

DIGITAL GALLERY OF
MUSEUM SPECIMENS (CHORDATES)

As per Practical Course of SGBAU
B.Sc. II (Semester III)
Zoology

By

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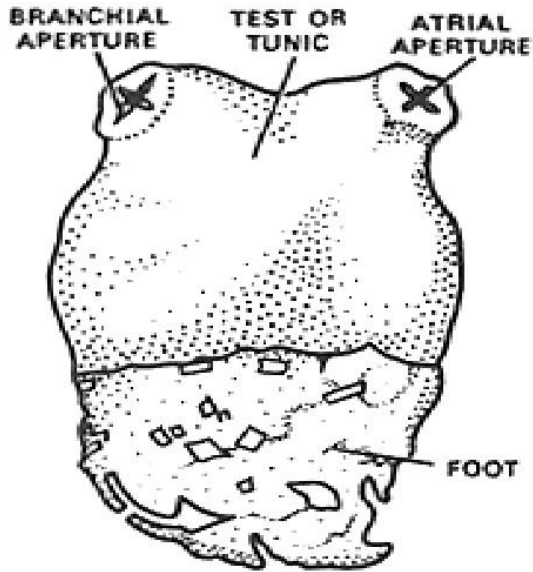
Shri R.L.T. College of Science, Akola

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Herdmania



Classification:

Phylum- Chordata

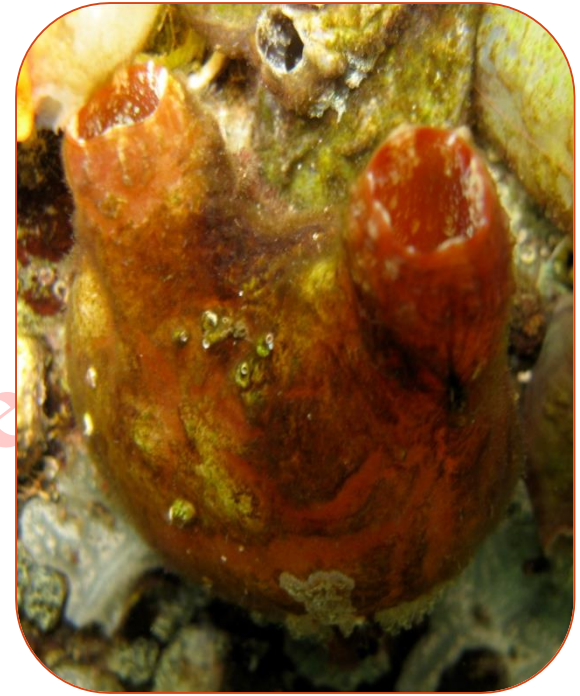
Group- Protochordata

Subphylum- Urochordata

Class- Ascidiacea

Order-Enterogona

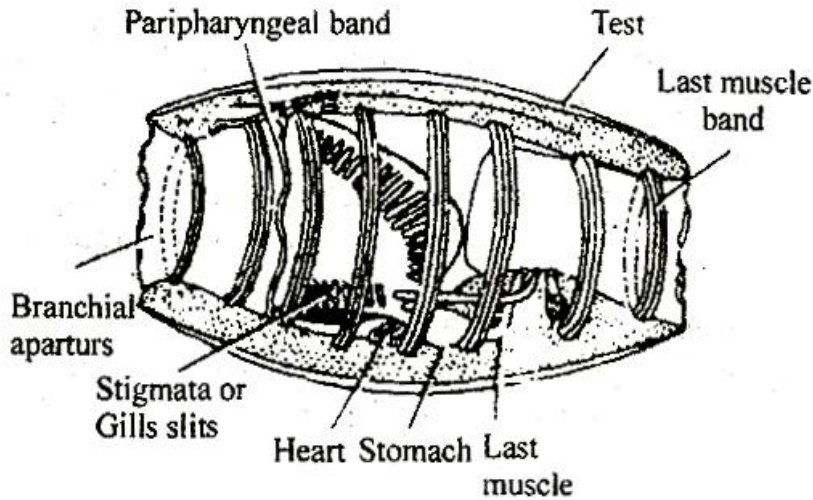
Genus –Herdmania



Comments:

- It is a solitary marine form found attached to rocks etc.
- Body is roughly oblong and enclosed in a soft leathery test.
- The body has a posterior-ventral foot for attachment.
- Free end of the body is provided with two external opening of the branchial and the atrial apertures.
- Mouth opens by branchial aperture while anus by atrial aperture.
- Alimentary canal is U-shaped.
- Sexes are united or hermaphroditic.
- Food consist chiefly microscopic plants and animals.
- It shows retrogressive metamorphosis.

Doliolum



Classification:

Phylum-Chordata

Group-Protochordata

Subphylum-Urochordata

Class-Thaliacea

Order- Doliolida

Genus- Doliolum



Comments:

- It is a free swimming, pelagic form. Commonly called as chain tunicate.
- Body is barrel shaped with the mouth & anus at opposite ends.
- The test is thin, transparent.
- The open ends of the barrel are fringed with lobes.
- Pharynx is perforated by rows of stigmata.
- Dorsal lamina & tentacles are absent.
- Hermaphrodite.
- life cycle exhibits an alternation of sexually mature adult, the gonozooids with the asexually reproducing phase, the oozoid.

Salpa

Classification:

