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	Drawn - nervous system				
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	Permanent slide preparation				
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# I N D E X

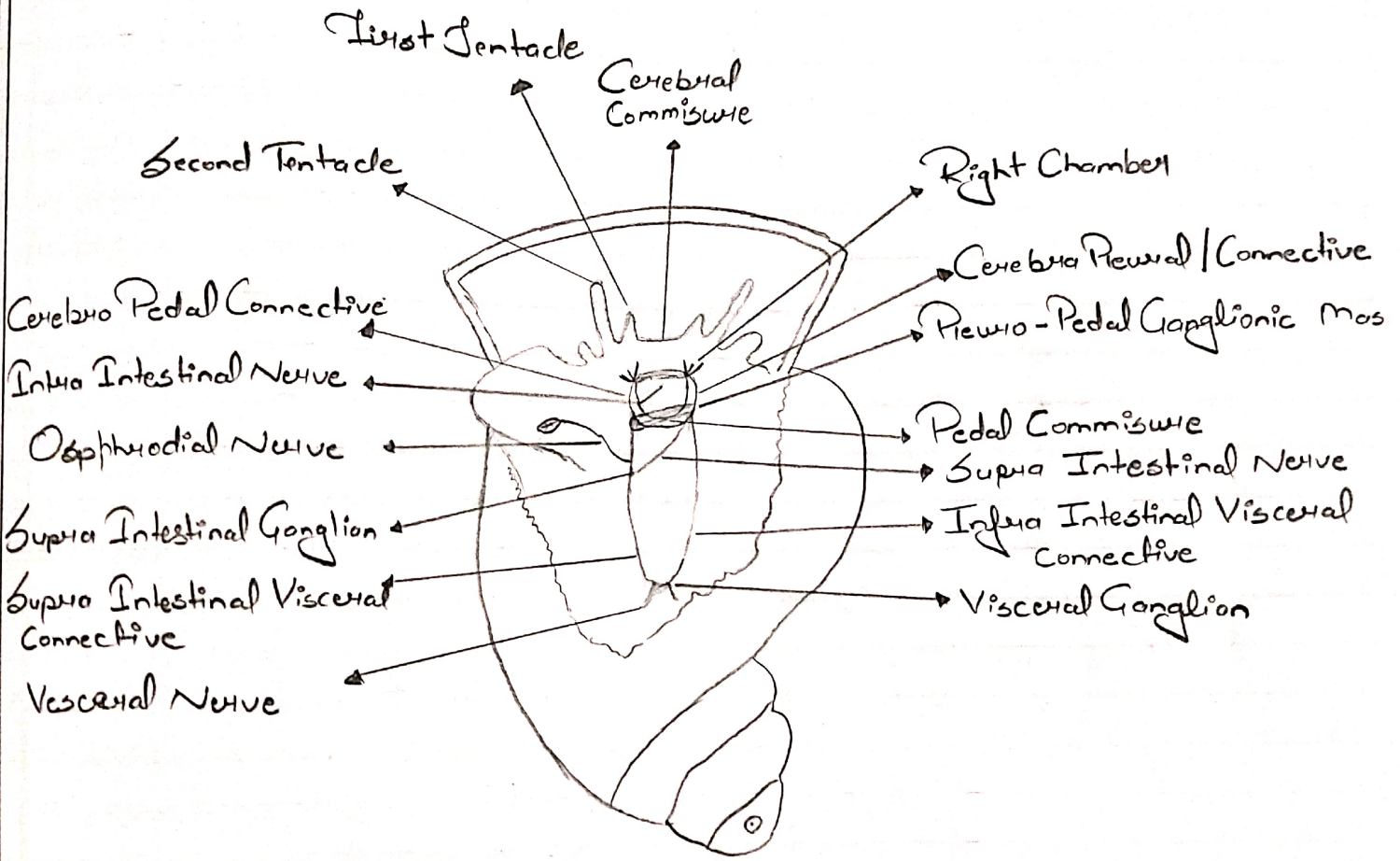
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# DISSSECTION





