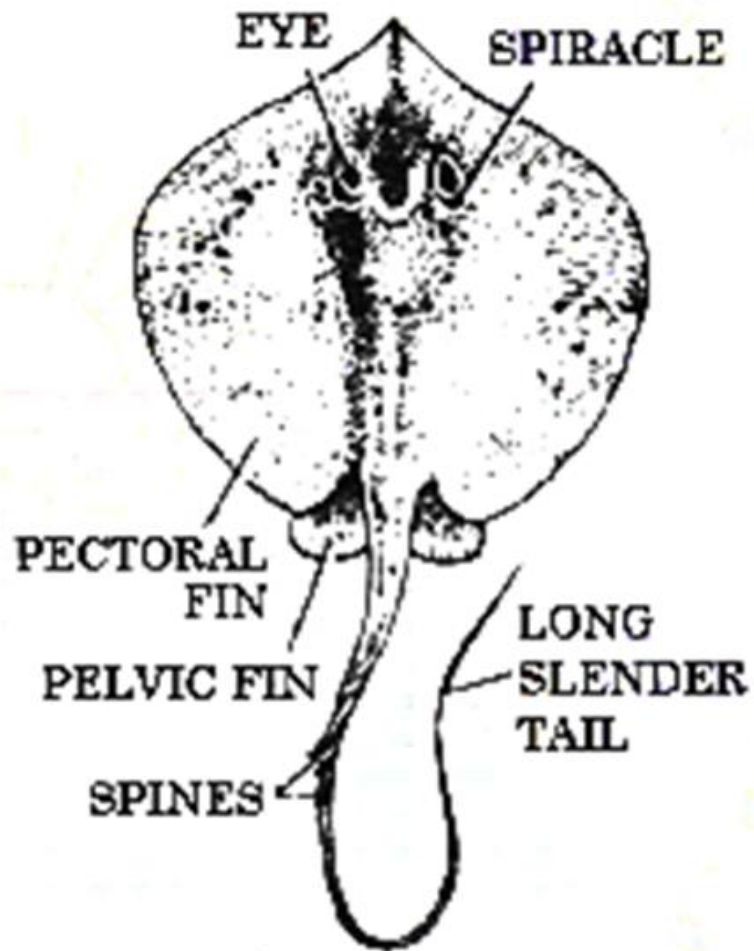
**PISCES**

**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: CHONDRICHTHYES**

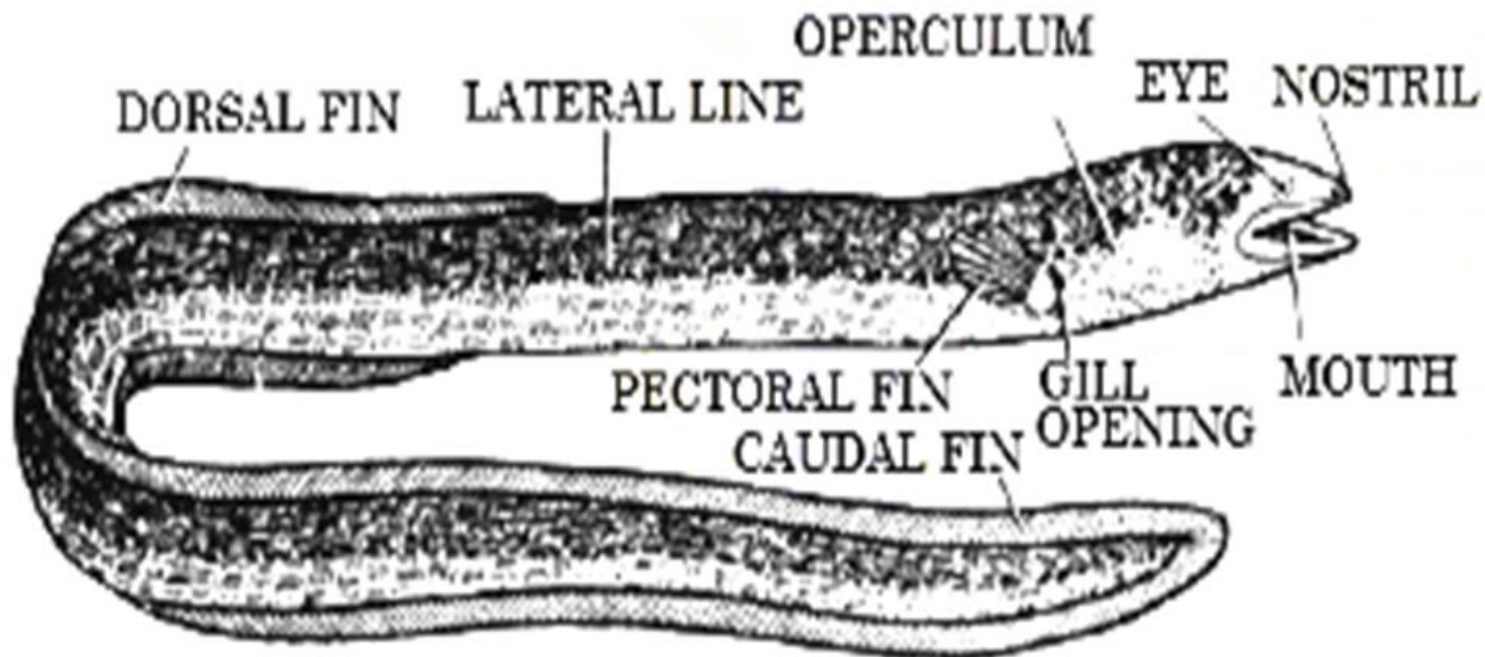
**Ex., PRISTIS**



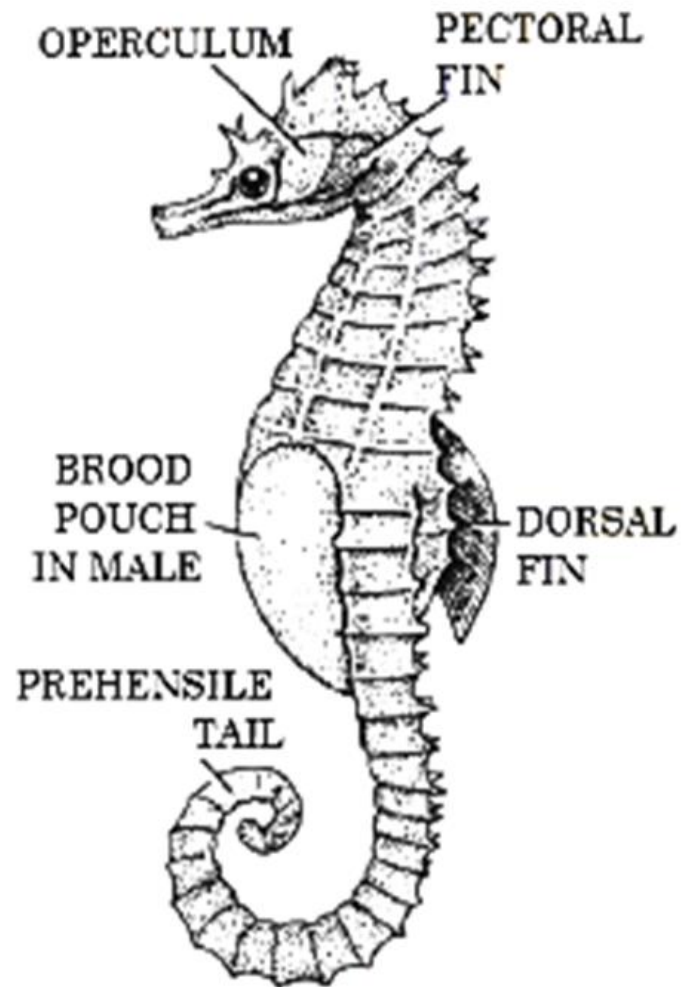
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: CHONDRICHTHYES**  
**Ex., TRYGON**



**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: OSTEICHTHYES**  
**EXAMPLE: ANGUILLA**



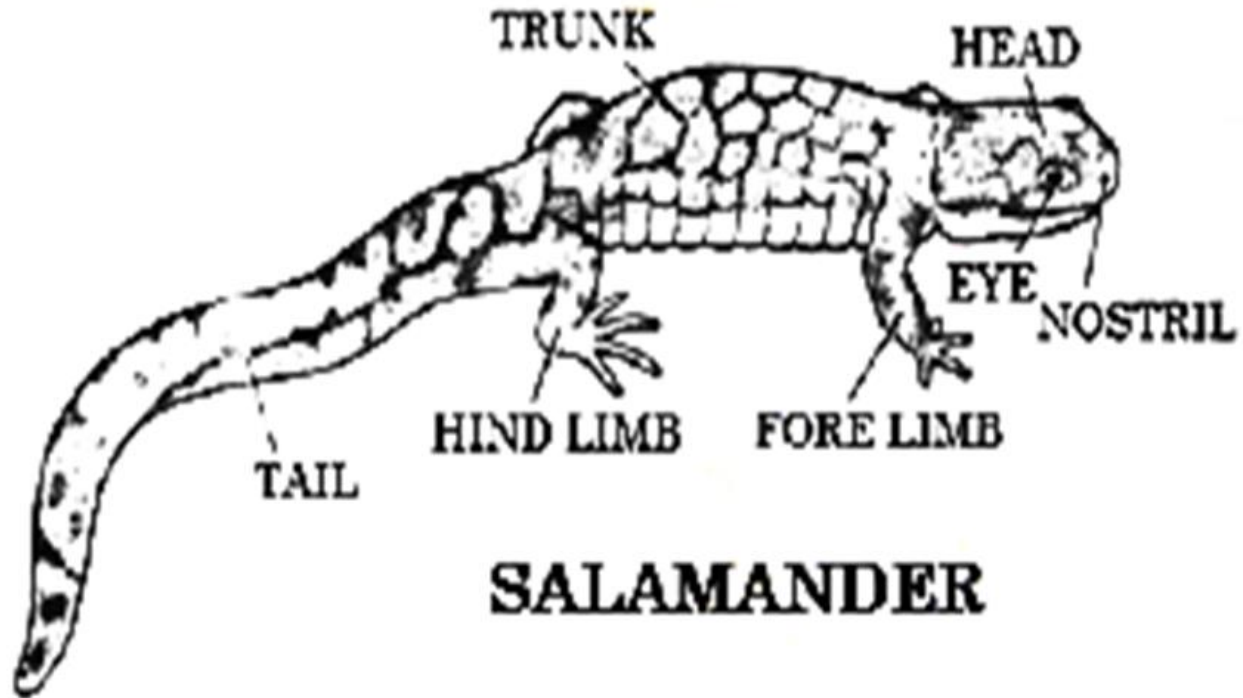
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: OSTEICHTHYES**  
**EXAMPLE: HIPPOCAMPUS**



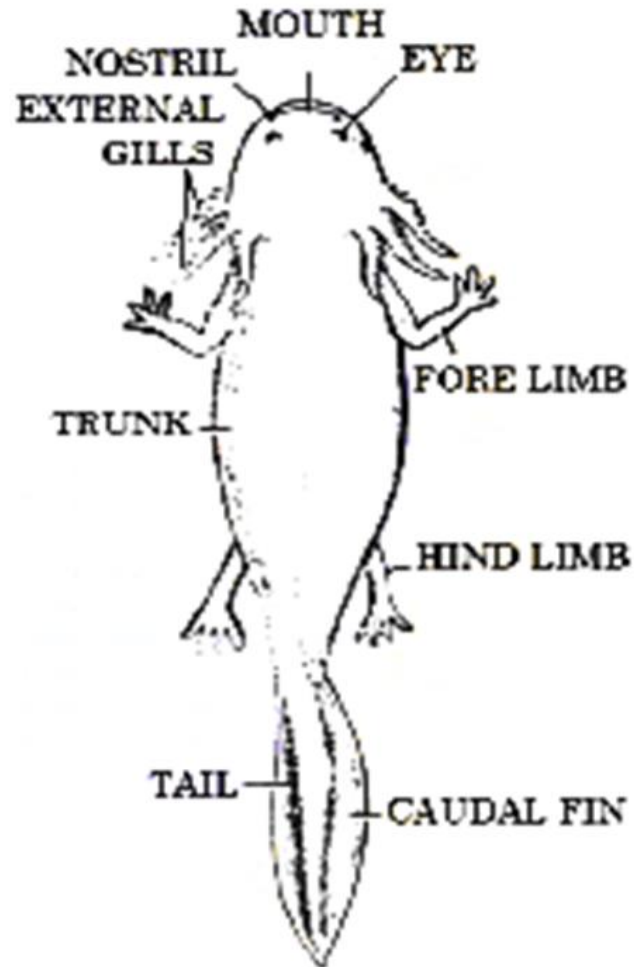


# AMPHIBIA

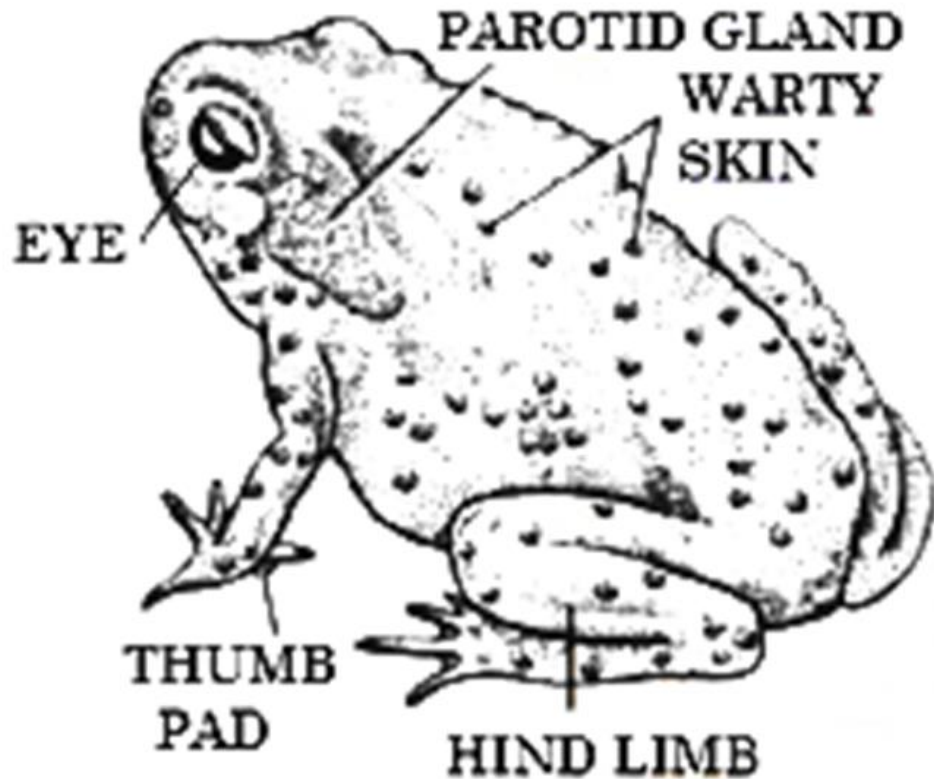
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: AMPHIBIA**  
**EXAMPLE: TIGER SALAMANDER**