Phylum-Chordata

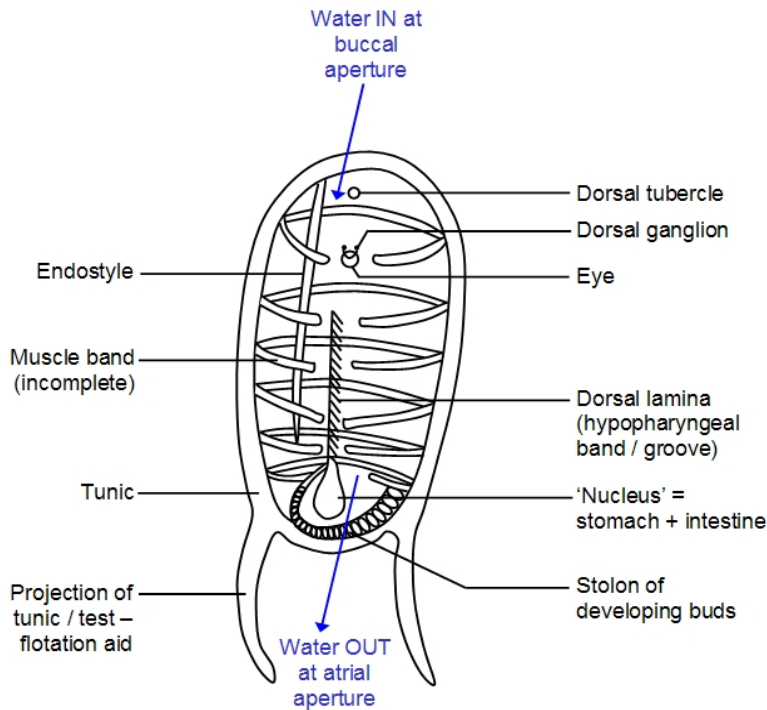
Group-Protochordata

Subphylum-Urochordata

Class-Thaliacea

Order-Salpida

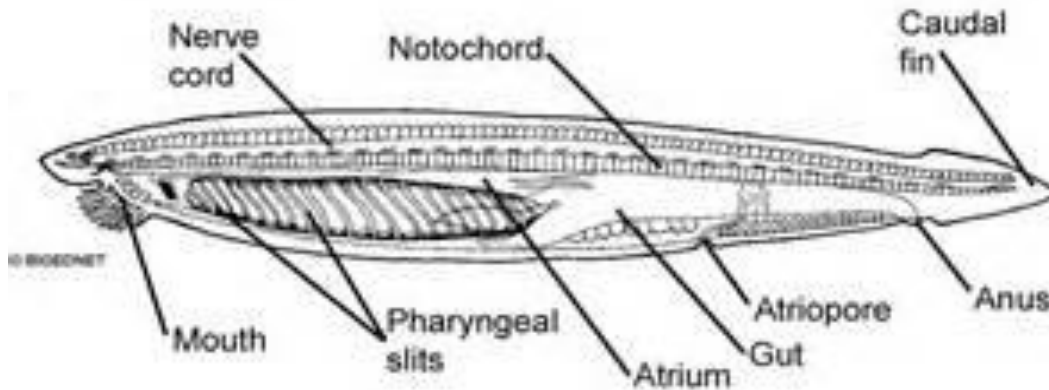
Genus-Salpa



Comments:

- It is a free swimming, solitary pelagic form.
- Body is barrel-shaped with mouth & atrial apertures at opposite ends
- Test is transparent.
- Endostyle & pharyngeal bands are present.
- Dorsal lamina is present & its known as gill.
- A single tentacle is present on the dorsal surface.
- Salpa is found in two forms.
- Asexual phase or oozoid. b) sexual phase or blastozoid.

Amphioxus



Classification:

Phylum- Chordata

Group- Protochordata

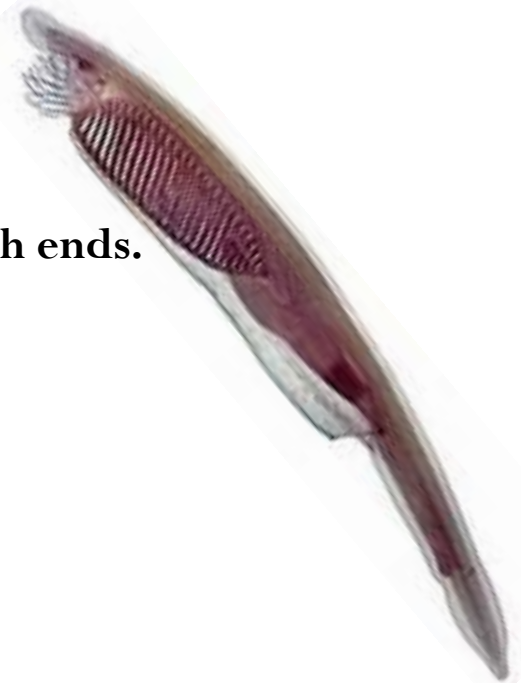
Subphylum- Cephalochordata

Class- Leptocardii

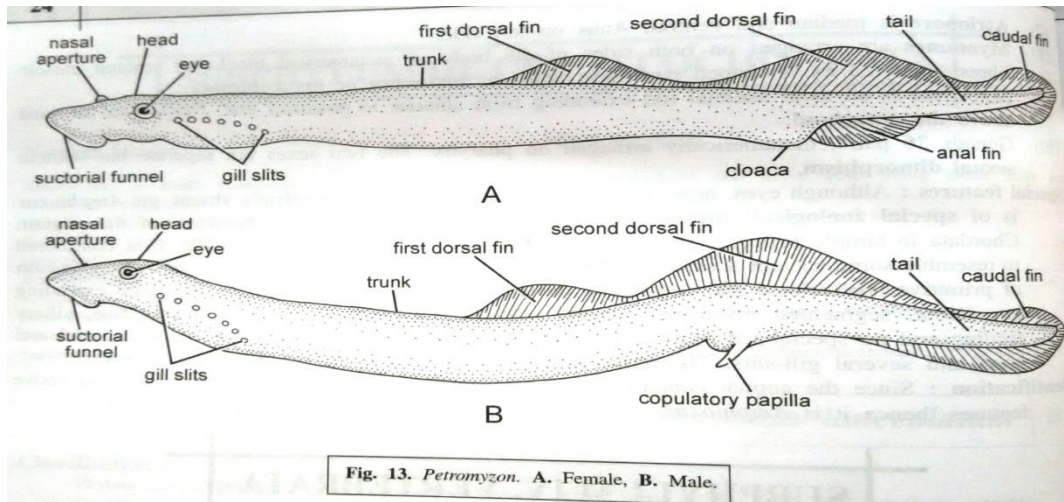
Genus- Amphioxus

Comments:

- Commonly called as lancelet.
- It is a fish like burrowing marine animal.
- Body is elongated, laterally compressed and pointed at both ends.
- The mouth is ventral to rostrum, guarded by the oral hood bearing numerous oral cirri.
- Dorsal, ventral and caudal fins present.
- Myotomes are present.
- The sexes are separate
- Twenty six pairs of gonads present.
- It is a ciliary filter feeder.



Petromyzon



Classification:

Phylum-Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Agnatha

Class-Cyclostomata

Order-Petromyzontia

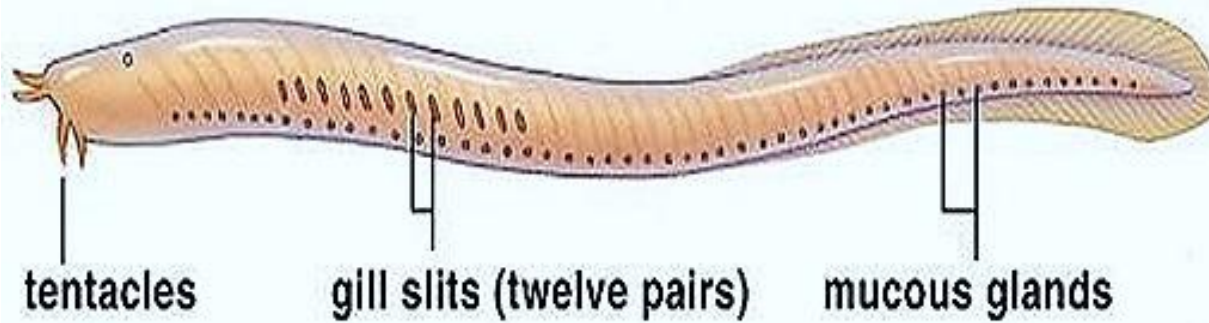
Genus-Petromyzon

Comments:

- It is commonly known as lamprey , it is found in fresh and salt water.
- Body is eel like differentiated in to head, trunk & tail.
- The surface of the body is smooth, slimy and pigmented.
- Head region has a buccal funnel.
- Mouth is circular with numerous horny teeth.
- Nostril is single & paired eyes are present.
- Seven pairs of external gill apertures present.
- Two dorsal fines and one caudal fin present.
- Sexes are separate.
- Ectoparasitic on large fishes.