DIG :- PILA - NERVOUS SYSTEM

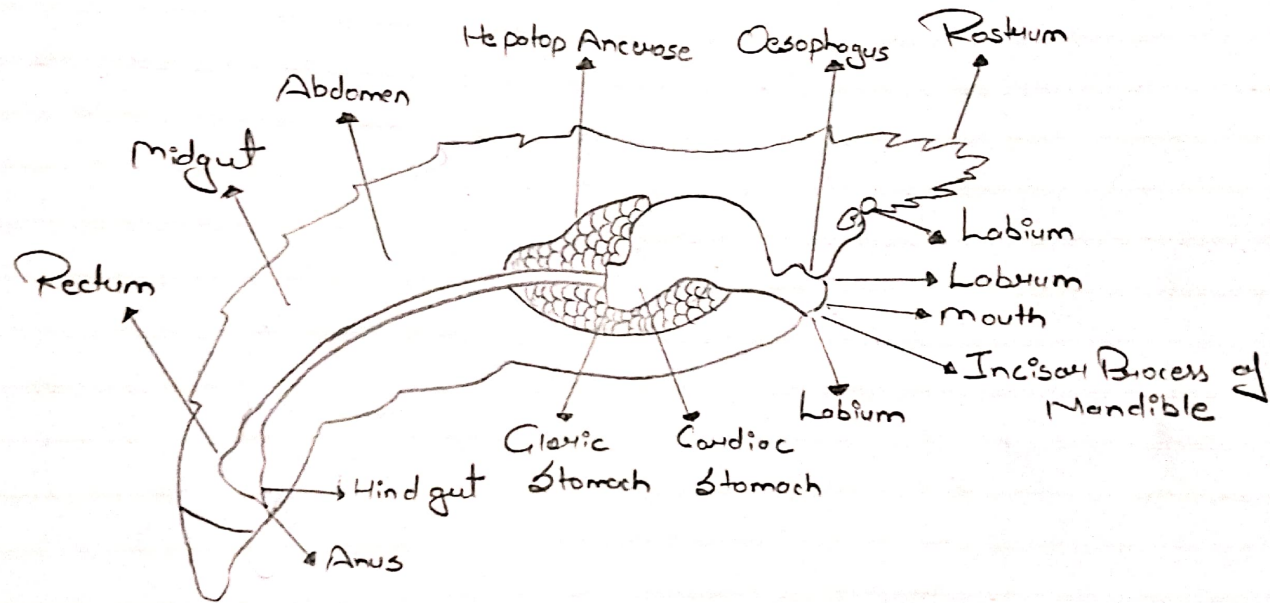