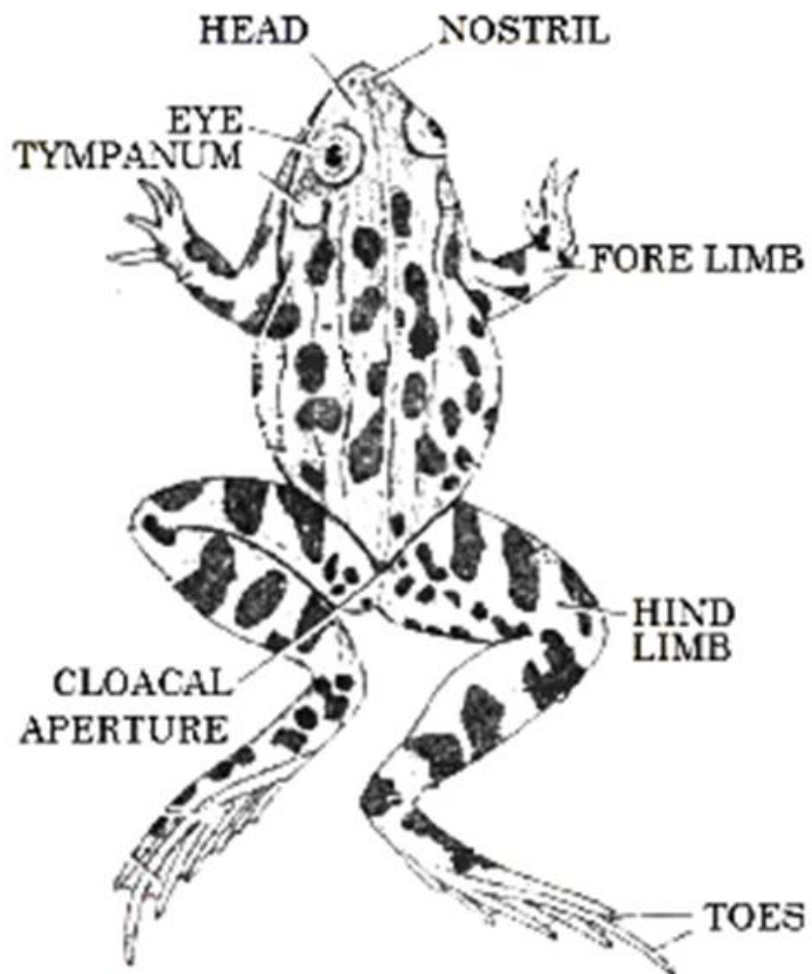
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: AMPHIBIA**  
**EXAMPLE: AXOLOTL LARVA**



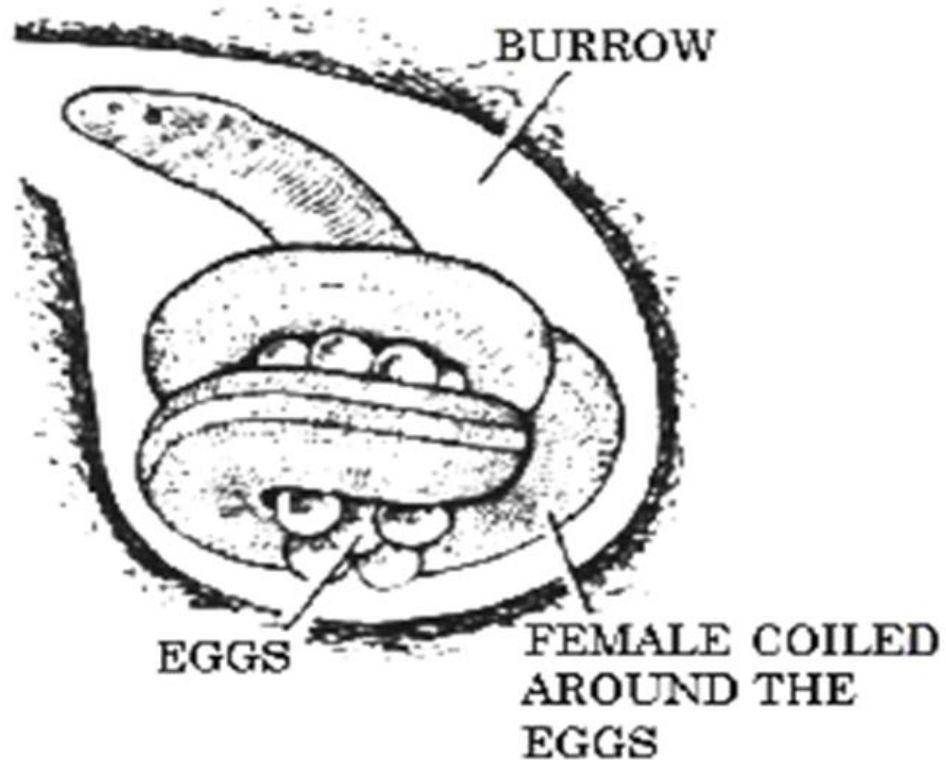
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: AMPHIBIA**  
**EXAMPLE: COMMON TOAD**