Myxine

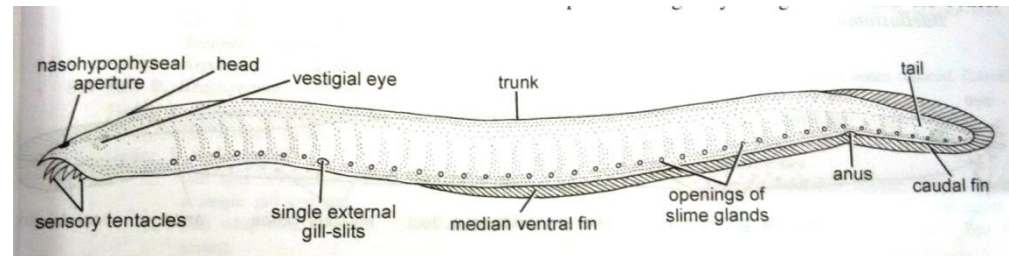


Classification:

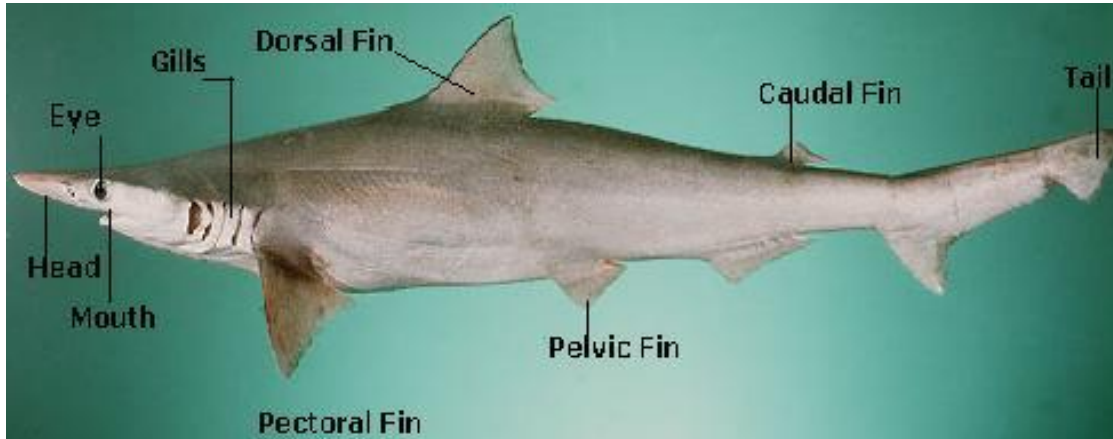
Phylum-Chordata
Group- Craniata
Subphylum- Vertebrata
Division- Agnatha
Class-Cyclostomata
Order-Myxinoidea
Genus-Myxine

Comments:

- It is commonly known as hag fish, it is found burried in the sea bottom.
- Body is eel-like, differentiated in to head, trunk and tail.
- The surface of the body is soft and smooth without scales.
- The mouth is terminal & surrounded by soft lips.
- Buccal funnel and jaws are absent.
- Six pairs of gills present which open externally by one pair of external gill-slits.
- Single median fin on ventral surface which covers the tail.
- Hermaphrodite
- Parasitic on large fishes.
- Nocturnal feeders.



Scoliodon



Comments:

- It is commonly known as Dog fish.
- Body is long, laterally compressed and spindle-shaped tapering at both ends.
- Body is divisible into head, trunk & tail.
- Head dorsoventrally compressed and flattened into snout.
- Tail is heterocercal.
- Five pairs of gill-slits present laterally behind eyes.
- A pair of pigmented lateral lines extends from head to tail.
- In male a copulatory organ called clasper is present.

Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Cyclostomata

Series- Pisces

Class- Elasmobranchii

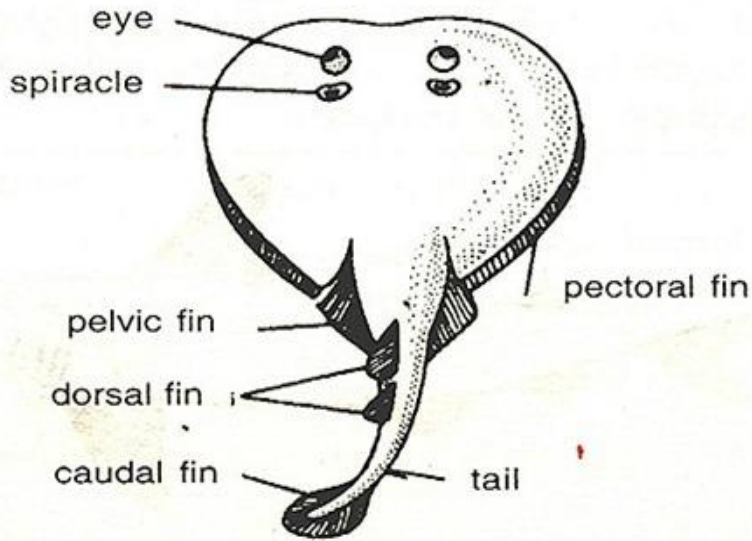
Subclass- Selachii

Super order- Pleurotremata

Order- Lamniformes

Genus- Scoliodon

Torpedo



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Series- Pisces

Class- Elasmobranchii

Subclass- Selachii

Superorder- Hypotremata

Order- Torpediniformes

Genus- Torpedo

Comments:

- It is commonly known as electric-ray.
- Body is dorsoventrally flat and disc-shaped which is sub circular.
- Skin smooth without scales.
- A pair of large electric organs present, one on either side in between the pectoral fins and the head.
- Electric organ consist of muscles fibers arranged in blocks and serve as batteries.
- These fishes are capable of giving a heavy electric shocks.
- Spiracles present behind the eyes.
- Carnivorous.
- Viviparous.

Acipenser

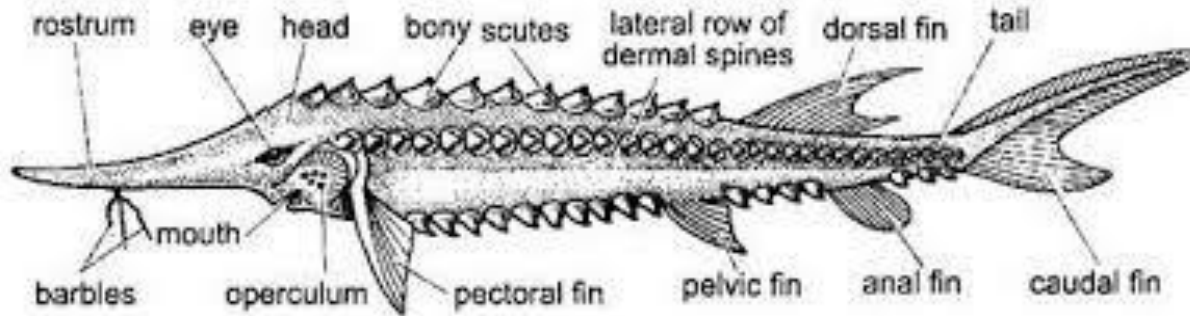


Fig. 16.7. *Acipenser sturio* (sturgeon).

Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Series- Pisces

Class- Teleostomi

Subclass- Actinopterygii

Order- Acipenseriformes

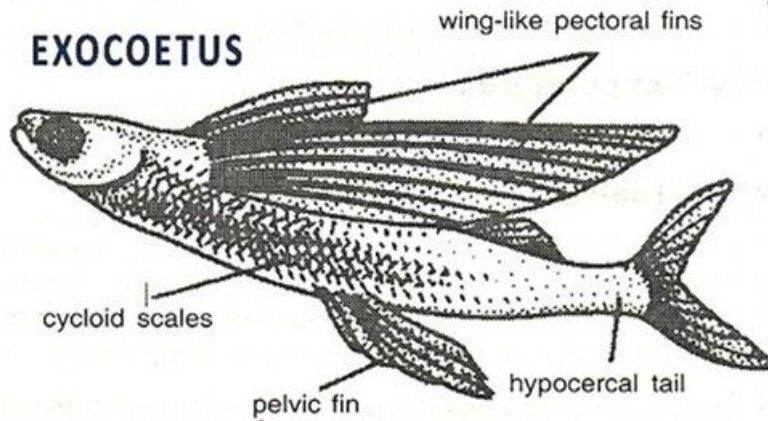
Genus- Acipenser

Comments:

- It is commonly known as sturgeon.
- Body is elongated and covered with five rows of bony scutes.
- Rostrum is well developed with four preoral barbles.
- The mouth is small, ventral & without teeth in jaws.
- The air bladder is smooth and oval.
- Carnivorous.



Exocoetus



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Series- Pisces

Class- Teleostomi

Subclass- Actinopterygii

Order- Cypriniformes

Genus- Exocoetus

Comments:

- Commonly known as Flying fish.
- Body covered with overlapping cycloid scales.
- Mouth opening is small but teeth in both jaws.
- Dorsal and anal fins are short.
- Pectoral fins are exceptionally large, spread like wings and make gliding flights.
- Tail is hypoblastic.
- Oviparous.



Hippocampus

Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

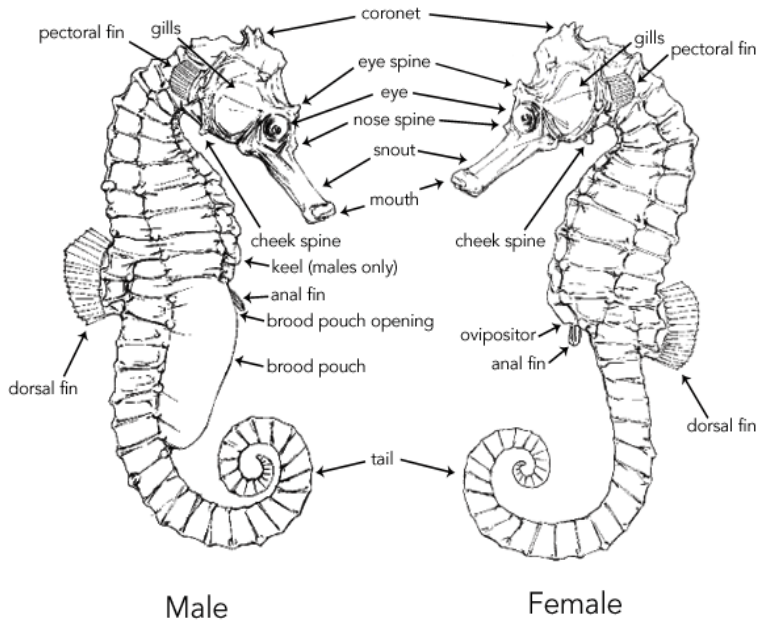
Series- Pisces

Class- Teleostomi

Subclass- Actinopterygii

Order- Syngnathiformes

Genus- Hippocampus



Comments:

- It is commonly known as sea horse.
- Body is elongated having an exoskeleton of rings.
- Mouth is at the extremity of an elongated tubular snout.
- Pectoral & dorsal fins are small.
- Pelvic & caudal fins are absent.
- Tail is prehensile & used for coiling round the sea weeds.
- Male possesses a “brood- pouch” on the abdomen, in the brood pouch eggs are retained while they hatch as young ones.
- It feeds on minute organism.



Ichthyophis



Classification:

Phylum- Chordata

Group- Craniata

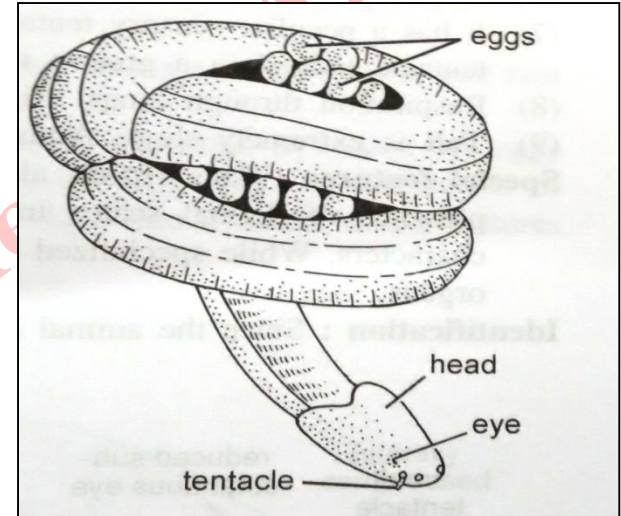
Subphylum- Vertebrata

Division- Gnathostomata

Class- Amphibia

Order- Apoda

Genus- Ichthyophis

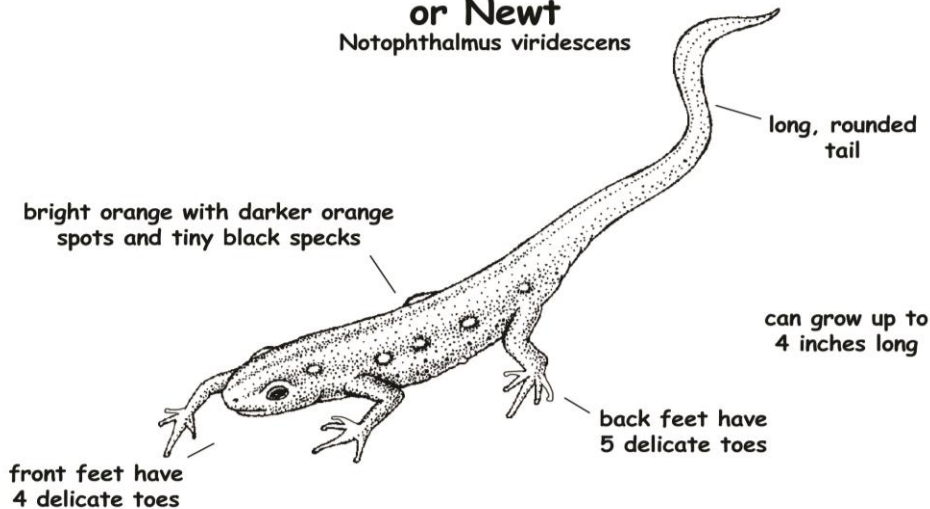


Comments:

- It is a burrowing elongated and eel-type animal.
- The colour of the body is dark brown or bluish with yellow band along the side.
- Skin is provided with numerous transverse grooves or wrinkles.
- Minute scales are embedded in the skin.
- Limbs and limb girdles are entirely absent.
- Tympanic membrane and columella are absent.
- Sexes separate.
- Parental care is very well developed. Female coils herself around the gelatinous egg mass to protect it from other animals.

Salamandra

or Newt
Notophthalmus viridescens



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Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Amphibia

Order- Urodela.

Genus- Salamandra

Comments:

- Salamandra is commonly known as European fire-salamandra.
- Body is lizard-like.
- The colour is black with yellow spots.
- Limbs are well developed and strong.
- Tail is cylindrical.
- Gills are absent in adults.
- Eye-lids are movable.
- Tympanic membrane or middle ear is absent.
- Teeth are present on both the jaws.
- Viviparous.