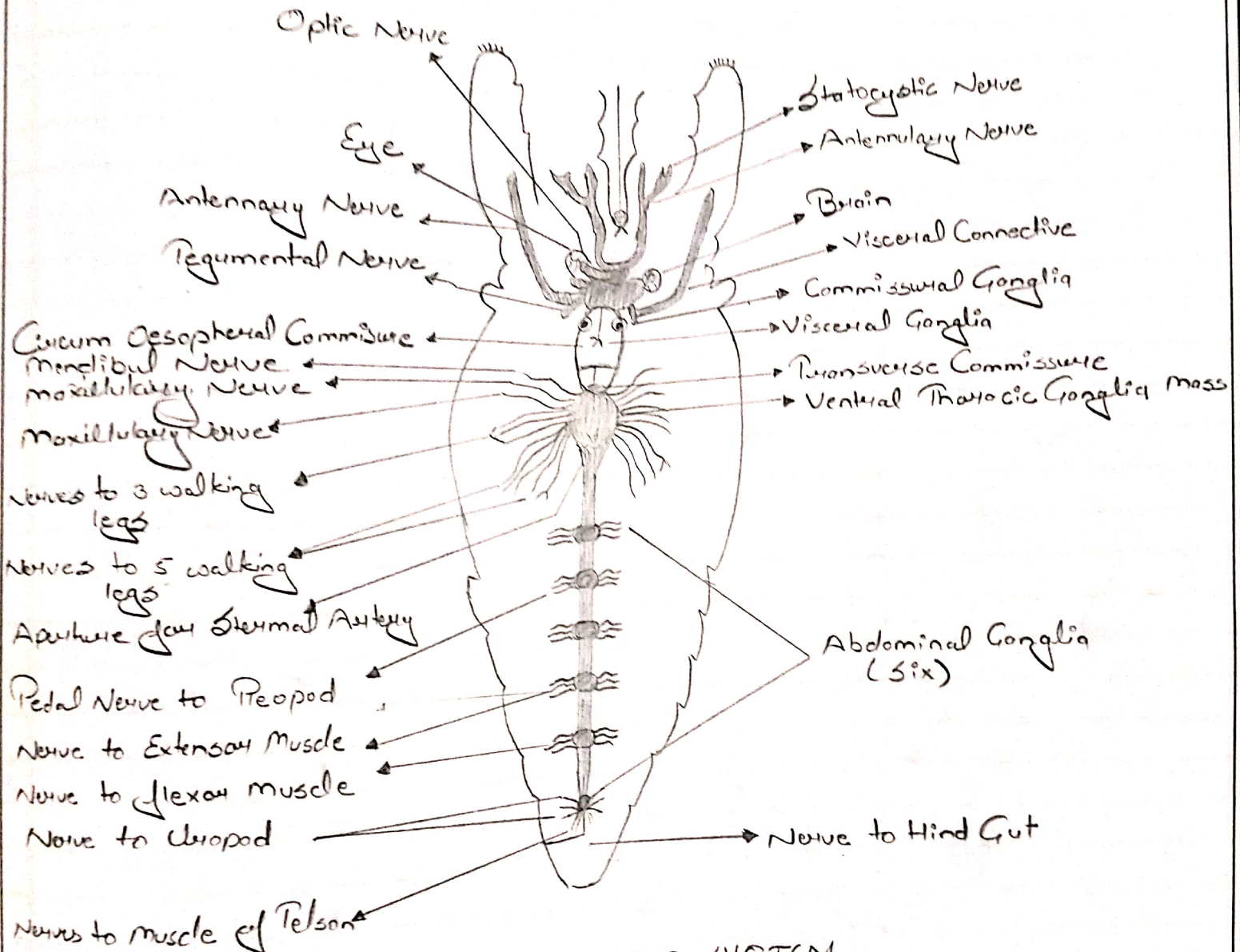
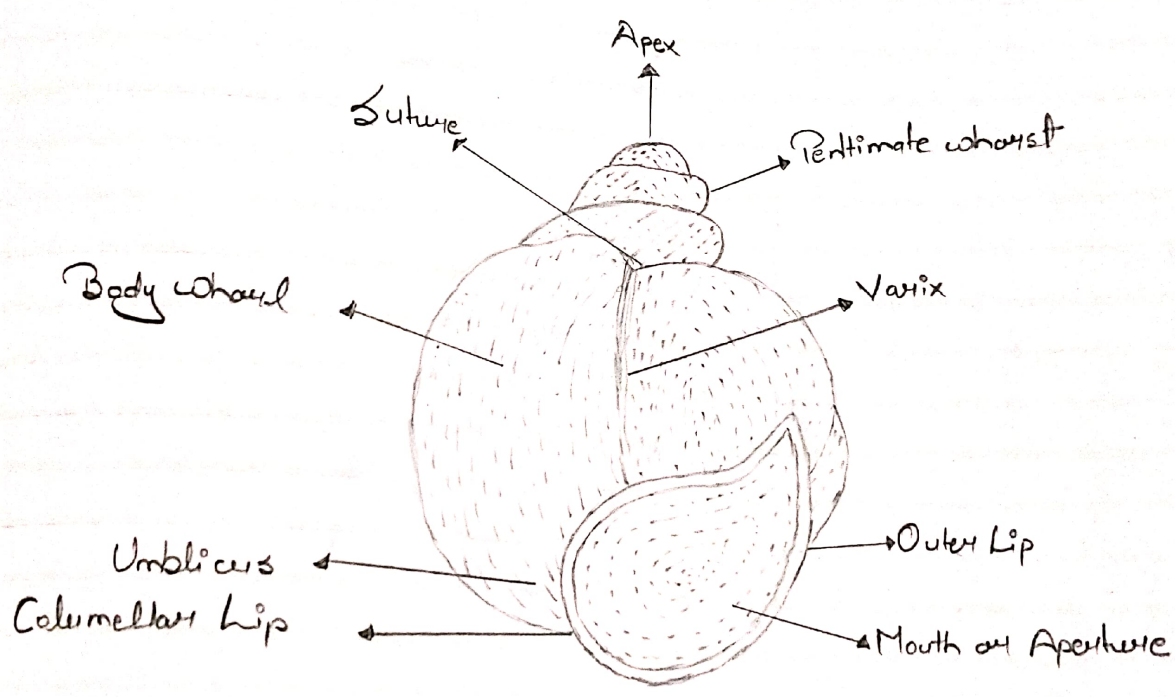