**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: AMPHIBIA**  
**EXAMPLE: INDIAN BULL FROG**

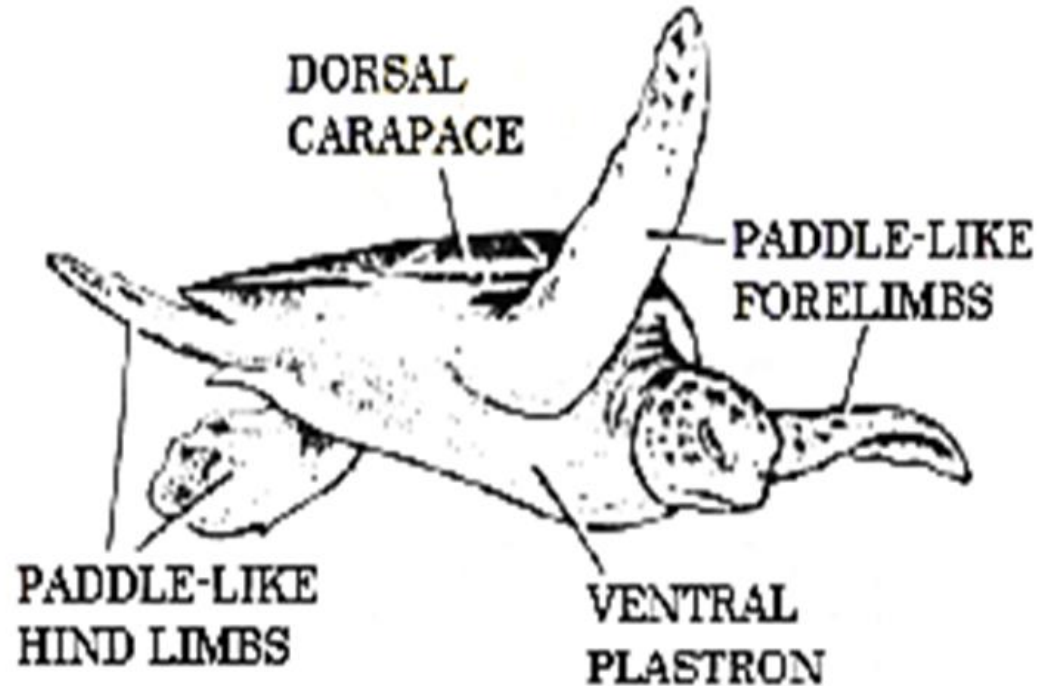


**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: AMPHIBIA**  
**EXAMPLE: ICHTHYOPHIS**



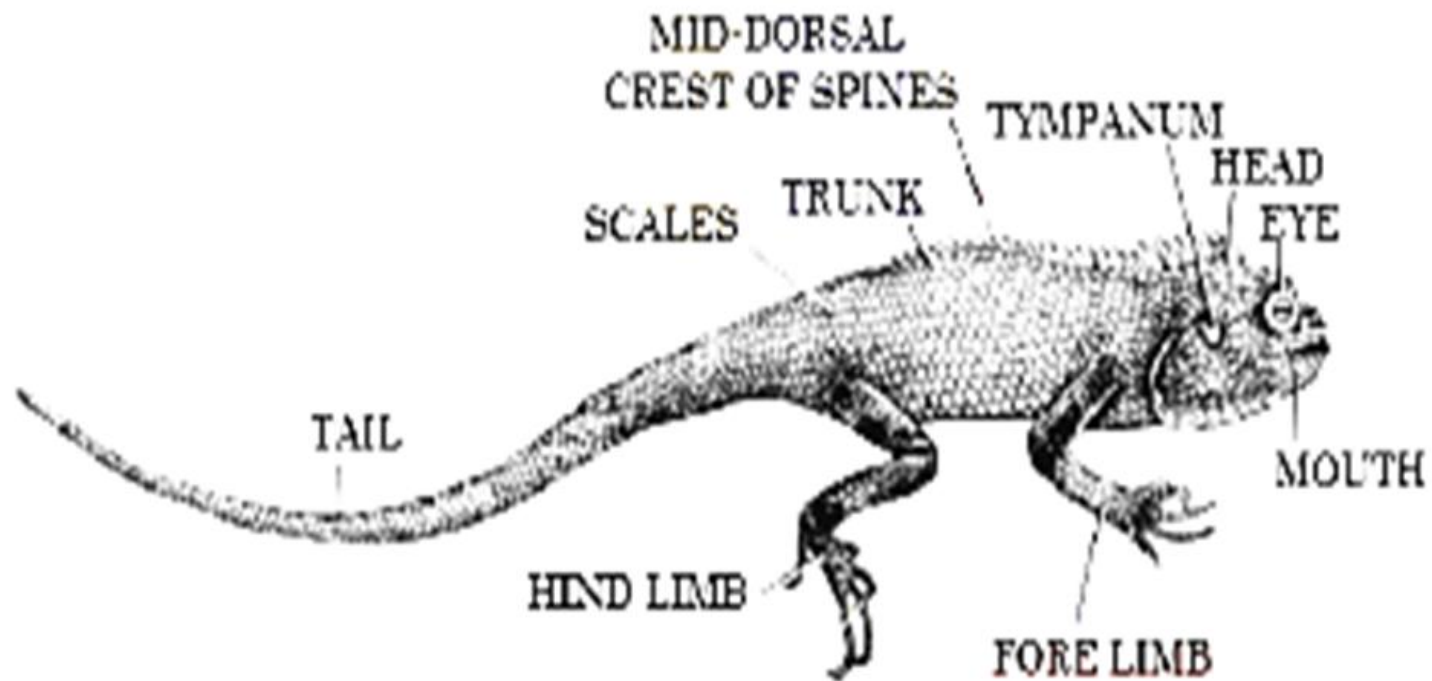
# REPTILIA

**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: REPTILIA**  
**EXAMPLE: CHELON MYDAS**

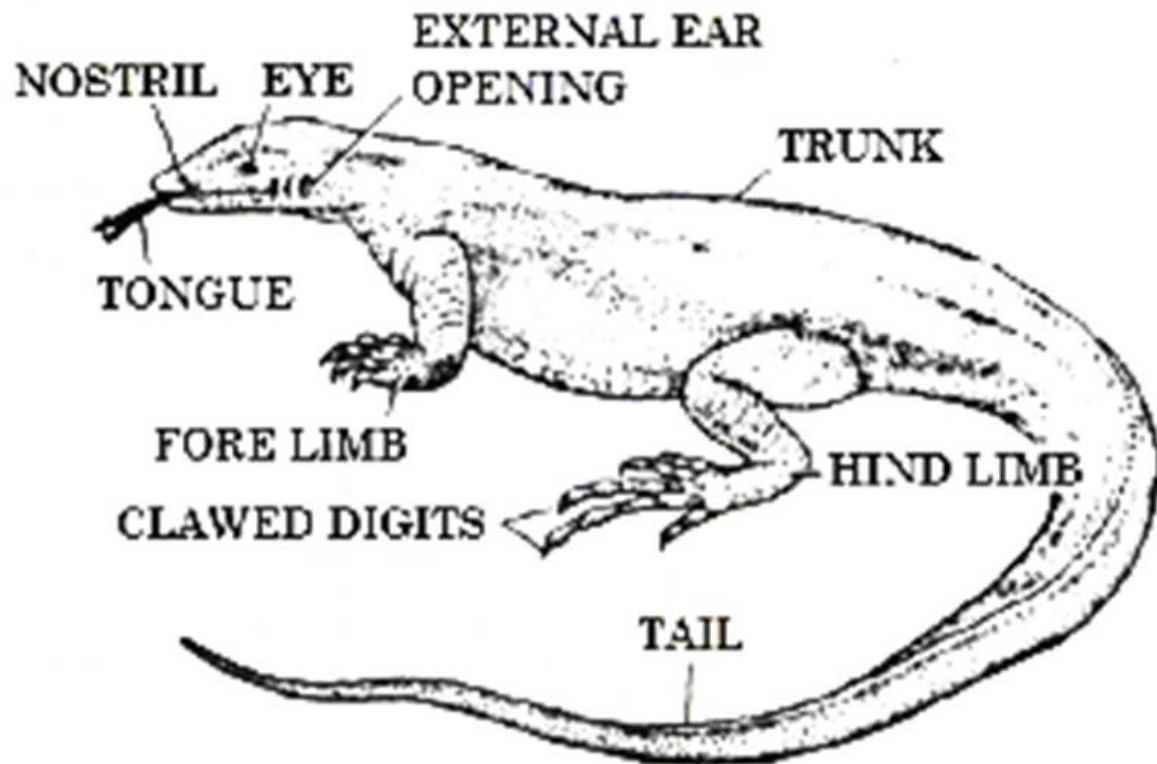




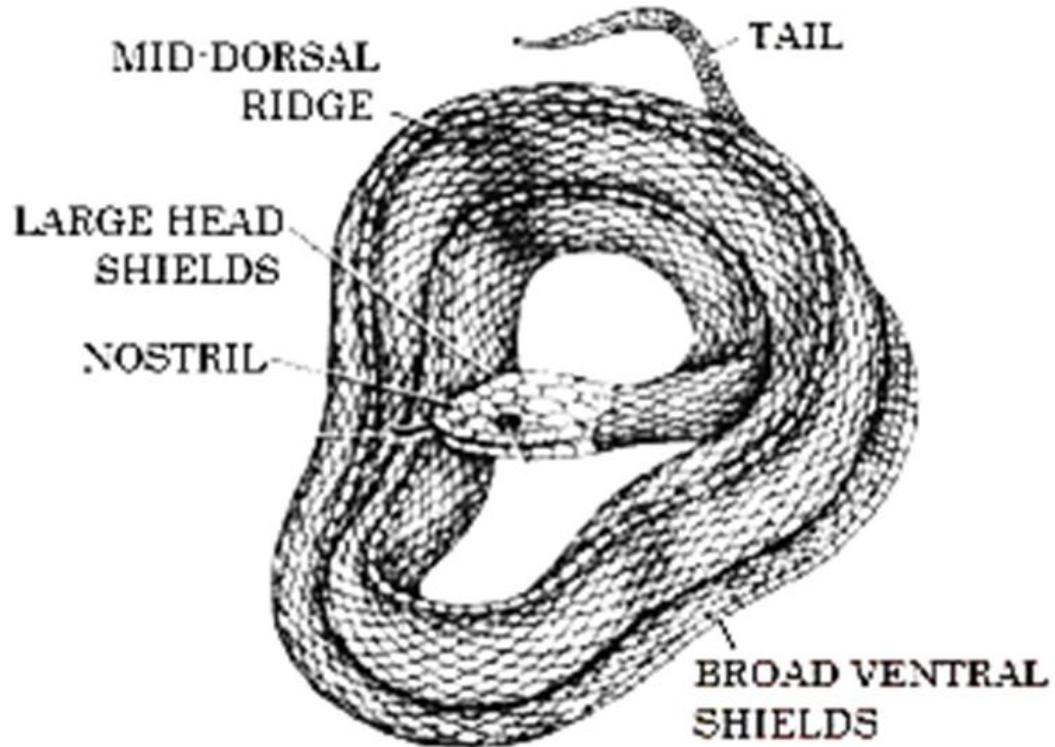
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: REPTILIA**  
**EXAMPLE: GARDEN LIZARD**



**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: REPTILIA**  
**EXAMPLE: COMMON INDIAN MONITOR**



**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: REPTILIA**  
**EXAMPLE: RAT SNAKE**



**PHYLUM: CHORDATA**

**SUBPHYLUM: VERTEBRATA**

**CLASS: REPTILIA**

**EXAMPLE: COMMON INDIAN COBRA**



**AVES**

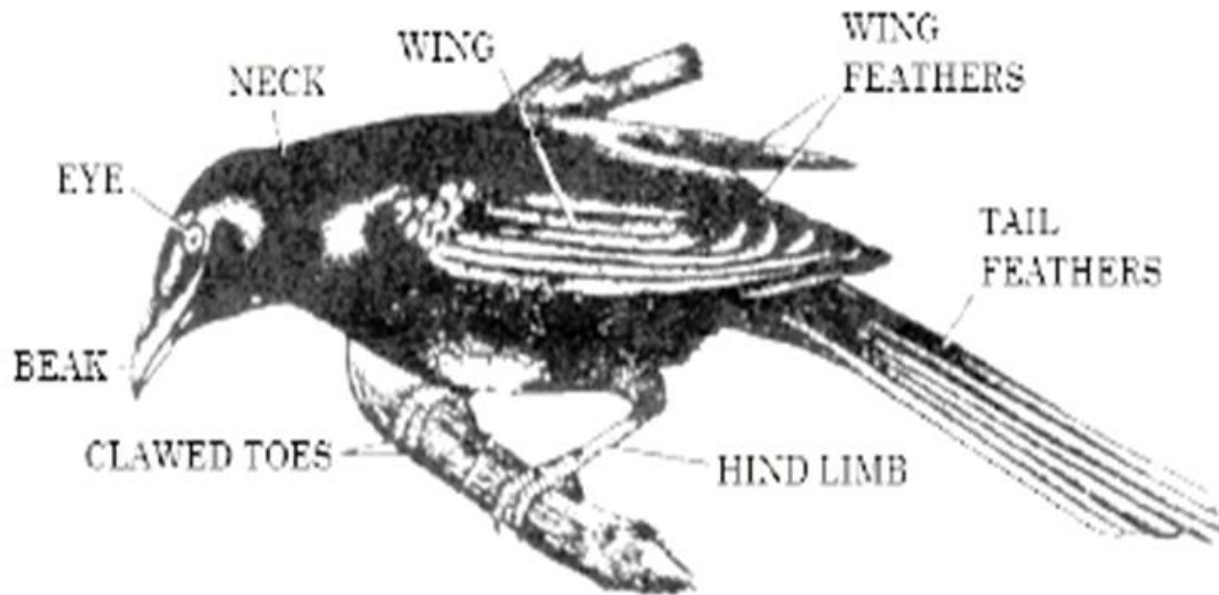
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: AVES**  
**EXAMPLE: GOLDEN BACKED WOODPECKER**



**Downy Woodpecker**



**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: AVES**  
**EXAMPLE: KOEL**

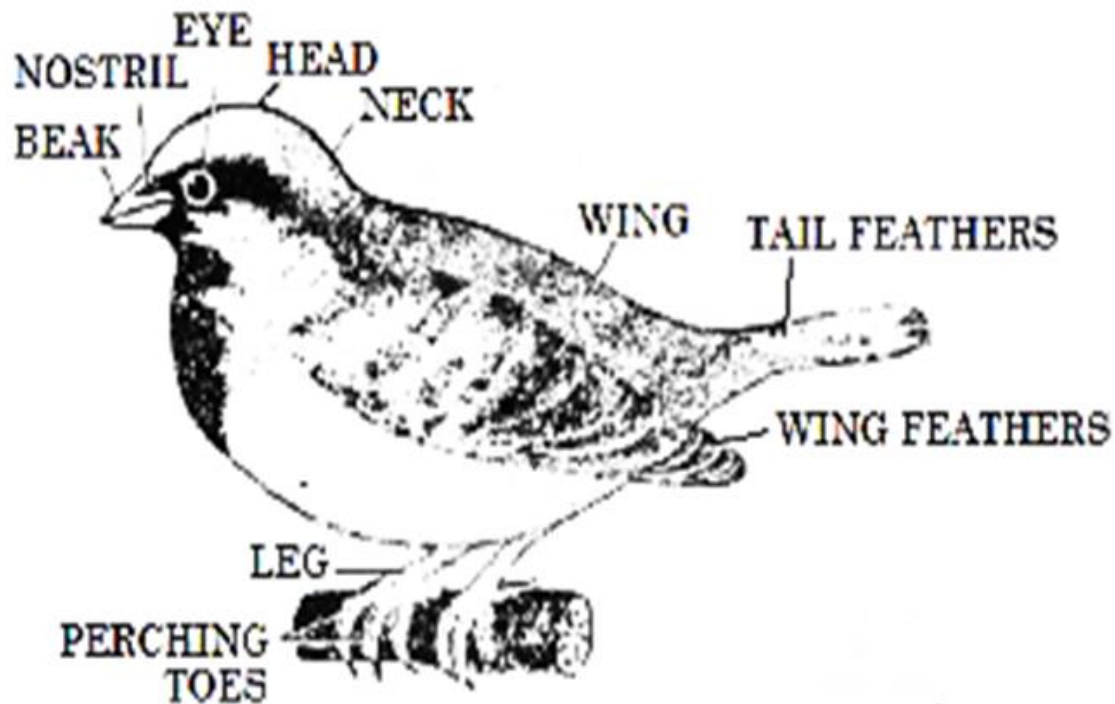


**KOEL**





**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: AVES**  
**EXAMPLE: HOUSE SPARROW**





**INDIAN**



**SRILANKAN**



**PHYLUM: CHORDATA**

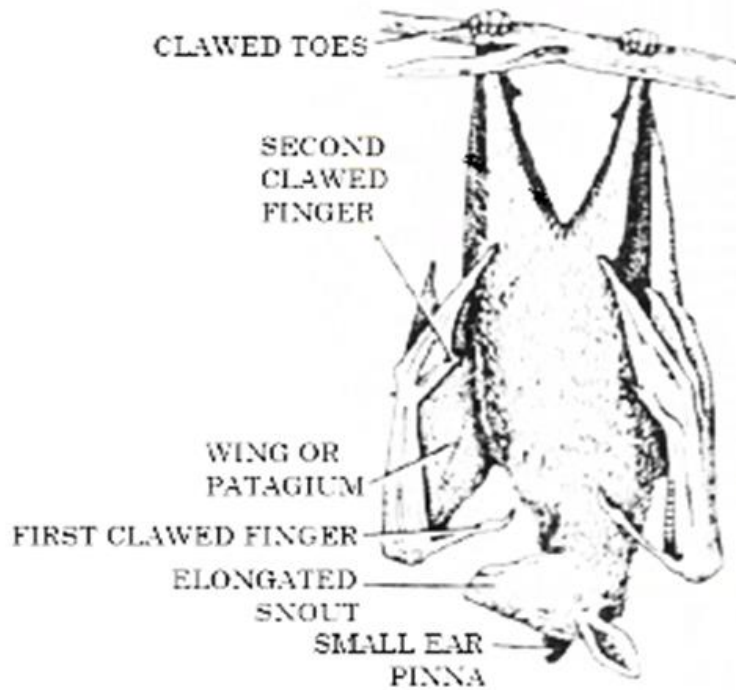
**SUBPHYLUM: VERTEBRATA**

**CLASS: AVES**

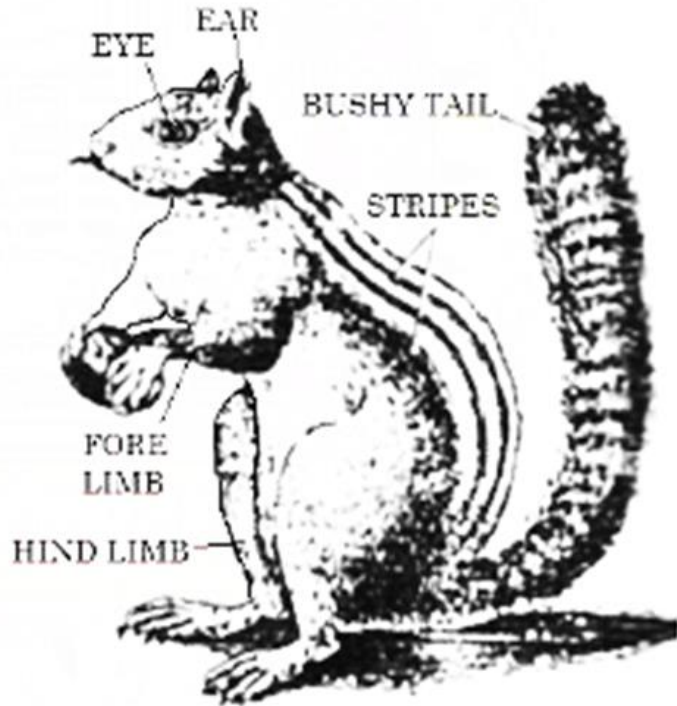
**EXAMPLE: *Corvus splendens***

**MAMMALIA**

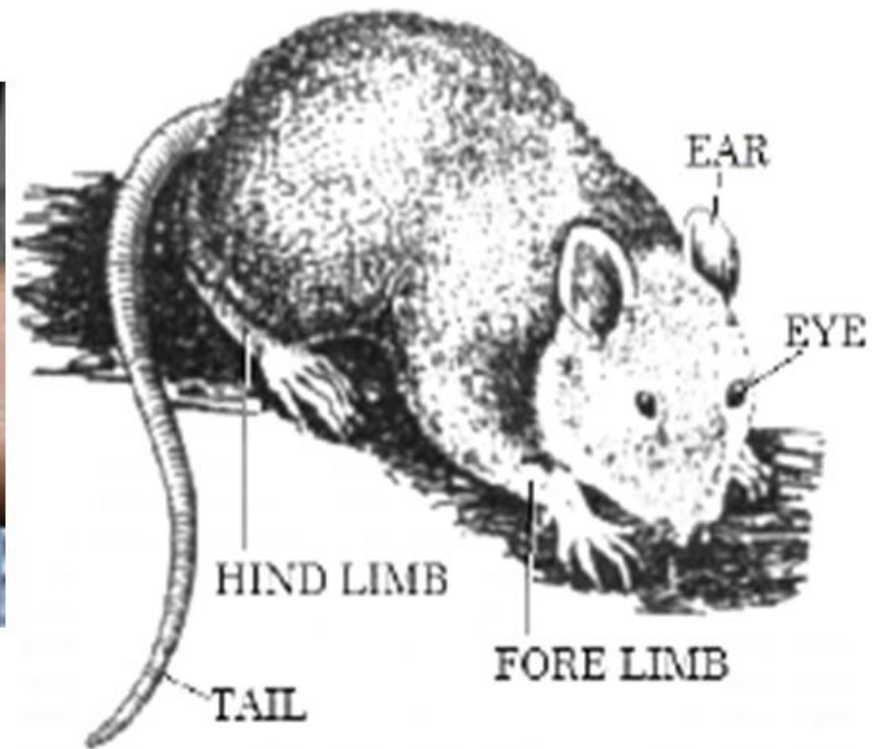
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: MAMMALIA**  
**EXAMPLE: CYANOPTERUS**