Bufo

Classification:

Phylum- Chordata

Group- Craniata

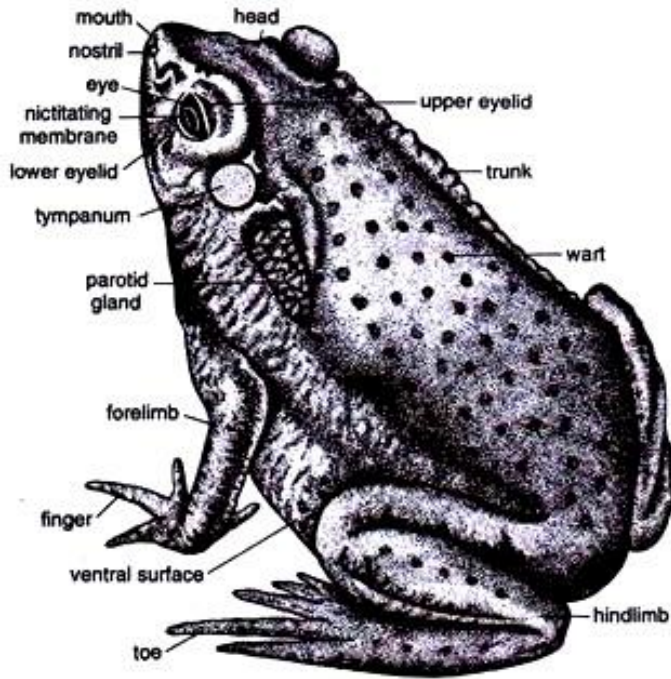
Subphylum- Vertebrata

Division- Gnathostomata

Class- Amphibia

Order- Anura

Genus- Bufo



Comments:

- Bufo is commonly called as true toad.
- Skin is rough, dry and warty dorsal surface of body.
- Eyes are larger and nostrils are very small.
- Tympanum is very well-developed.
- Paired parotid glands are present which secrete irritating poisonous fluid.
- Fore limb bear three web less finger & a thumb pad.
- Hind-limb have three toes with a greatly reduced web.
- Teeth are absent.
- Carnivorous and nocturnal in habit.



Hyla

Classification:

Phylum- Chordata

Group- Craniata

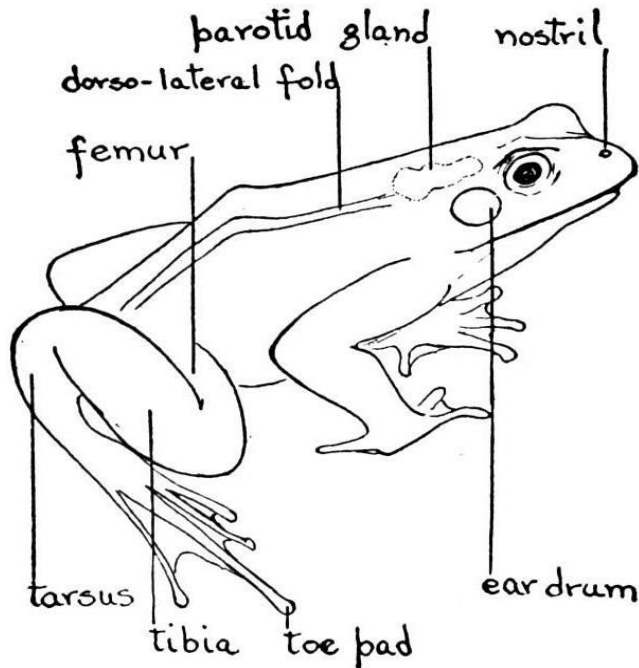
Subphylum- Vertebrata

Division- Gnathostomata

Class- Amphibia

Order- Anura

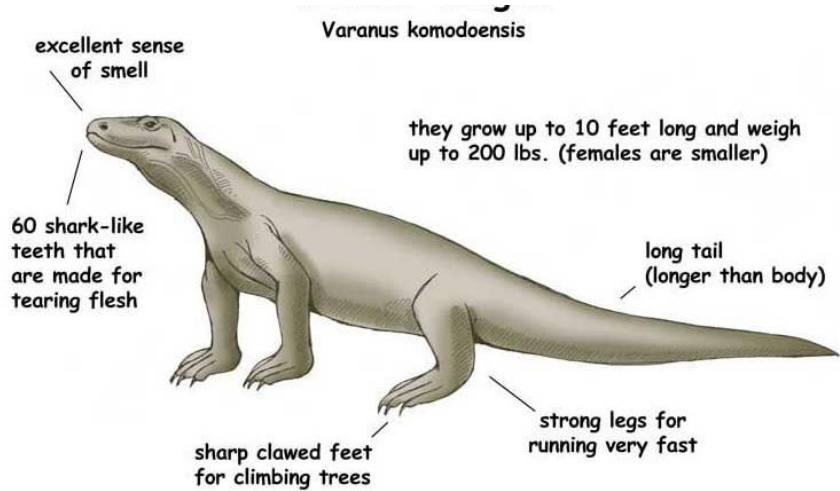
Genus- Hyla



Comments:

- Hyla is commonly called as tree frog due to its arboreal habit.
- Skin is smooth on the dorsal surface.
- Eyes, nostril and tympanum are well-developed.
- Finger and toes have adhesive –pad or disc for sticking on the smooth surface.
- Web is poorly developed.
- Teeth are present only in the upper jaw.
- Vocal sacs are greatly expanded and produce loud voice.
- They exhibit mimicry and are protectively colored.

Varanus



Comments:

- It is commonly known as Monitor lizard.
- Body is covered with smooth small scales with brownish, black and orange patches.
- Head is flattened and neck is long.
- Tongue is long and protrusible.
- Tail is very long.
- Limbs are stout, well developed and adapted for swift movement.
- Digits are clawed.
- Carnivorous.

Classification:

Phylum- Chordata

Group- Craniata

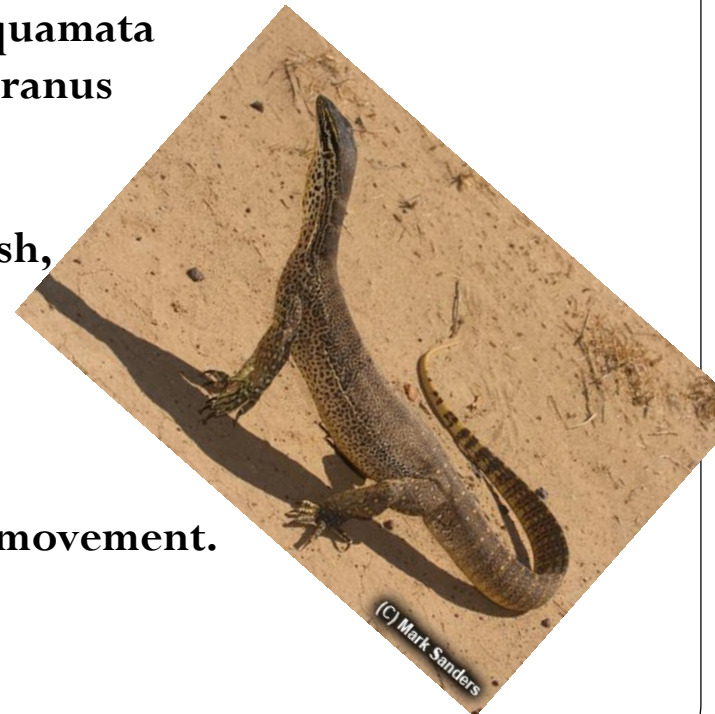
Subphylum- Vertebrata

Division- Gnathostomata

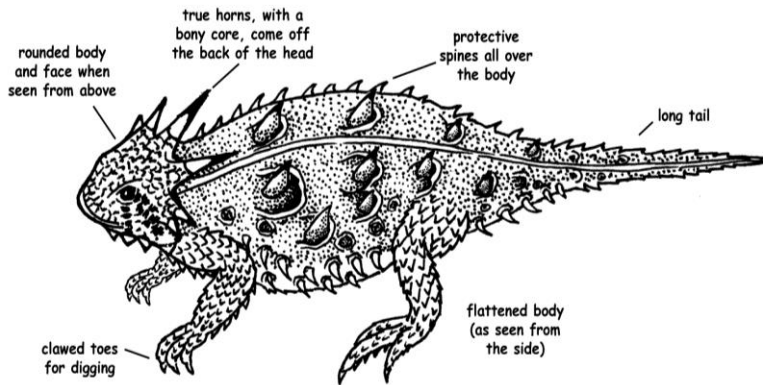
Class- Reptilia

Order- Squamata

Genus- Varanus



Phrynosoma



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Reptilia

Order- Squamata

Genus- Phrynosoma

Comments:

- It is commonly known as horned Toad.
- Body is much flattened and broadened and covered with larger and smaller strongly keeled scales.
- Head has five spikes on each side.
- Tongue is short, flat and spiny.
- Viviparous.



Chamaeleon

Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Reptilia

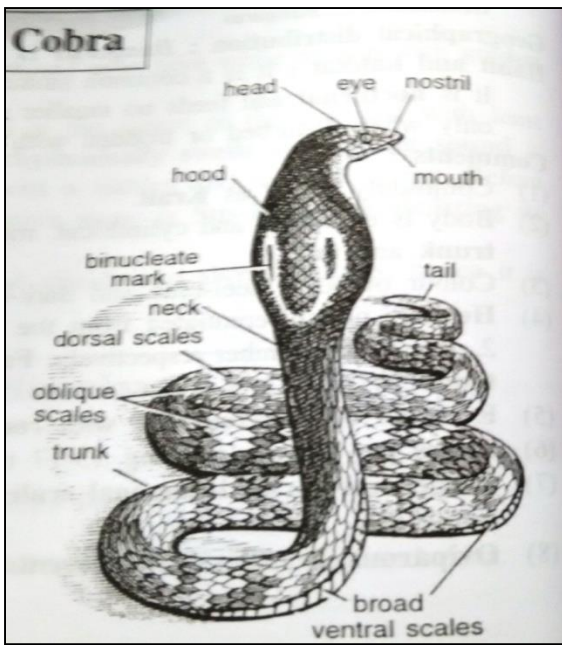
Order- Squamata

Genus- Chamaeleon

Comments:

- It is an arboreal lizard.
- Skin is covered with minute granules.
- Body and head are laterally compressed.
- Eyes are large. The right and left eye can be moved separately from each other.
- Tongue is spoon- shaped, protrusible and covered by sticky secretion.
- Limbs are large and slender.
- The digits of each limb form groups of three and two digits which are used in grasping twigs.
- Tail is long and prehensile.
- It has the power of changing colour.
- Insectivorous, Viviparous.





Naja

Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Reptilia

Order- Squamata

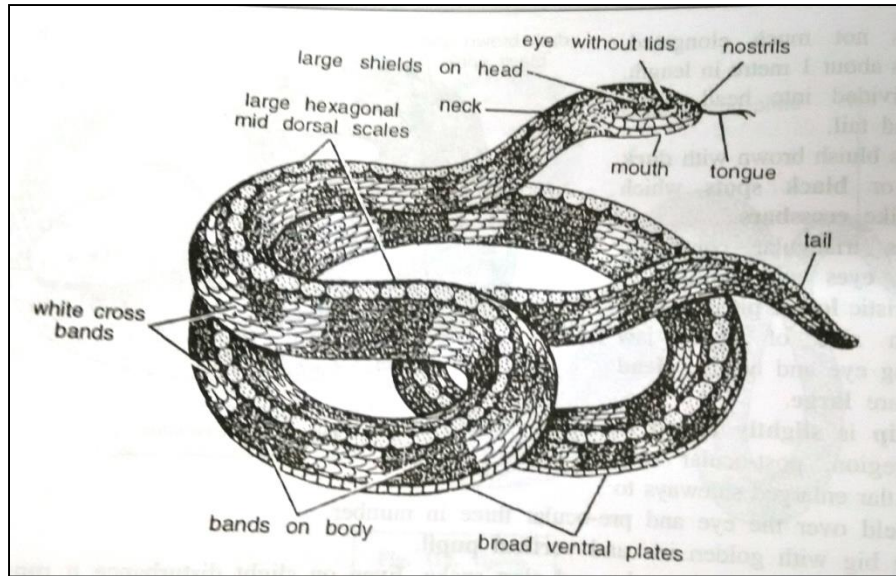
Genus- Naja



Comments:

- It is commonly Called Indian cobra or Nag.
- Body is elongated & covered with smooth oblique scales.
- Head is not differentiated from the neck.
- Neck is dilatable and the cervical ribs are elongated, the expansion of the neck and cervical ribs form the hood.
- The upper surface of the hood bears a spectacle mark.
- Eyes are small.
- Tail is cylindrical and tapering.
- Oviparous & carnivorous.
- It is deadly poisonous and its venom is neurotoxic and fatal.

Bungarus (Krait)



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Reptilia

Order- Squamata

Genus- Bungarus (Krait)

Comments:

- Body is elongated & slender.
- Colour of the body is steel-blue with narrow cross bars.
- Loreals are absent.
- Third & fourth supra-labials are touching the eye .
- Eyes are of moderate size with narrow pupils.
- Oviparous.
- Carnivorous.
- Bungarus is poisonous & its venom is neurotoxic.



Viper



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Reptilia

Order- Squamata

Genus- Viper

Comments:

- It is commonly called Russell's viper.
- Body is elongated and covered by scales.
- Body colour is pale brown above with three longitudinal series of black spot.
- Head is triangular & covered with very small scales on the upper surface.
- Paired erectile fangs present.
- Viviparous.
- Carnivorous.
- Very poisonous, venom is haemotoxic.

Typhlops

Classification:

Phylum- Chordata

Group- Craniata

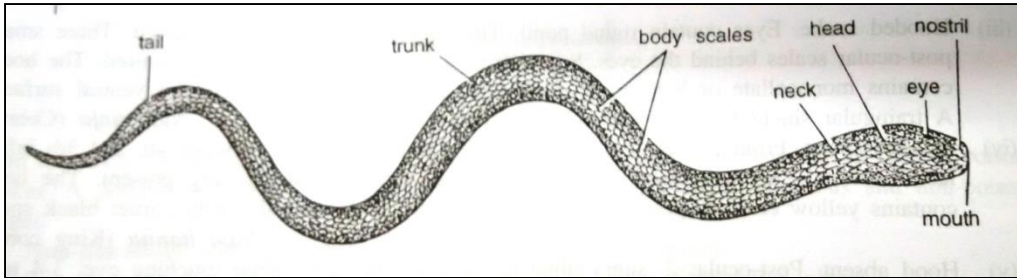
Subphylum- Vertebrata

Division- Gnathostomata

Class- Reptilia

order- Squamata

Genus- Typhlops



Comments:

- Typhlops is commonly called blind snake and it is found rotting vegetation in semi tropical and tropical regions.
- It is about 170-180 mm in length, brown with a shining chocolate hue above and lighter below in colour.
- The body is cylindrical and covered with uniform imbricate scales all over.
- There is no distinction between dorsal & ventral scales.
- The head is not distinct from the body.
- The tail is blunt with small point.
- Eyes are small and more or less covered by scales.
- Few teeth are present in the upper jaw only.