DIAGRAM :- PRAWN-ALIMENTARY CANAL

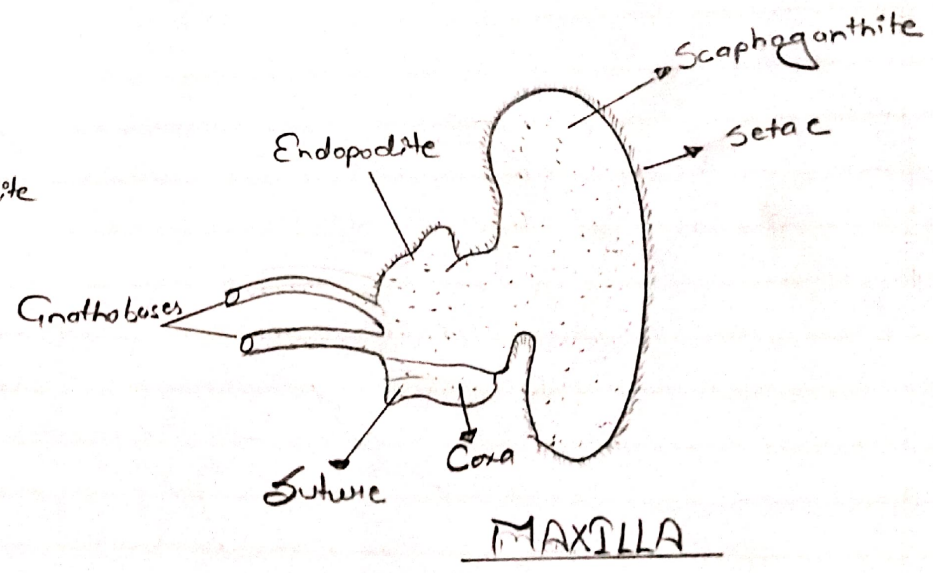
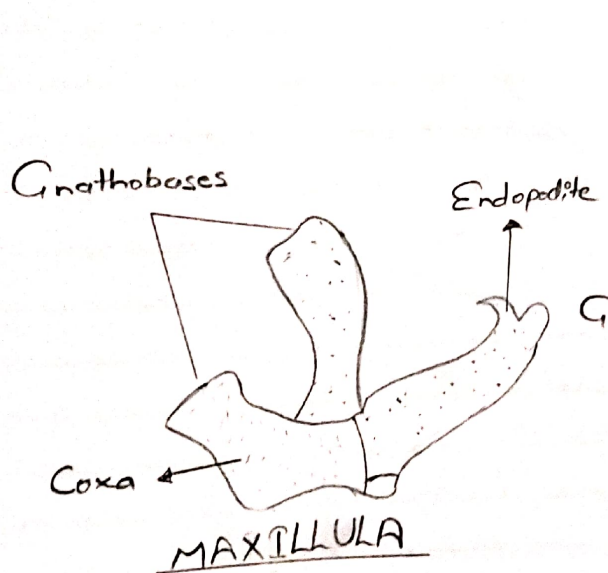
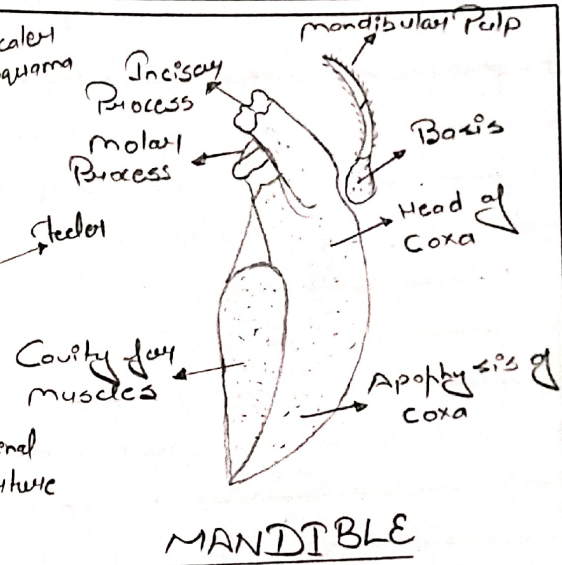
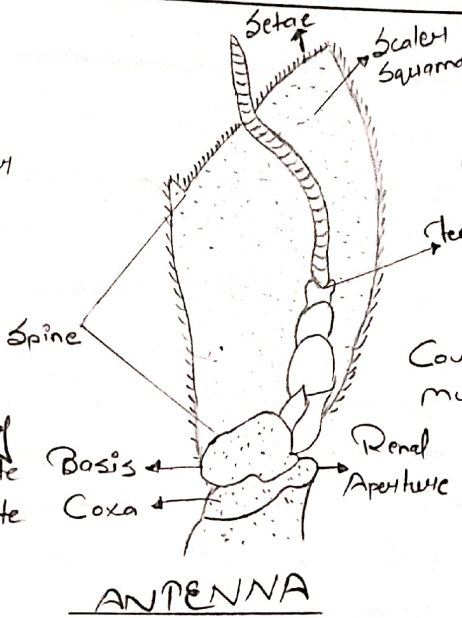
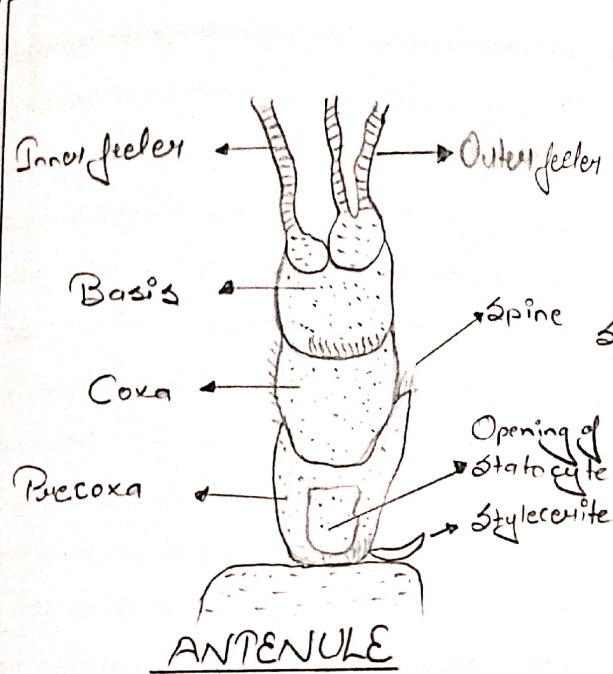