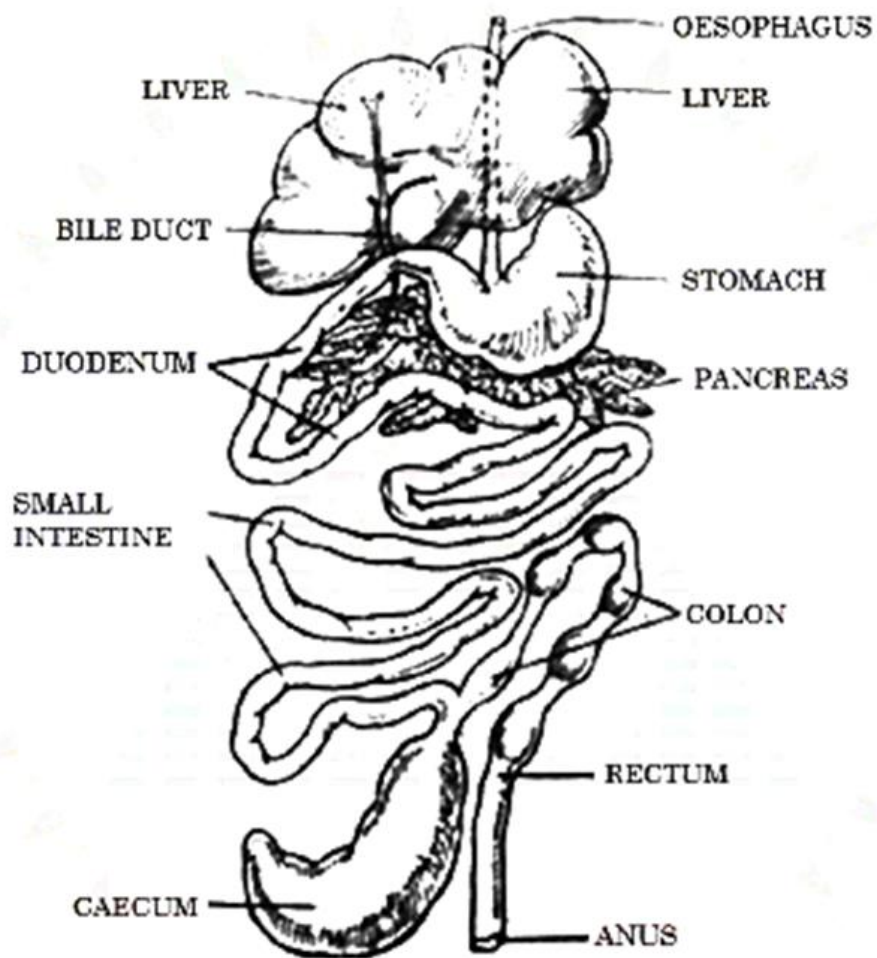
**PHYLUM: CHORDATA**  
**SUBPHYLUM: VERTEBRATA**  
**CLASS: MAMMALIA**  
**EXAMPLE: FUNAMBULUS**



**PHYLUM: CHORDATA**  
**SUBPHYLUM:**  
**VERTEBRATA**  
**CLASS: MAMMALIA**  
**EXAMPLE: HOUSE RAT**

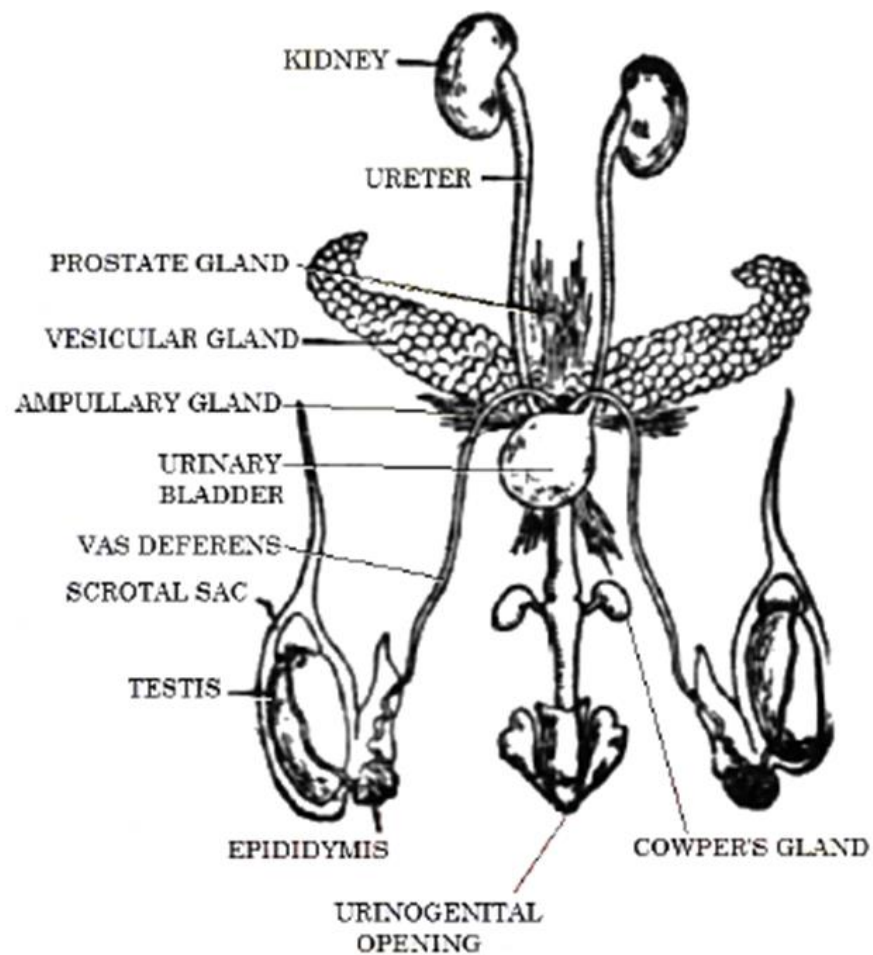


# **B. Dissections**

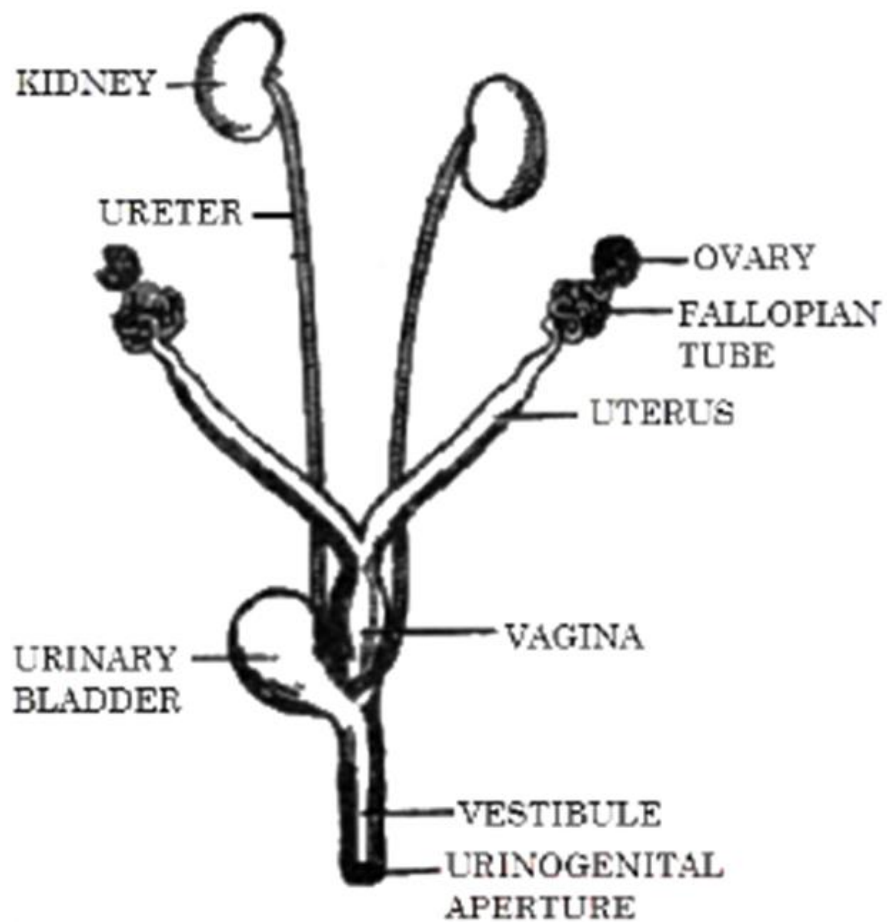


**DIGESTIVE SYSTEM OF RAT**





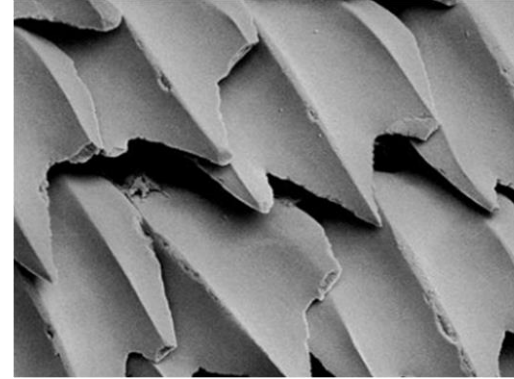
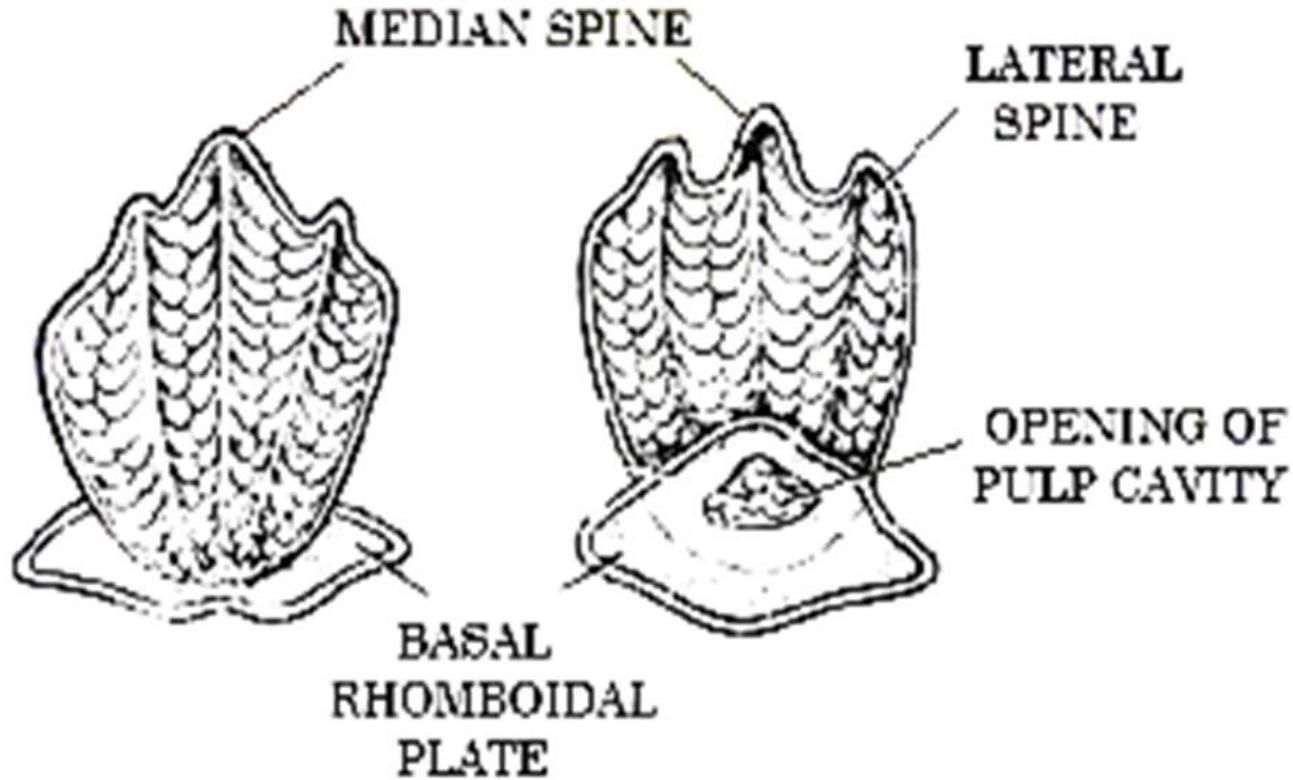
**URINOGENITAL SYSTEM OF MALE RAT**