Hydrophis



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Reptilia

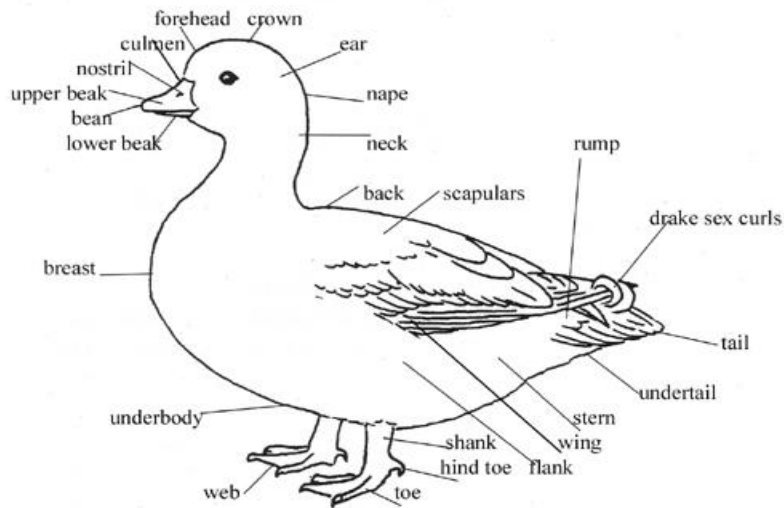
Order- Squamata

Genus- Hydrophis

Comments:

- It is commonly called Sea-snake.
- The body is long & laterally compressed.
- Head & neck are very slender.
- Colour is dark olive-green above with yellowish cross bars & white below.
- The ventral scales are small.
- Tail is laterally compressed & acts like paddle in swimming.
- Eyes are small with rounded pupil.
- Loreal-shield is absent.
- Viviparous, Carnivorous.
- It is deadly poisonous & its venom is neurotoxic.

Duck



(C) Vievet, 2012

Comments:

- It is an aquatic bird found in fresh water.
- The body is covered with feathers.
- It has a long neck and a modified flat beak.
- The leg are short having web between the three front toes for swimming in water.
- The hind toe is very much reduced and raised above.
- The body is heavy and tail is soft.
- It is economically important for its eggs, flesh and feather.

Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Aves

Order- Anseriformes

Genus- Duck



Dinopium

Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

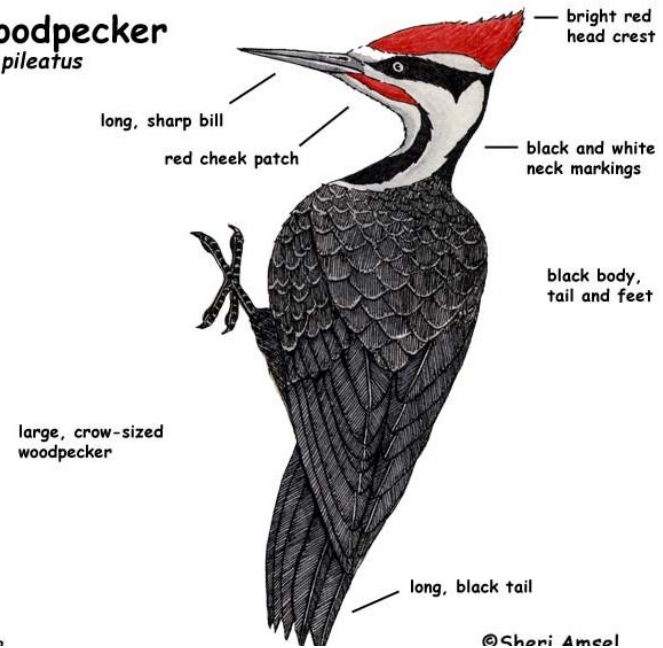
Division- Gnathostomata

Class-Aves

Order-Piciformes

Genus-Dinopium

Woodpecker
pus pileatus

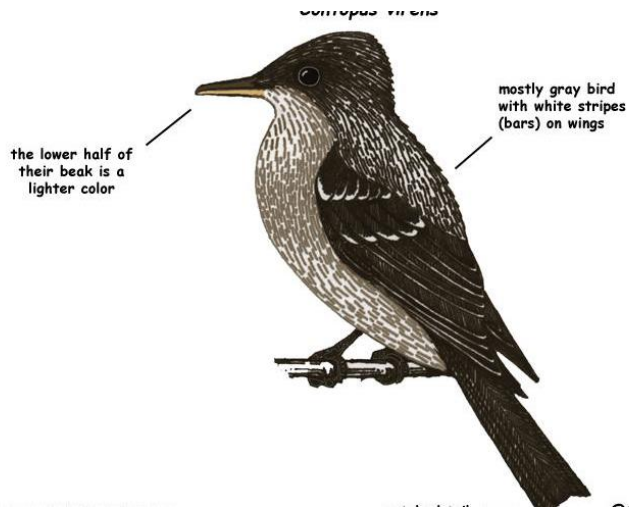


Comments:

- It is commonly known as woodpecker (kathphorwa).
- It is a small bird.
- The bill is long, stout and pointed.
- The tongue is protrusible and barb-tipped.
- Toes are four, two directed forward and two behind.
- Tail is stiff and wedge-shaped.
- Food chiefly comprises wood-boring beetles, grubs, ants, and other insect injurious to trees.



King-fisher



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Aves

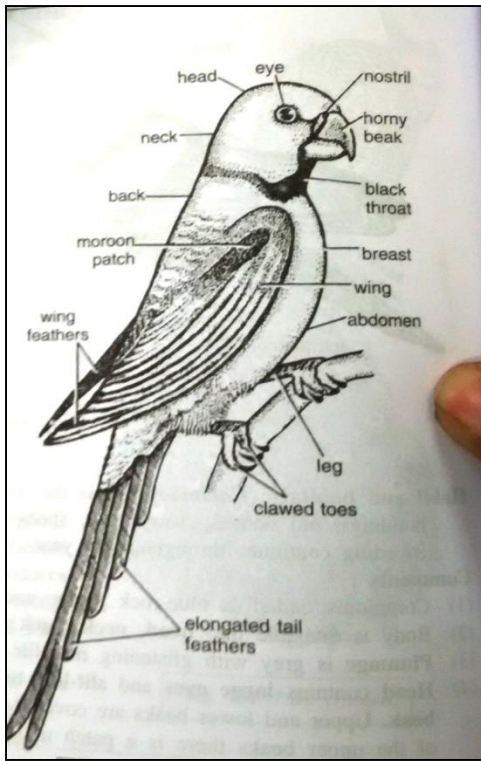
Order- Coraciformes

Genus- King-fisher

Comments:

- It is a small bird.
- Beak is long powerful and sharply pointed to capture fish, frog, tadpoles and other aquatic animals.
- Four toes are present, three in front and one behind.
- 2nd and 3rd toes are fused.