DIG :- PRAWN - NERVOUS SYSTEM





DIG :- PILA - EXTERNAL FEATURES



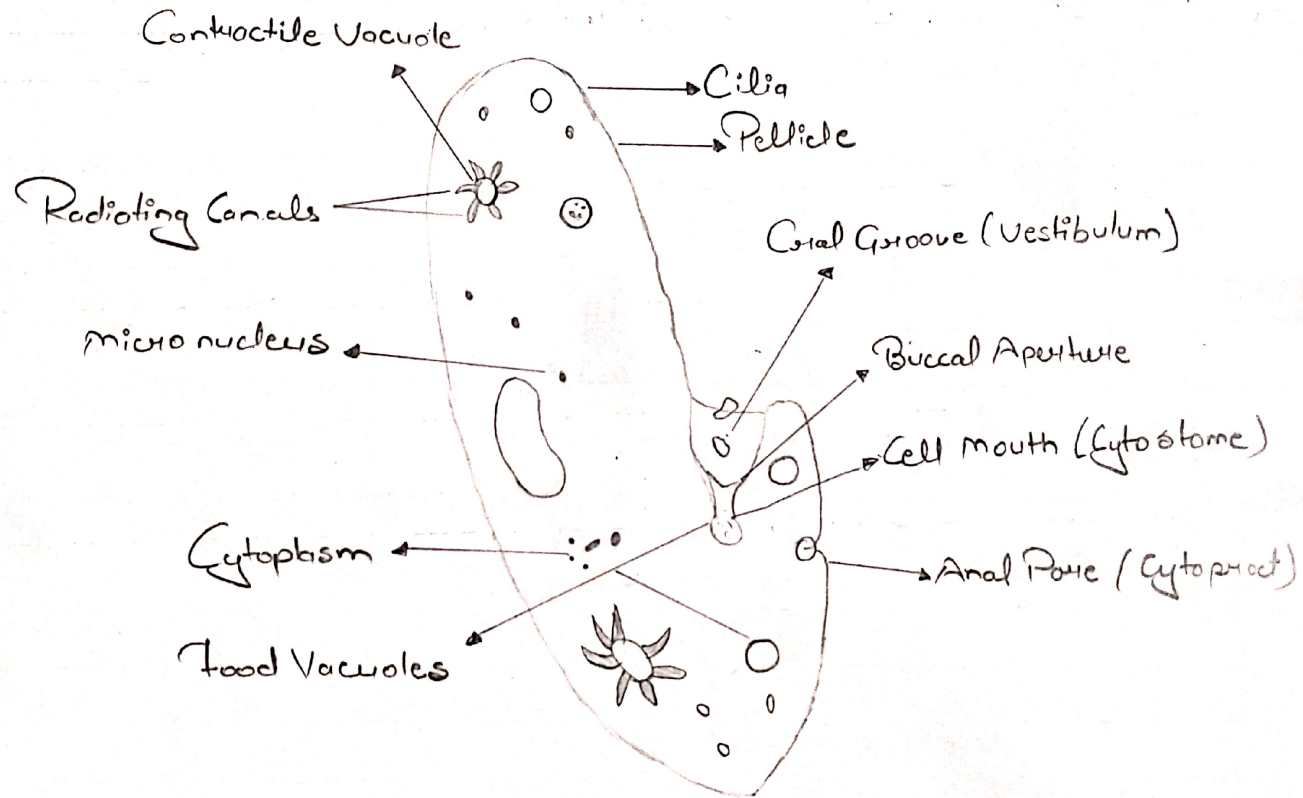
DIG: PRAWN - APPENDAGES

PERMANENT

SLIDE

PREPARATION





DIG :- PARAMECIUM

## Paramecium

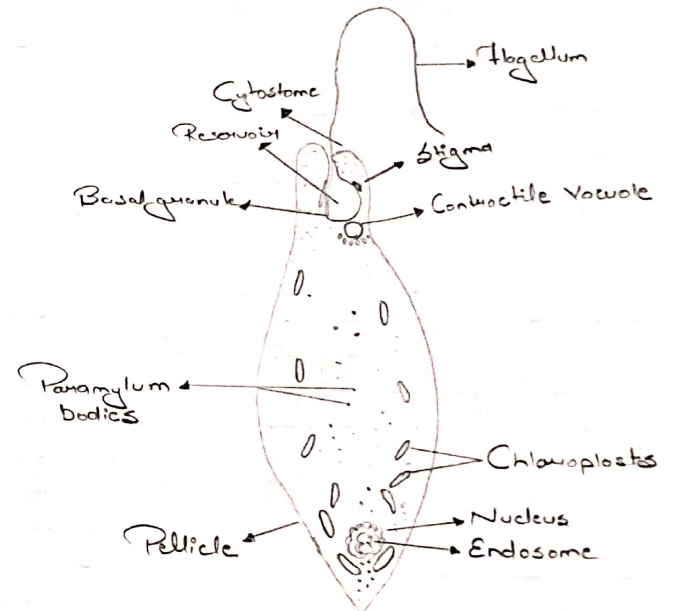
### Characteristics :-

- (i) Polypyll, which gives definite shape to the body, is found.
- (ii) Contractile cell vacuole is found at a fixed place.
- (iii) Two central (small & square) are found.
- (iv) Trichocysts are found in polypyll which are protective organs.
- (v) Sexual reproduction occurs by conjugation & asexual reproduction occurs by binary.

## Euglena

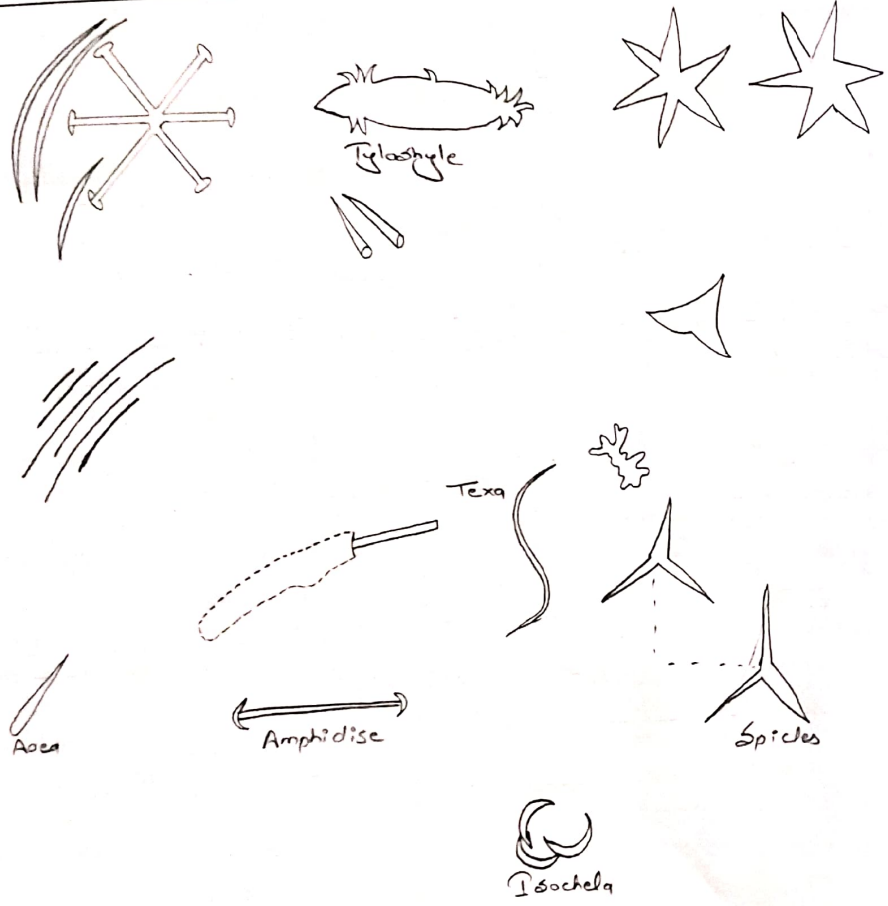
### Characteristics :-

- (i) A flagellum at the anterior end which is available at the base of the esophagus.
- (ii) A stigma at the anterior end which is light sensitive.
- (iii) The nucleus is found near the posterior end.
- (iv) Stored food in the form of paramylum body.
- (v) This is an organic puzzle because it is half plant & half animals.



DIG :- EUGLENA





DIG:- SPONGE SPICULES

Teacher Signature .....

Sponge Spicules

Character :-

- (i) In sponges, the endoskeleton is made up of coenocytic fibers of the fungi. These are crystalline structures.
- (ii) Inorganic matter in the form of  $CaCO_3$  or hydrated silica is deposited at the base of the sponges in the canals.
- (iii) In the sponges, a number of infinitely needle-like sharp & long monaxonal or aequous cuticles are found forming a circle around the osculum. Simple ice-like aqueous cuticles are found protruding from the exterior outside the axial canals.
- (iv) Cuticles are divided into short cuticles & long cuticles on the basis of length.