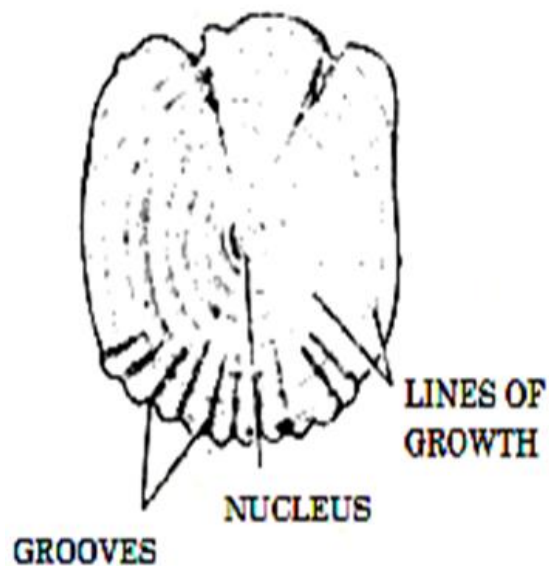


**URINOGENITAL SYSTEM OF FEMALE RAT**

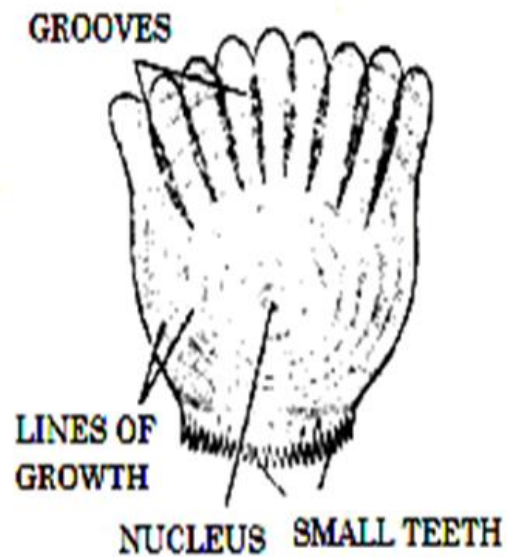
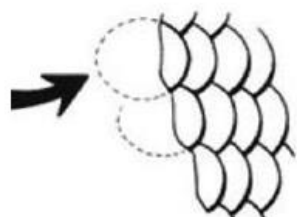
# **C. Mountings**