Psittacula

Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Aves

Order- Psittaciformes

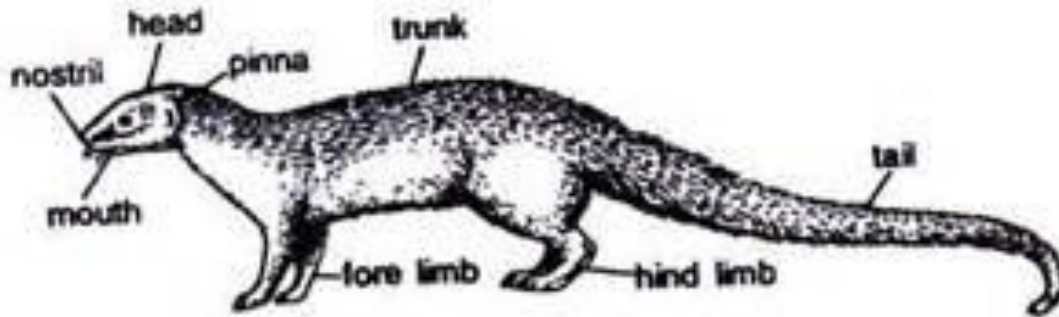
Genus- Psittacula

Comments:

- It is commonly known as Rose-ringed parakeet (Tota).
- Body is slender with a long pointed tail.
- It is grass green in colour .
- The typical red bill is short, snout and deeply-hooked.
- The black and rose-pink collar is present in the male and absent in the female.
- Feet are adapted for grasping.
- Food chiefly comprised the fruits and ripening grains.
- It is a popular bird.



Herpestes



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Mammalia

Order- Carnivora

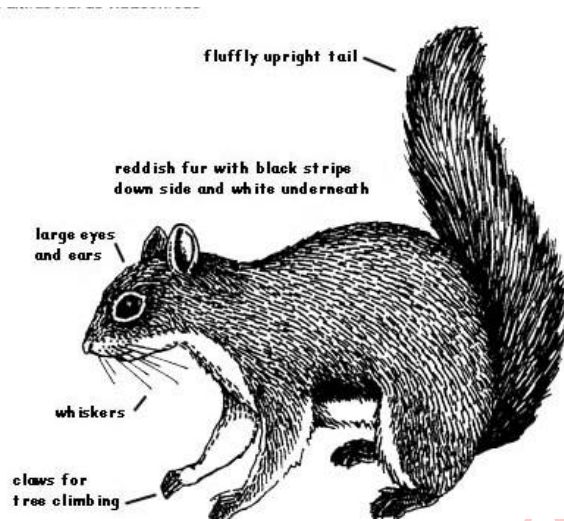
Genus- Herpestes

Comments:

- It is commonly known as mongoose.
- Body elongated & covered with grayish fur.
- Head is elongated with pointed snout.
- Eyes small, pinnae are small & rounded.
- Tail is long.
- Fore and hind limbs have five digits with fuscorial claws.
- Carnivorous.



Funambulus



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Mammalia

Order- Rodentia

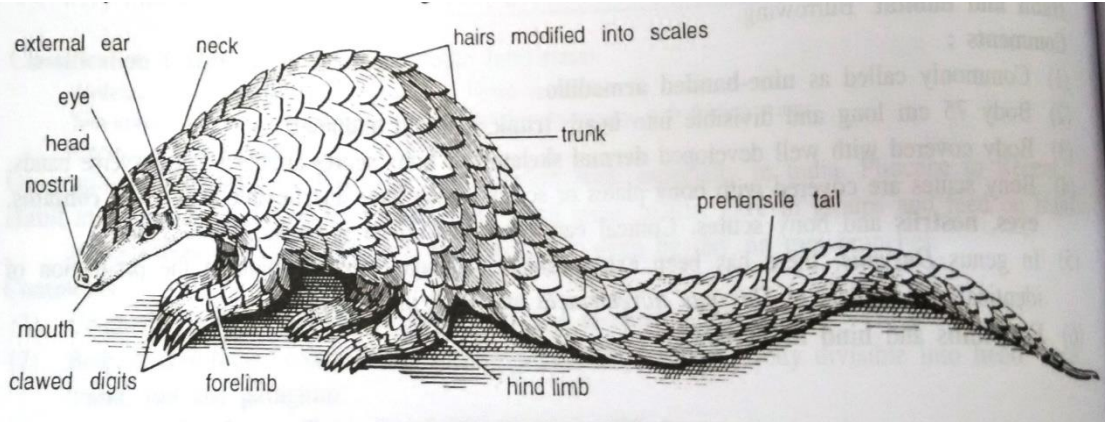
Genus- Funambulus

Comments:

- It is commonly known as squirrel or gilhari.
- Body elongated & covered with fur.
- Five longitudinal stripes of dark colour present on the back.
- Tail is long and bushy.
- Eyes and pinnae or ear large.
- Arboreal and active climber.
- Diurnal and builds nests of twigs and leaves.
- Feed on nuts, seed and fruits.



Manis



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Mammalia

Order- Pholidota

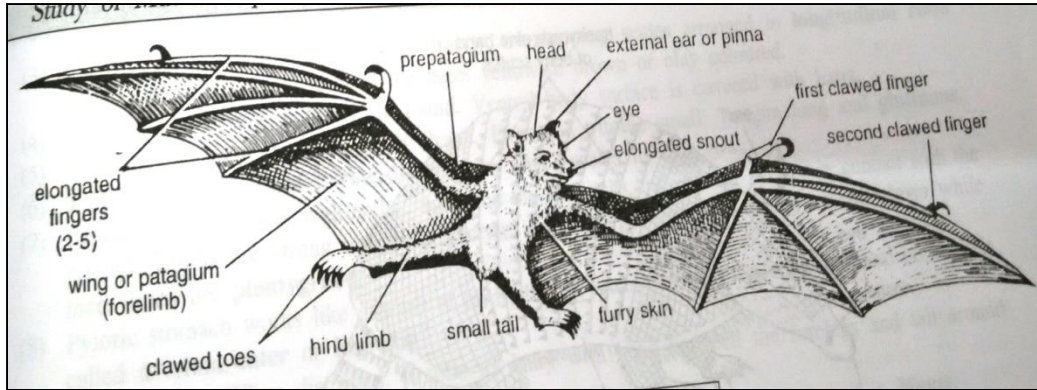
Genus- Manis

Comments:

- It is commonly known as scaly-ant eater or pangolin.
- Body is covered by imbricate epidermal scales arranged on the back & tail.
- Snout is elongated & the teeth are entirely absent.
- Eyes are small & the ears are reduced.
- Tongue is long, sticky & protrusible.
- Limbs are short & bear five digits.
- Nocturnal & burrowing in habit.
- Feeding on ants and termites.
- This animal has the habit of rolling into a ball when alarmed.



Bat



Classification:

Phylum- Chordata

Group- Craniata

Subphylum- Vertebrata

Division- Gnathostomata

Class- Mammalia

Order- Chiroptera

Genus- Bat

Comments:

- It is small in size, skin covered with soft fur.
- Pinnae are large.
- Eyes are small & the vision is weak.
- Tail is short.
- A thin membrane, patagium attached to forelimbs act as wings.
- Nocturnal in habit.
- Insectivorous.
- Gregarious living in colonies of thousands.
- They produce ultra-sonic sound waves, guiding in their flight.



THE END

**ALL FOR ONE AND
ONE FOR ALL
KEEP BIODIVERSITY
OR
OUR FUTURE MAY FALL**