Obelia Colony

Characteristics -

(i) This is a settlement with tree-like branches

(ii) Polyps are found in the growth region of the main branch. Chlorostyle is found at the base & medusa is found on the sides of the blastostyle

(iii) Polyps have a structure like a gosh with tentacles around their mouths. Blastostyle does not have main & tentacles. Medusa is a plate-like structure

(iv) Polyp vegetative blastostyle performs the function of nutrition & medusa reproduction

(v) Tentacles are organs of defense because nematocytes are found on them

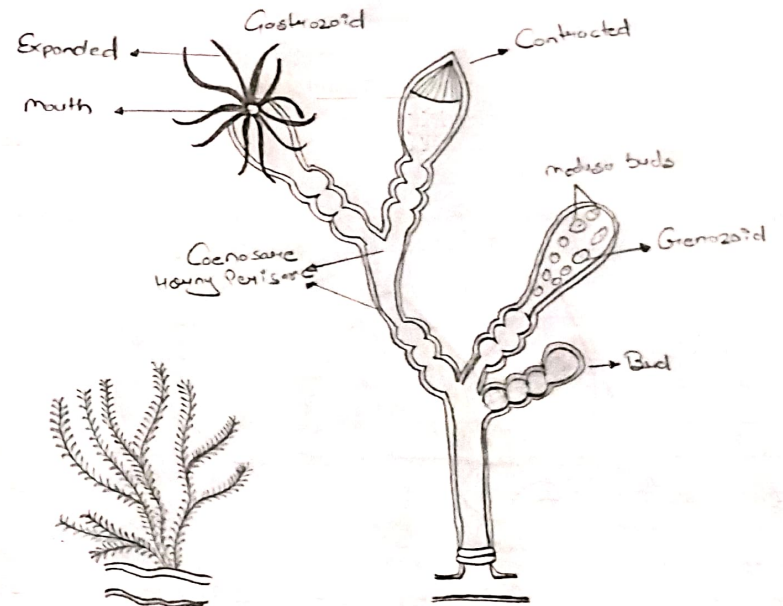
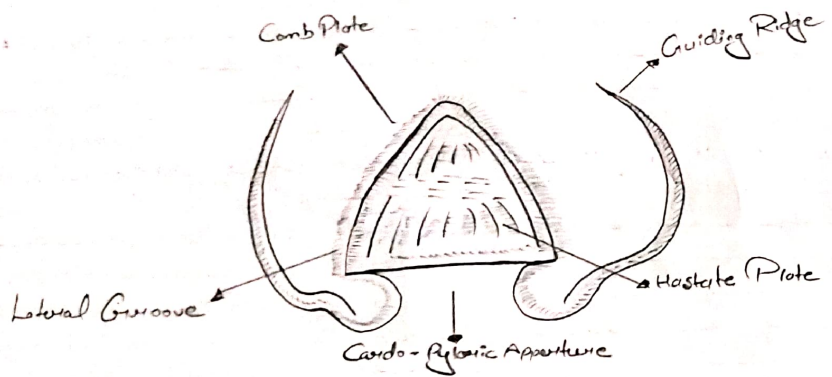


DIAGRAM - OBELIA COLONY



DIGI :- HASTATE - PLATE

Hastate Plate

Characteristics :-

- i) The hastate plate is located on the front of the prawn's cardiac pylorus
- ii) This spear-shaped flat structure is made of thick cuticle
- iii) The bottom of the hastate plate is covered by hard substance made of chitin with the help of serration the ingested food is broken into small pieces



P10: Gill Lamella

Characteristics :-

(i) For aquatic respiration, a gill called filidium is present in the pila, which bears on the right side of the mantle in the branchial cavity.

(ii) The gills form a single row of numerous triangular parallel plates

(iii) The bases of the plates are attached to the mantle & their free ends are called hags on the branchial girdle

(iv) At the bottom of each plate there are transverse bulges, i.e. plates. These bulges contain an elaborate network of vascular cells & when water flows over them, gaseous exchange takes place.