# PLACOID SCALE OF SHARK





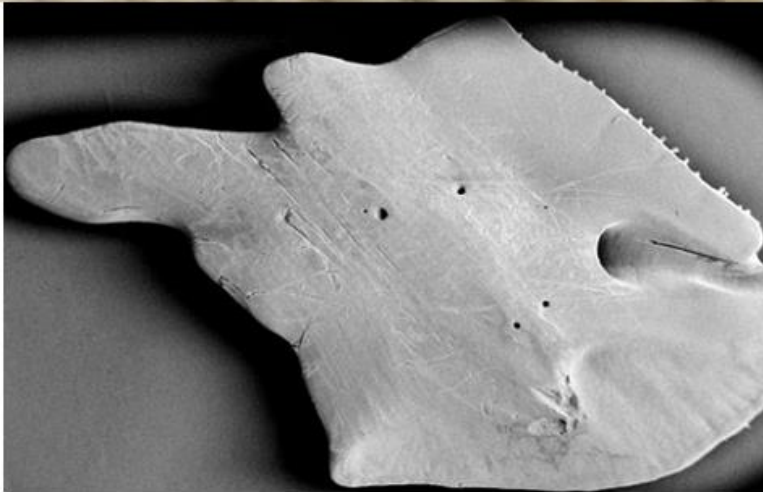
**CYCLOID SCALE**



**CTENOID SCALE**



# Ganoid scales



## Cosmoid scales

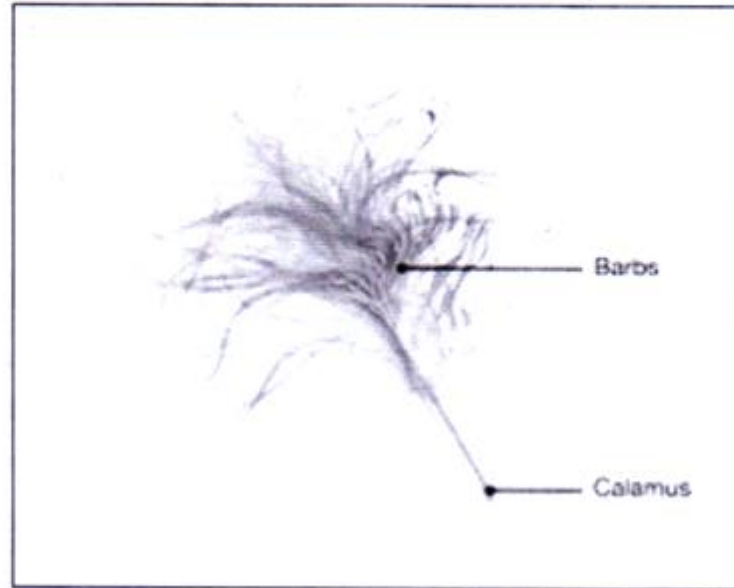


# **Exoskeletal structures**



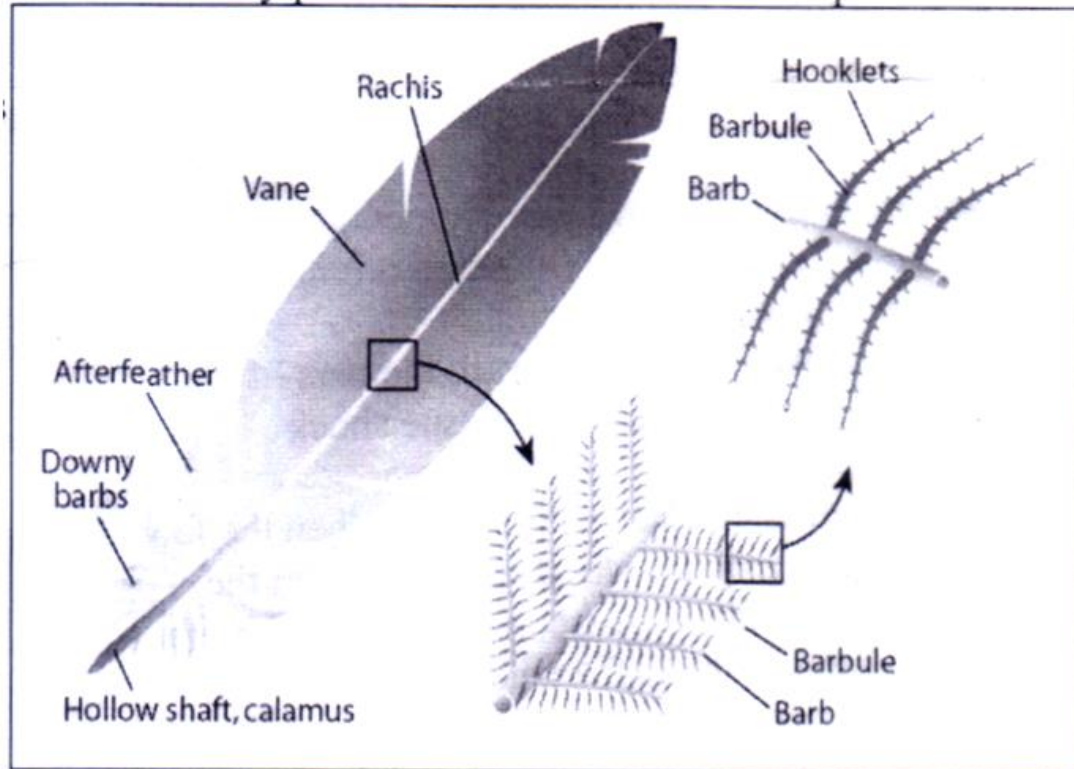
# BIRD FEATHERS

## DOWN FEATHER

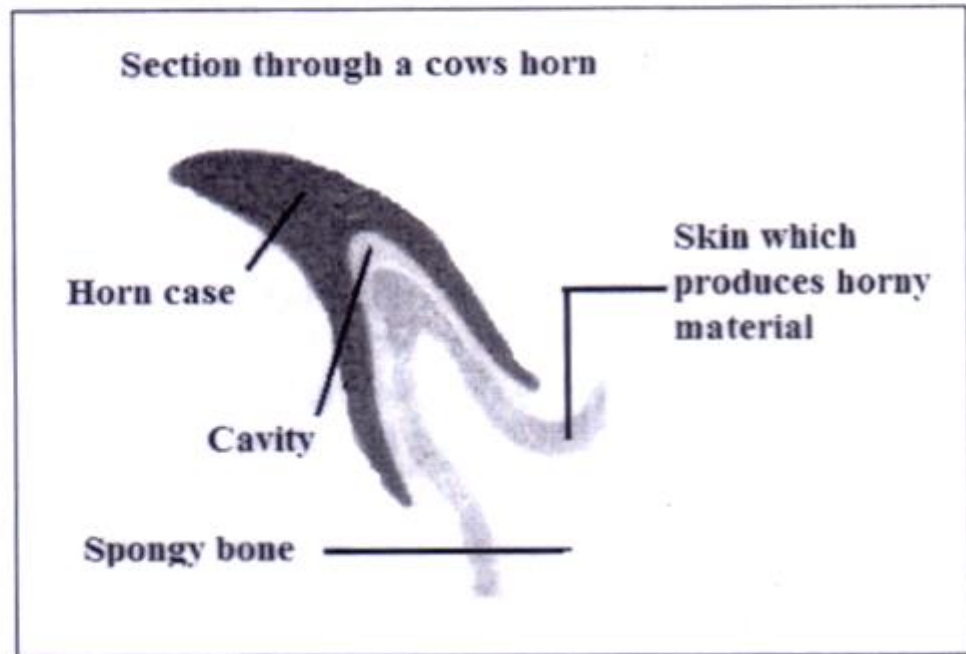


# BIRD FEATHERS

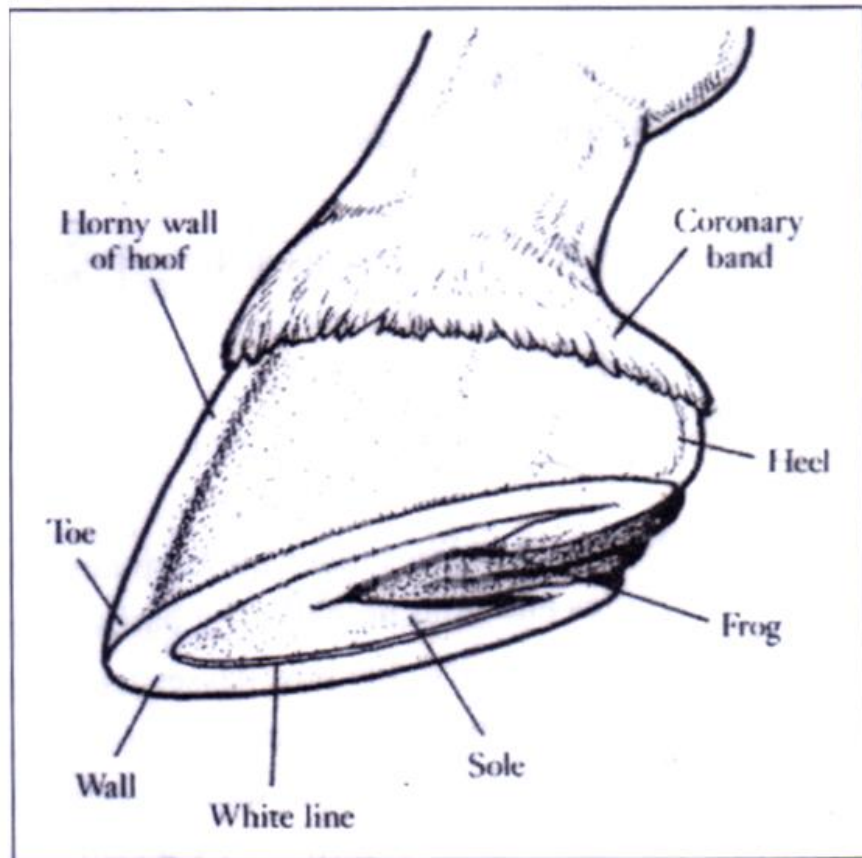
## CONTOUR FEATHER



## HORNS OF CATTLE

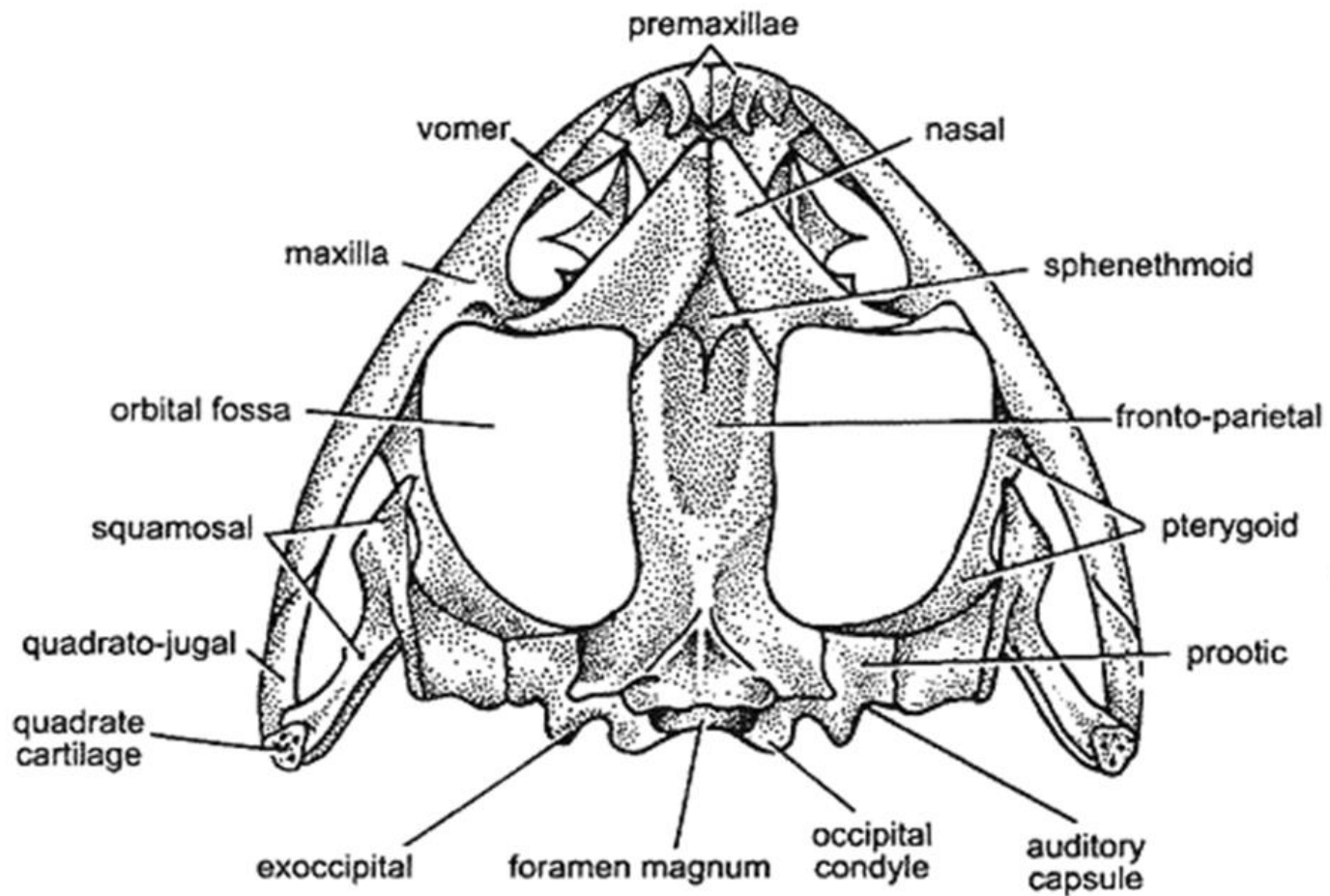


## HOOVES OF HORSE

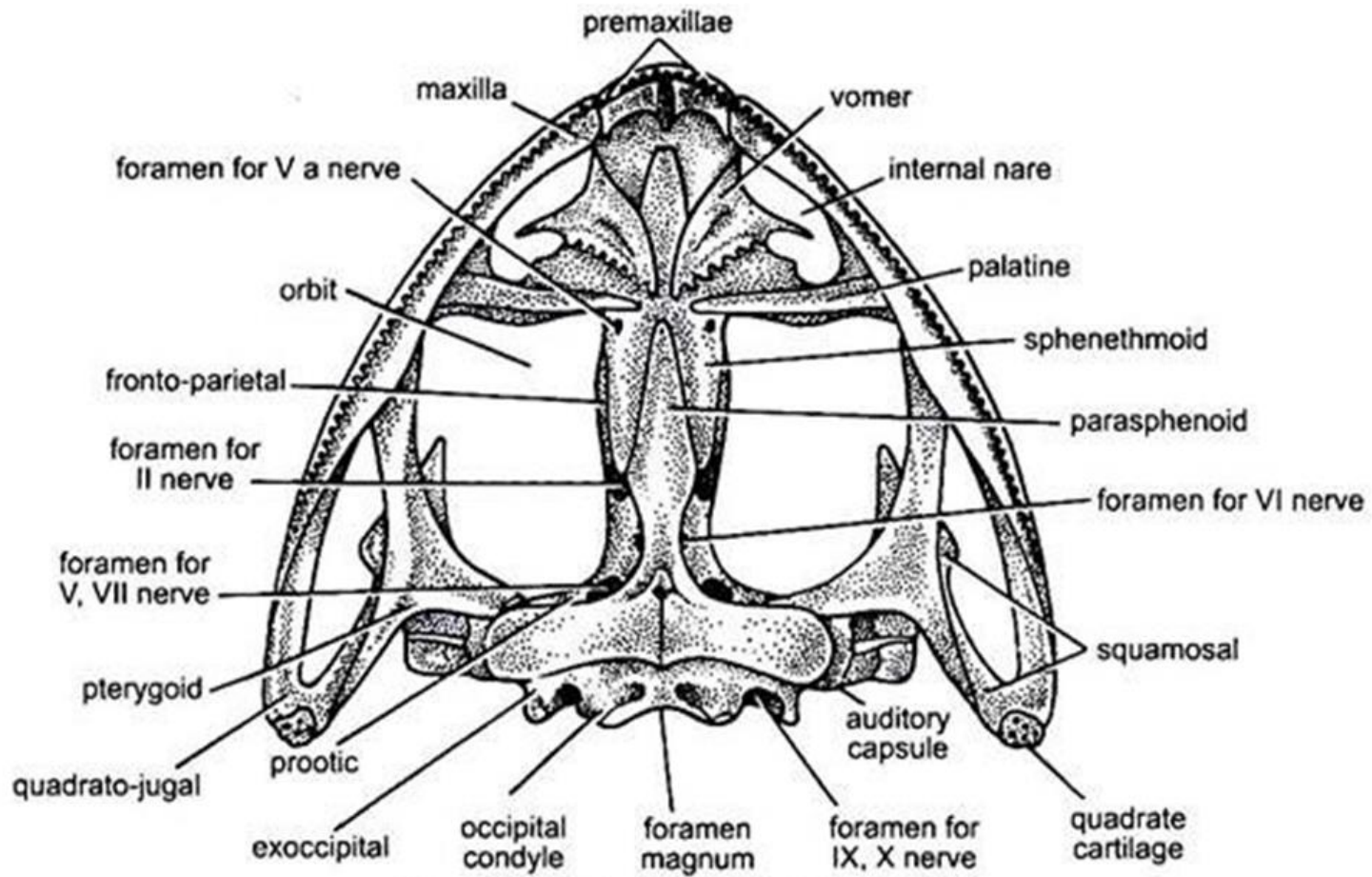


# **ENDOSKELETAL STRUCTURES**

# **Skull of Frog**



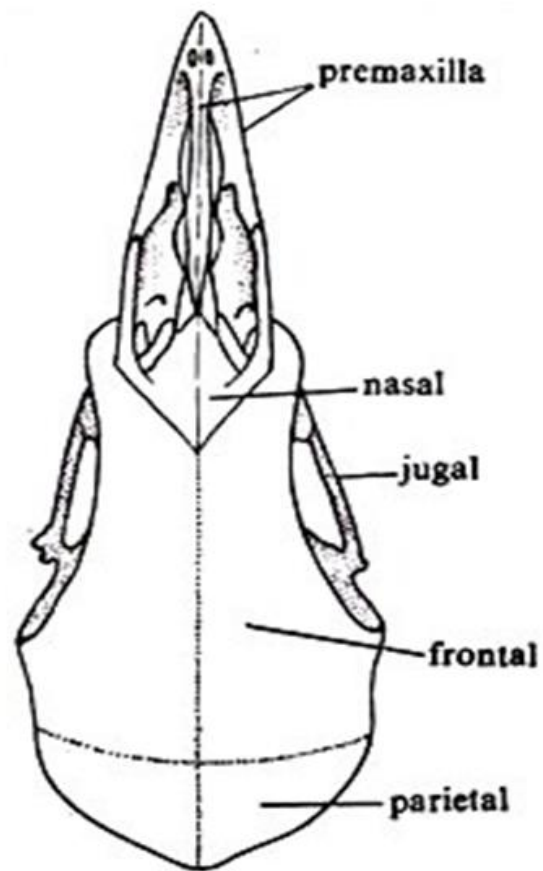
**DORSAL VIEW**



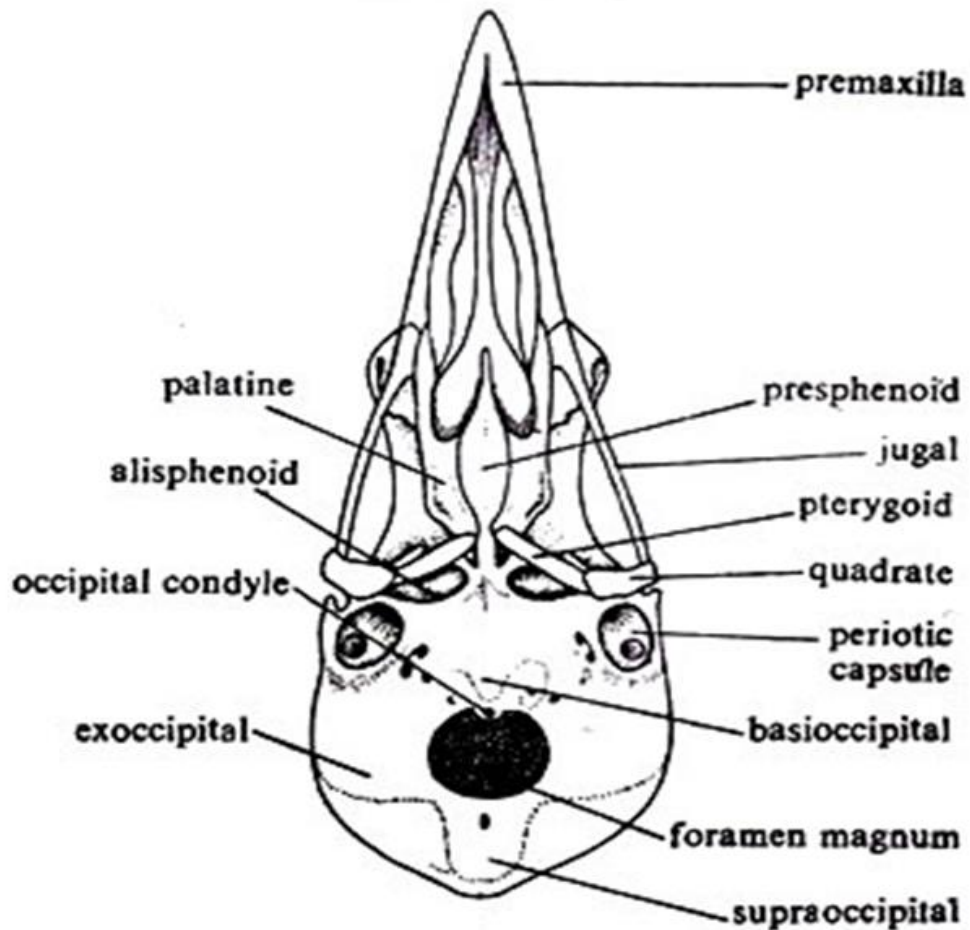
**VENTRAL VIEW**



# **Skull of Pigeon**

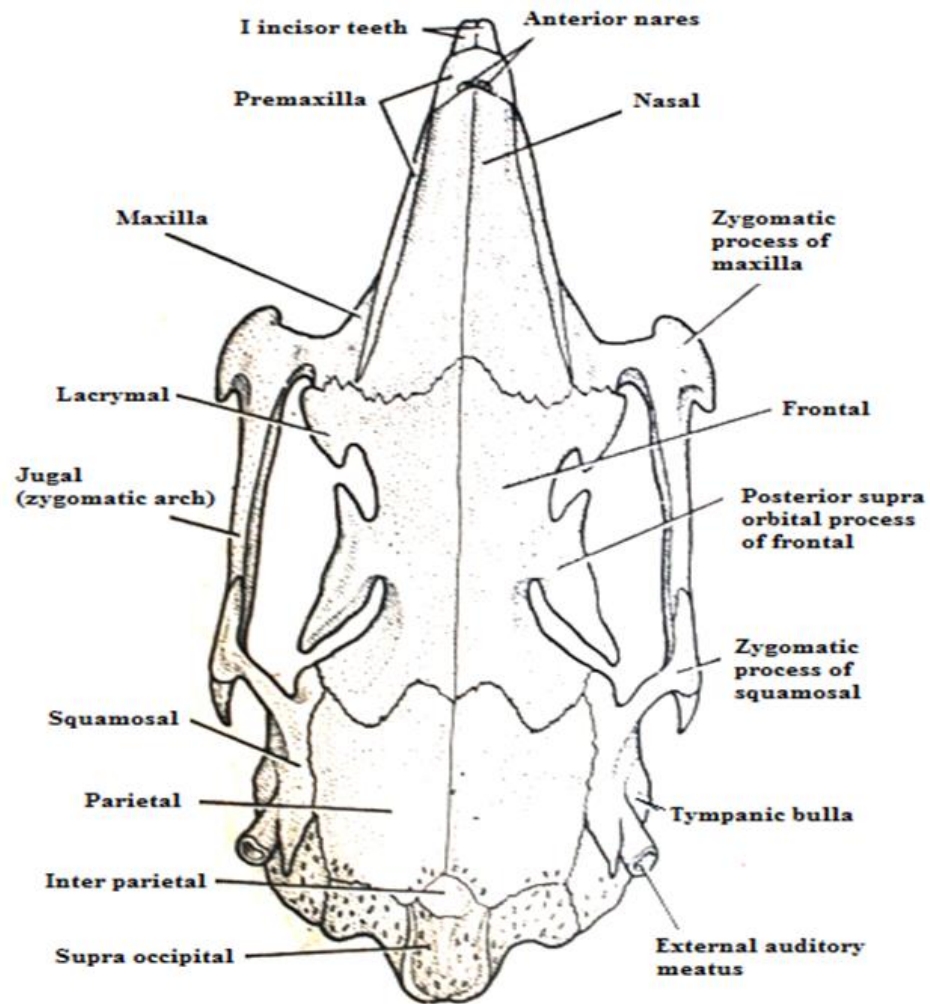


**DORSAL VIEW**



**VENTRAL VIEW**

# **Skull of Rabbit**



# **Vertebrae of Frog**

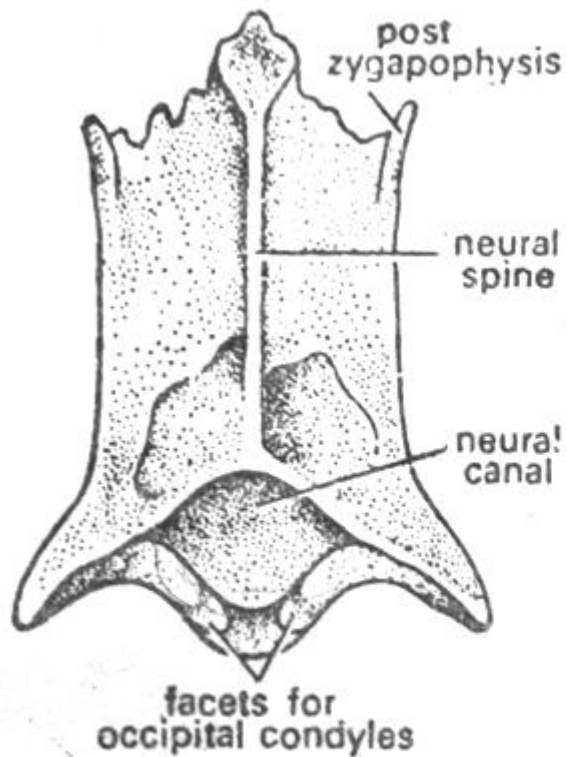


Fig. 356 Atlas (Dorsal view).