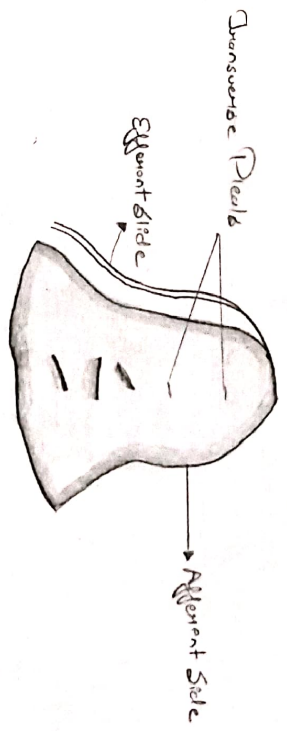


FIG:-P10A-GILL LAMELLA

SPOTTING

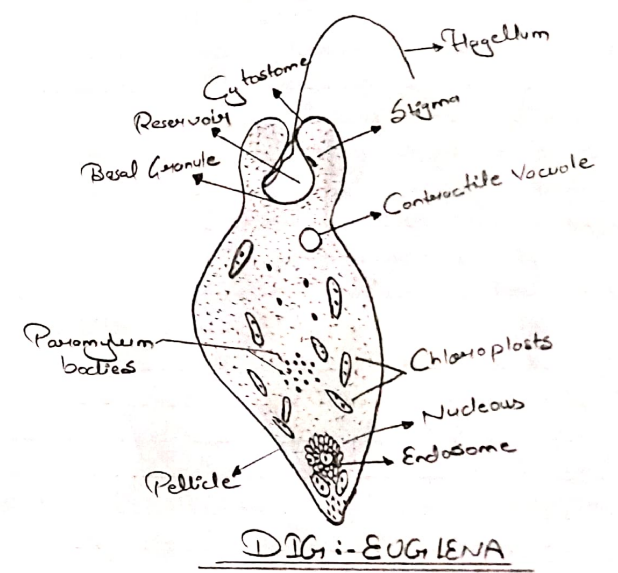
## Euglena

### Classification :-

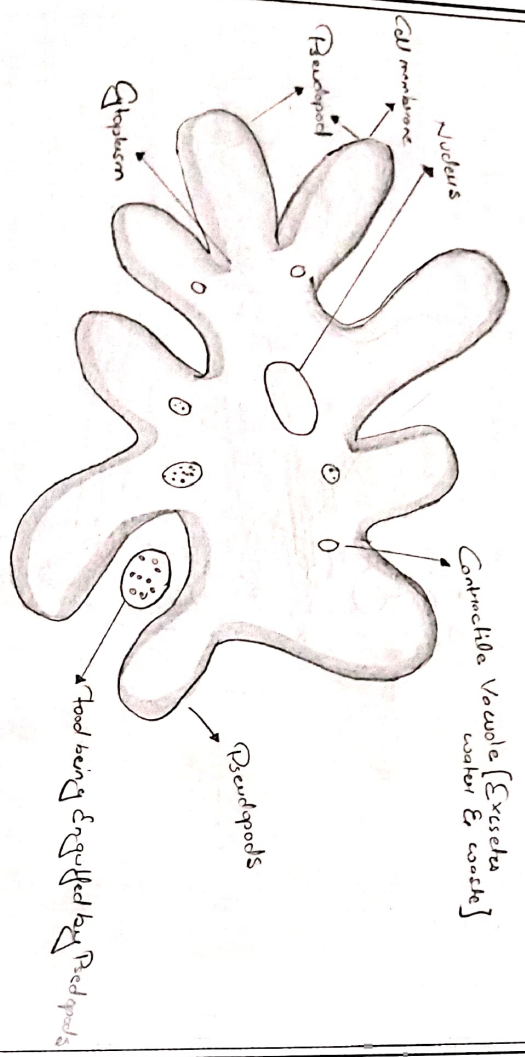
- Phylum - Protista
- Class - Mastigophora
- Order - Euglenoidina
- Genus - Euglena

### Characteristics :-

- (i) There is a flagellum on the head which is available at the base of the esophagus.
- (ii) A stigma which is light sensitive is found at the anterior end.
- (iii) The nucleus is found near the posterior end.
- (iv) Stored food in the form of paramylum body.
- (v) This is an organic puzzle because it is half plant & half animal.







Diagrams:- AMOEBIA

Teacher Signature .....

Amoeba

Classification :-

- Kingdom - Protista
- Class - Rhizopoda
- Order - Lobosa
- Genus - Amoeba

Characteristics :-

- (i) The shape is irregular & the protoplasm appears temporarily in the form of pseudopodia.
- (ii) The protoplasm is released in the form of internal & external fluid.
- (iii) Food vacuole, nucleus & contractile vacuole are found in the endoplasmic contractile vacuole continuously expels water.
- (iv) Reproduction by asexual binary fission.
- (v) Under unfavourable conditions cyst formation occurs.

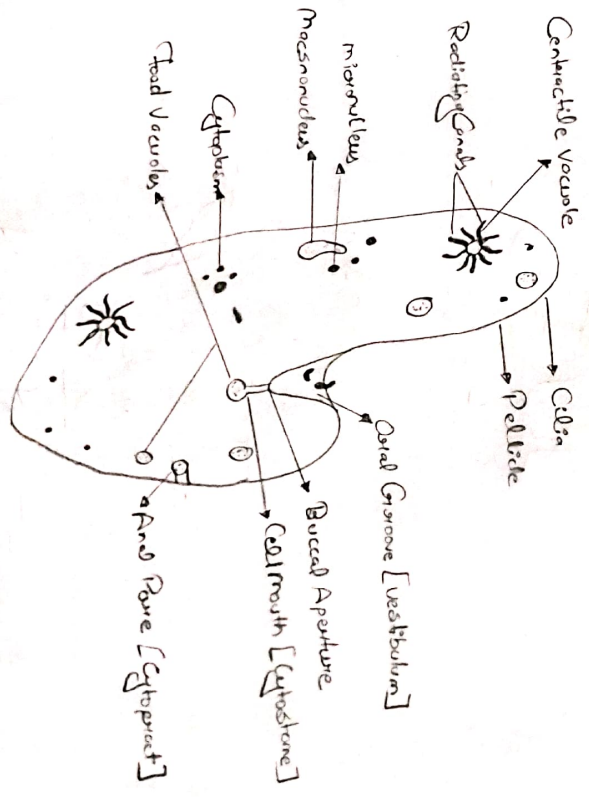
Paramecium

Classification :-

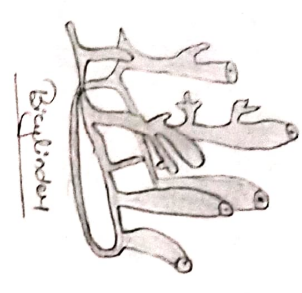
- Phylum - Protozoa
- Class - Sillata
- Order - Holotricha
- Genus - Paramecium

Characteristics :-

- (i) Pellicle, which gives definite shape to the body is found
- (ii) Contractile vacuole is found at a fixed place.
- (iii) The cytoplasm is divided into outer & inner plasma respectively
- (iv) The nuclei which are found to be small & old
- (v) Sexual reproduction occurs by conjugation & asexual reproduction occurs by binary fission



DIAG-3- PARAMECIUM



ONG: LEUCOSOLENIA

Leucosolenia

Classification :-

- Phylum - Porifera
- Class - Calcarea
- Order - Homocida
- Genus - Leucosolenia

Character :-

- (i) Body like a bouquet
- (ii) The simple organization of sponges resembles that of Obolus
- (iii) The sponge cavity is exposed through the osculum.
- (iv) Canal system Asson type of stream of water enters the spongocoel through ostium & comes out through osculum
- (v) Reproduction through complexation & regeneration.