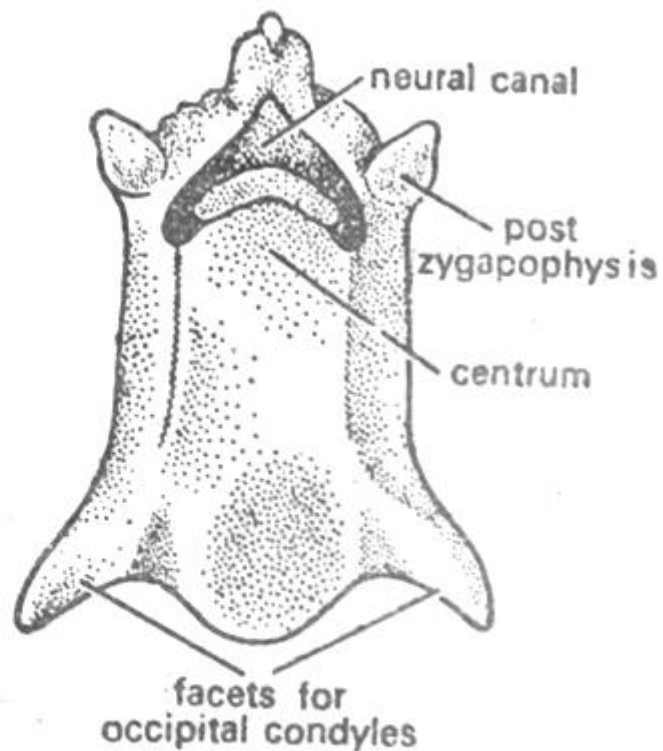


Fig. 357. Atlas (Ventral view).

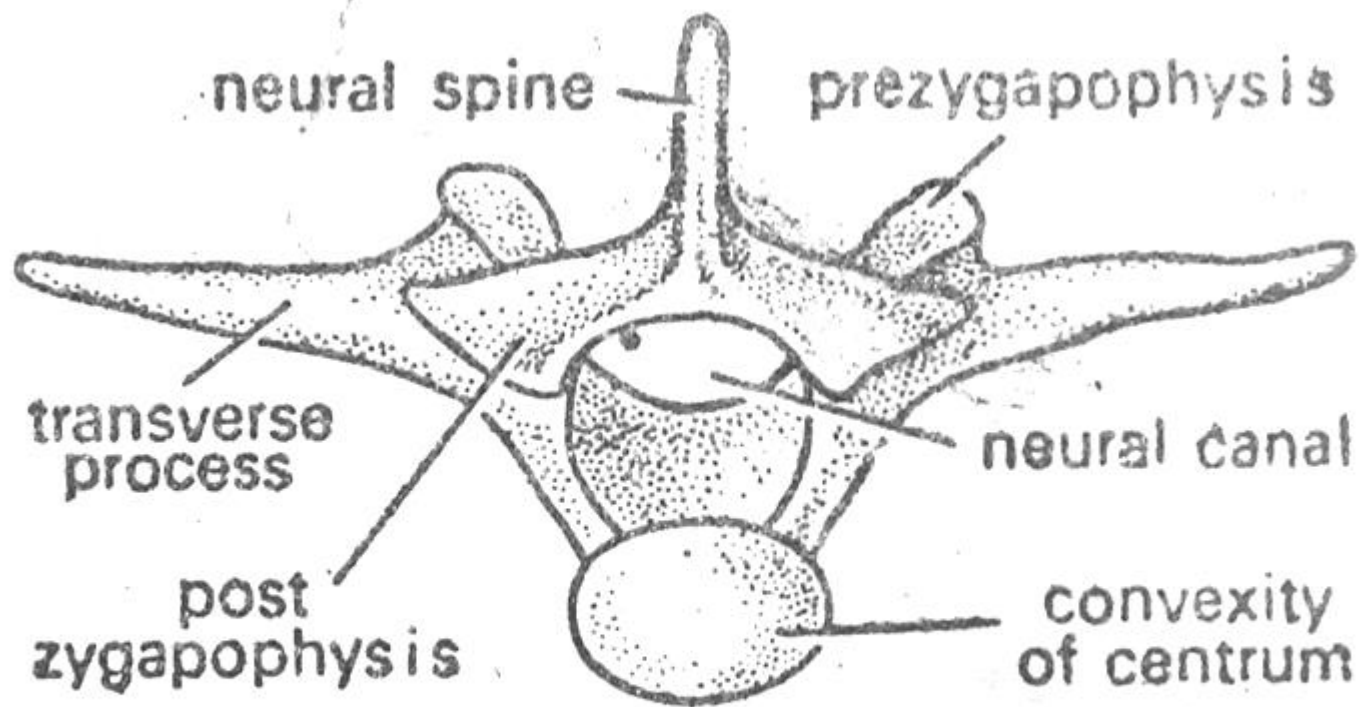


Fig 358. Typical vertebra.  
(Posterior view).

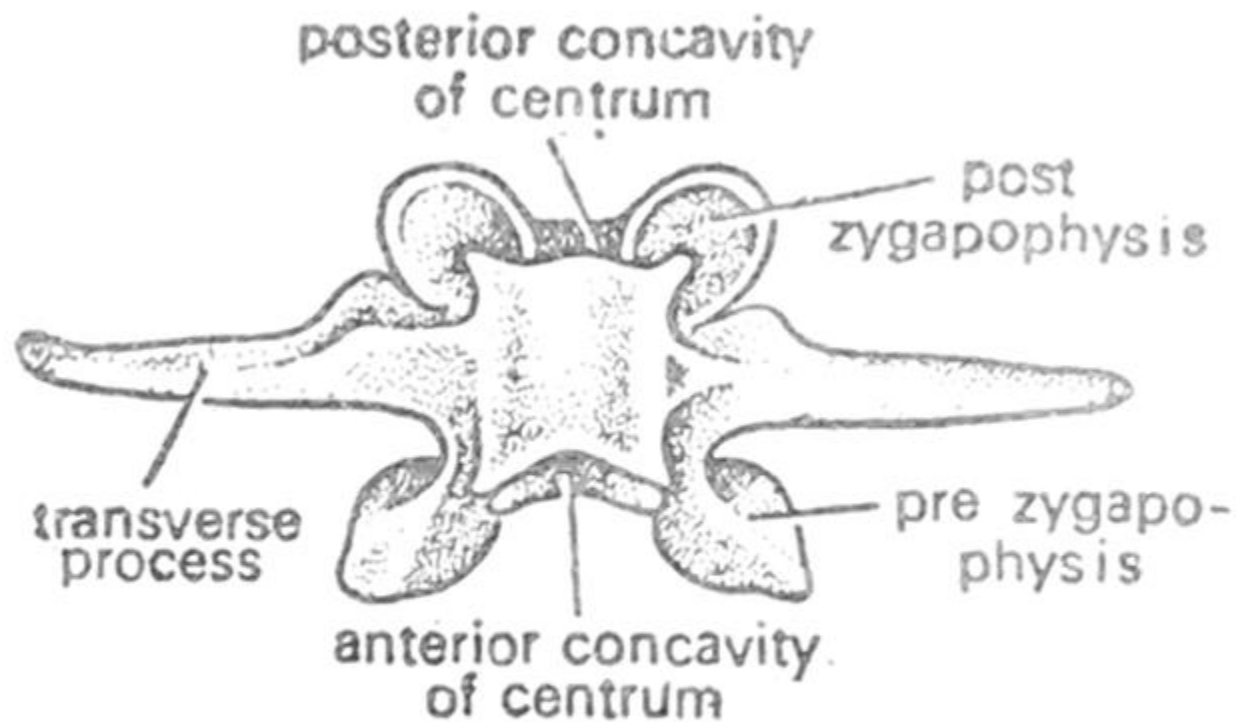
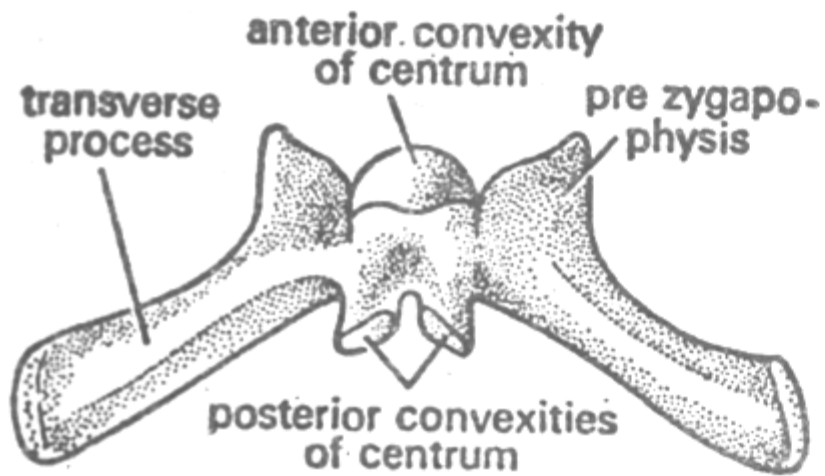
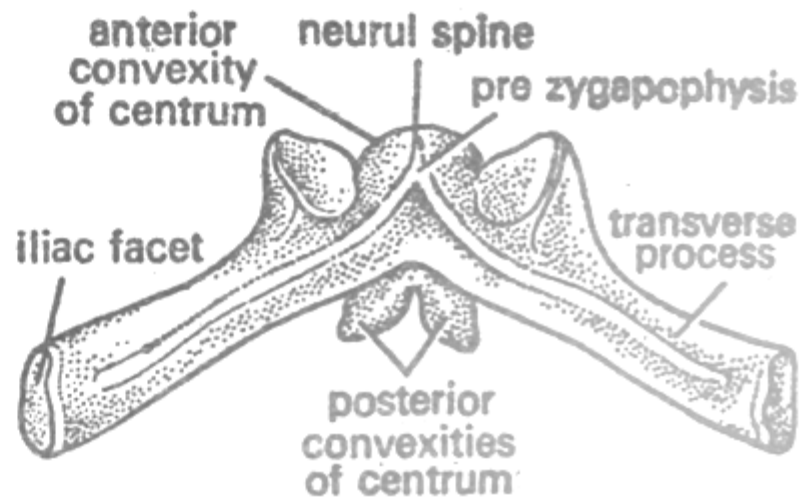


Fig. 361. Eighth vertebra  
(Ventral view).

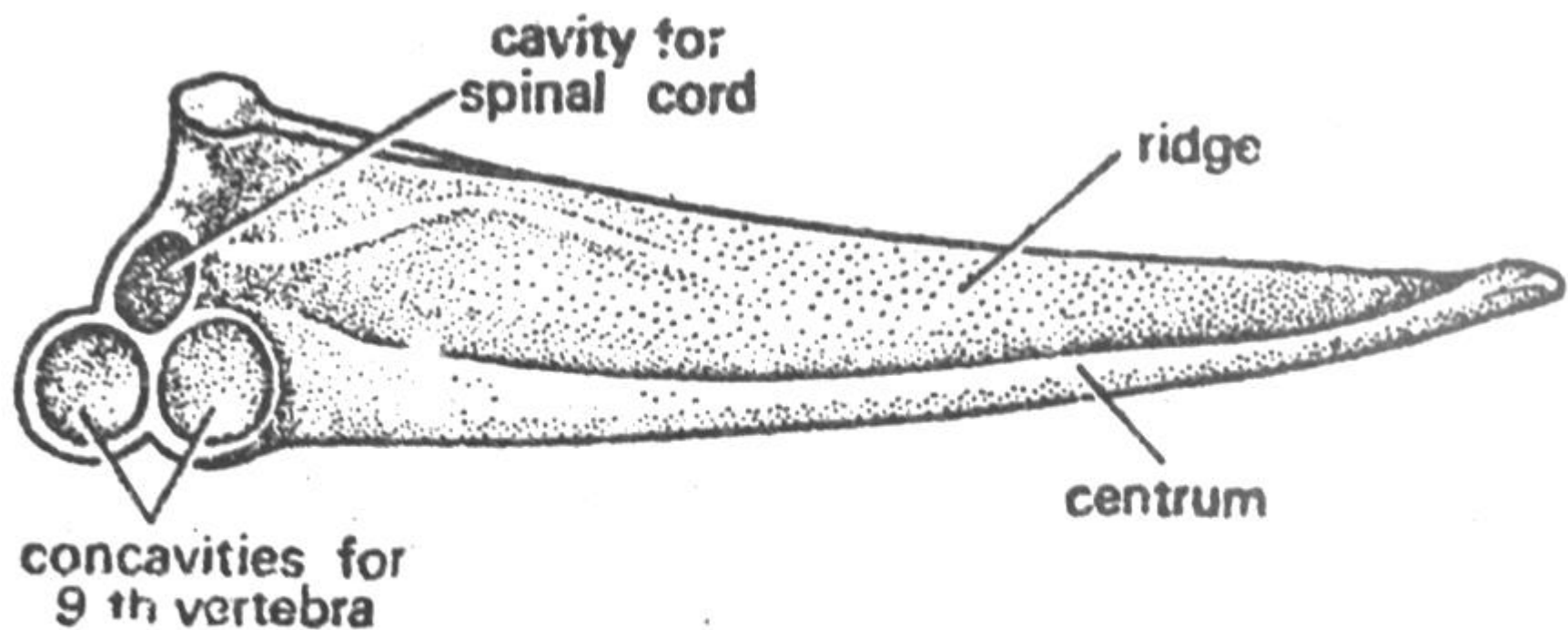




**Fig. 362. Ninth vertebra (Dorsal view).**



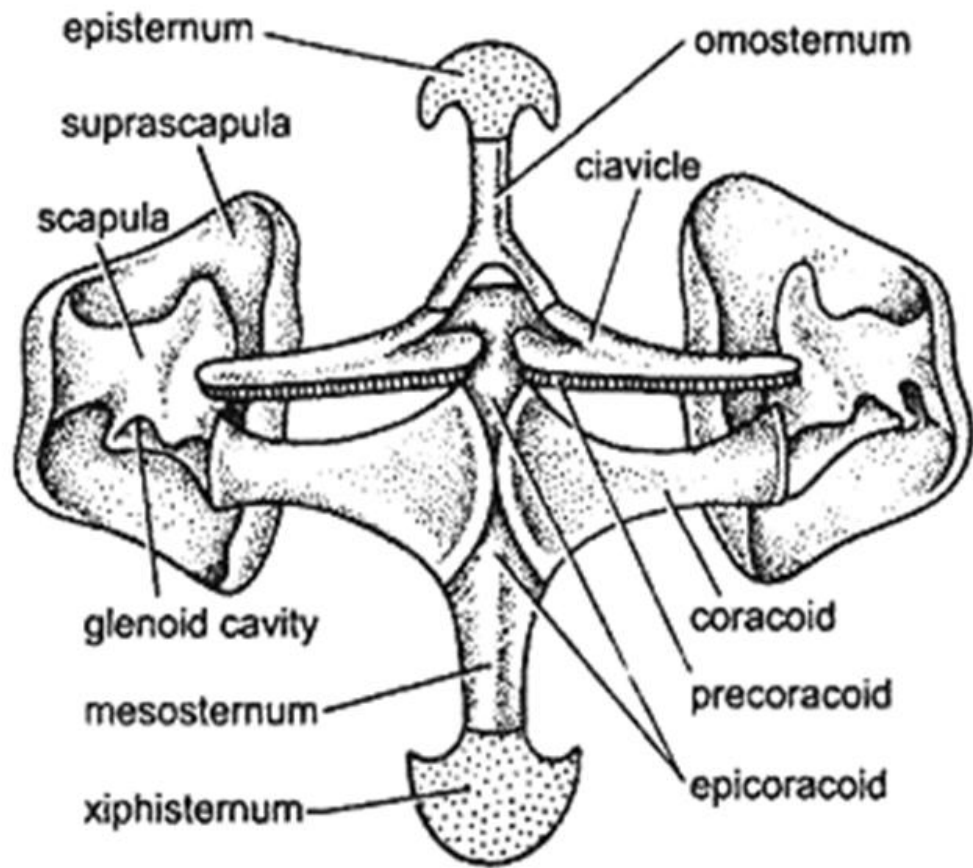
**Fig. 363. Ninth vertebra (Ventral view).**



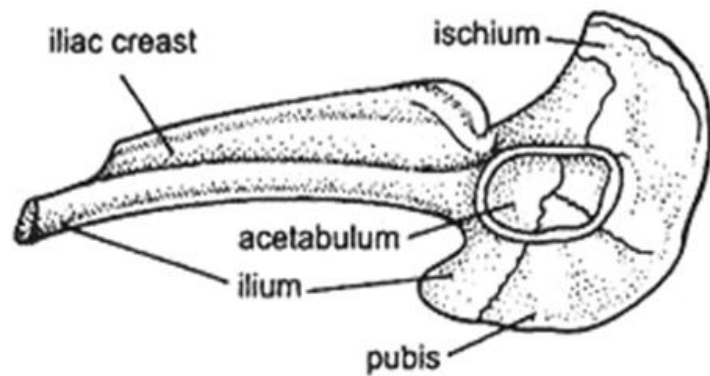
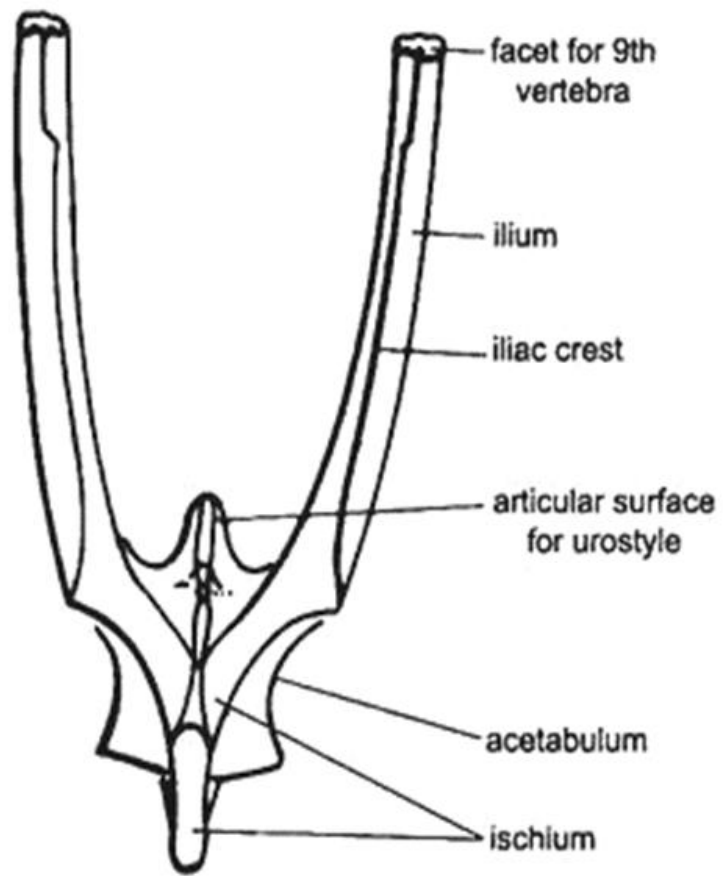
**Fig. 364. Urostyle (Lateral view).**

# **Appendicular Skeleton of frog**

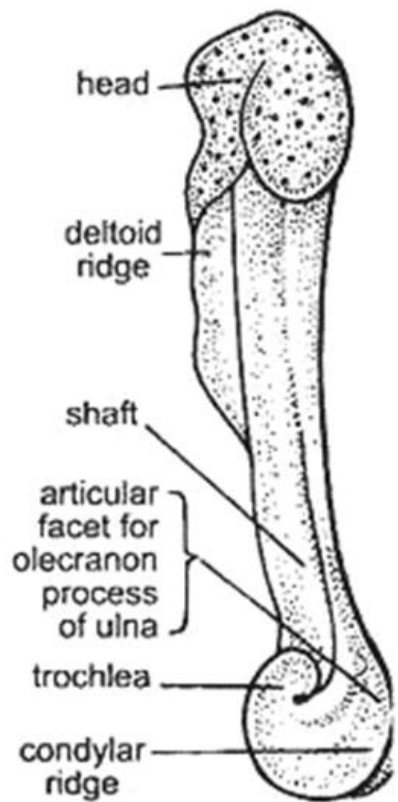
- **Pectoral Girdle**
- **Pelvic Girdle**



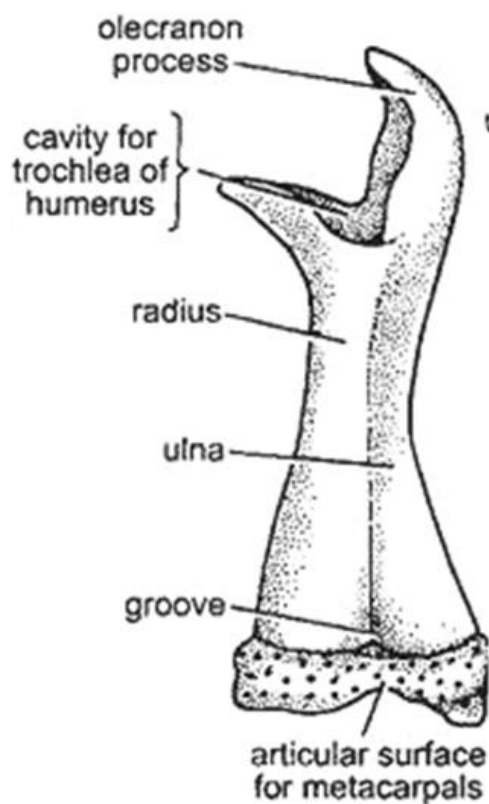
**Pectoral Girdle**



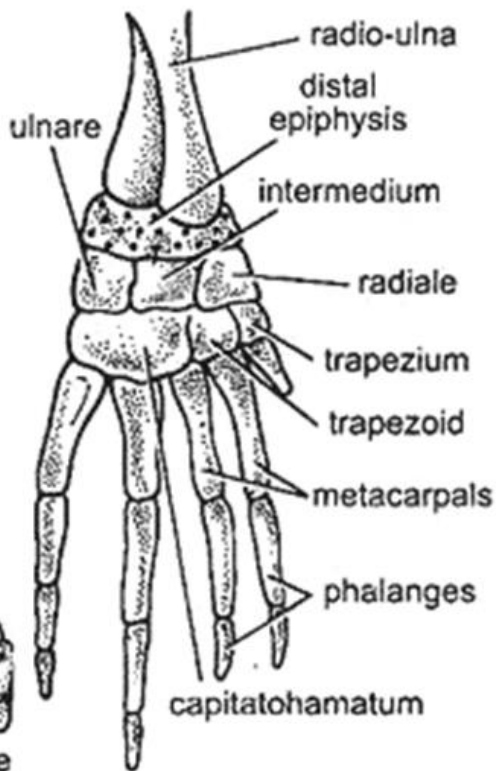
## Pelvic Girdle



HUMERUS

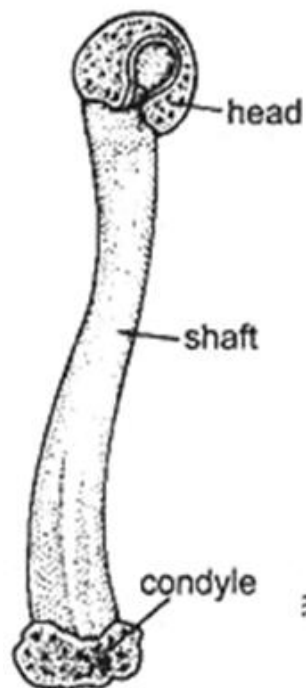


RADIO-ULNA

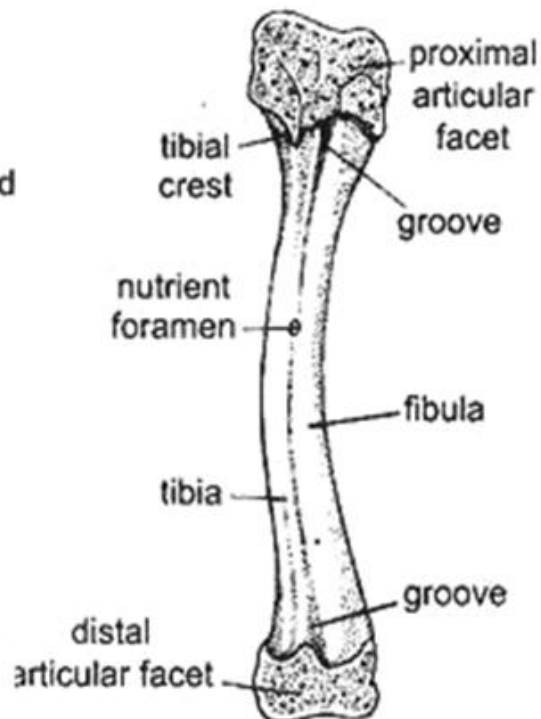


BONES OF HAND

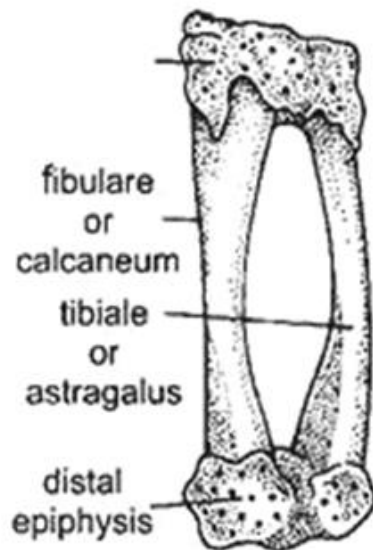
## Forelimb



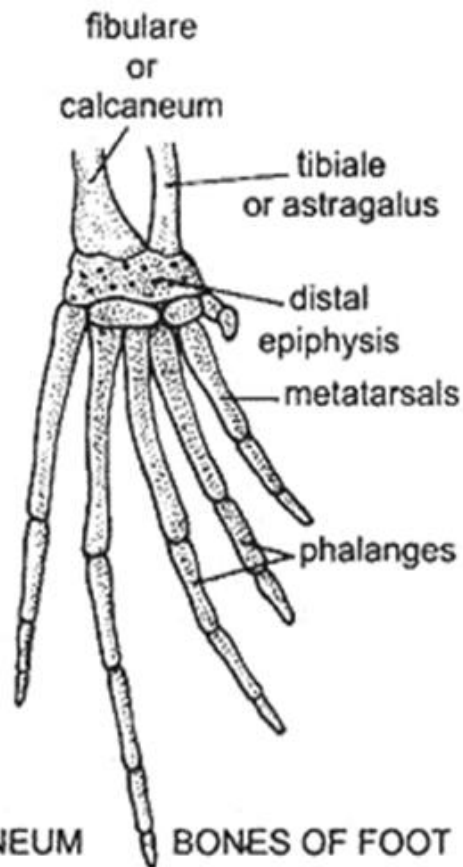
FEMUR



TIBIO- FIBULA



ASTRAGALUS-CALCANEUM



BONES OF FOOT

## Hindlimb