Teacher Signature .....



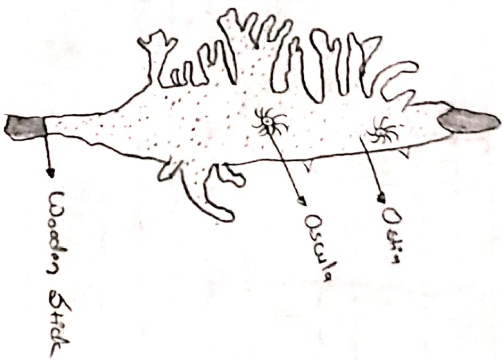
### Spongilla

#### Classification :-

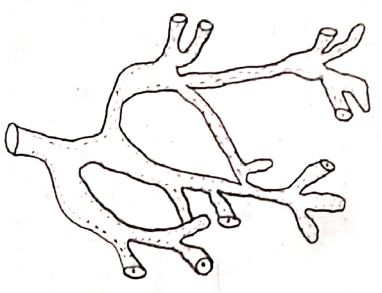
- Phylum - Porifera
- Class - Demospongia
- Order - Monocanida
- Genus - Spongilla

#### Characteristics :-

- (i) The structure is irregular & spongy.
- (ii) The skeleton is composed of siliceous spines embedded in the spongilla.
- (iii) They are yellowish-brown or green in colour.
- (iv) During winter, spores are formed which sink to the bottom & develop into sponges when favourable conditions arise.
- (v) Skeletal system is of Rebergs fibres.



DIAG :- SPONGILLA



DIAG. :- MILLEPORA

Millepora

Classification :-

- Phylum - Cnidaria
- Class - Hydrozoa
- Order - Hydrocorallina
- Genus - Millepora

Characteristics :-

- (i) It is branched & its skeleton is made of CaCO<sub>3</sub>.
- (ii) Innumerable spiracular holes found on the body.
- (iii) The small pores are called dactyloporous & gastroporous.
- (iv) Gastrophoroids emerge from gastroporous & dactyloporous emerge from dactyloporous.
- (v) Dactyl joints perform the functions of protection & sensation.

Teacher Signature .....

Physalia

Classification :-

- Phylum - Cnidocysta
- Class - Hydrozoa
- Order - Siphonophora
- Genus - Physalia

Character :-

- (i) This shows division & polymorphism of larvae
- (ii) The nematocysts on the tentacles are powerful & can kill fish
- (iii) Gastrozooids perform the function of feeding & protection

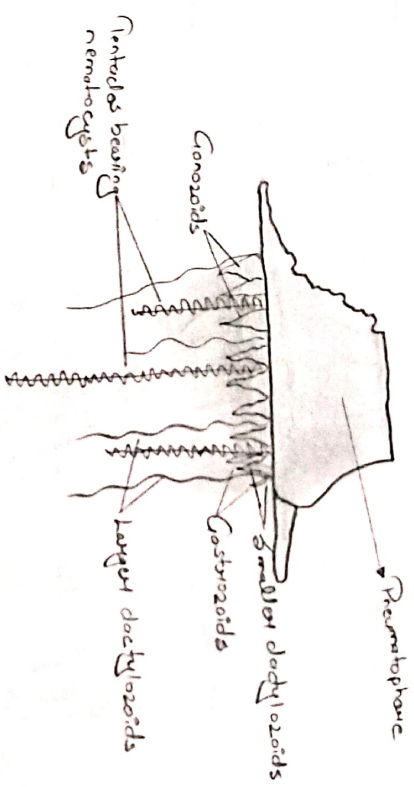
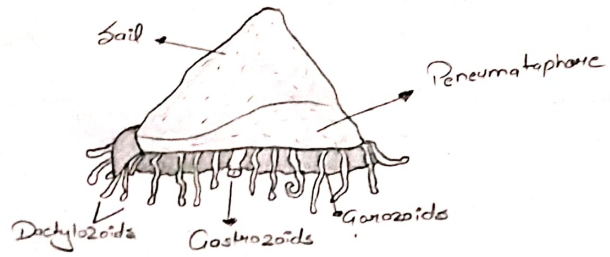


Fig :- PHYSALIA





DIAG :- VELELLA

Teacher Signature .....

Velella

Classification :-

Phylum - Ctenophora  
Class - Thaliacea  
Order - Cyphophorata  
Genus - Velella

Characteristics :-

- (i) The pneumatophore is a chitin-rich disc.
- (ii) It appears like a vertical boat in which air chambers are found.
- (iii) A single gastrozooid is found centrally on the ventral surface of the pneumatophore.
- (iv) Dactylozooids are found on the edges.

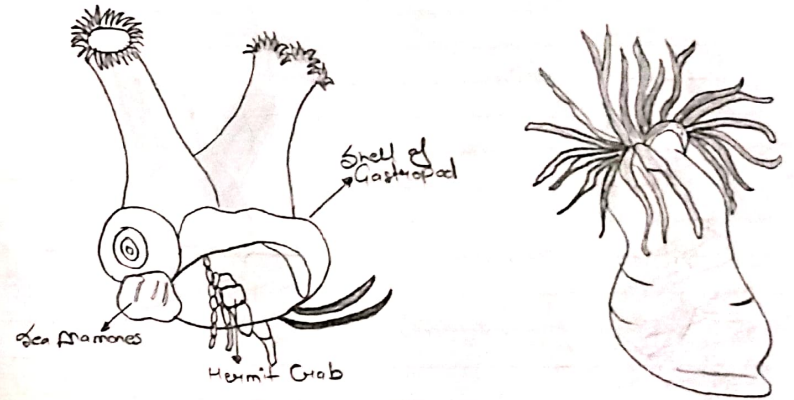
## Sea-Anemone

### Classification :-

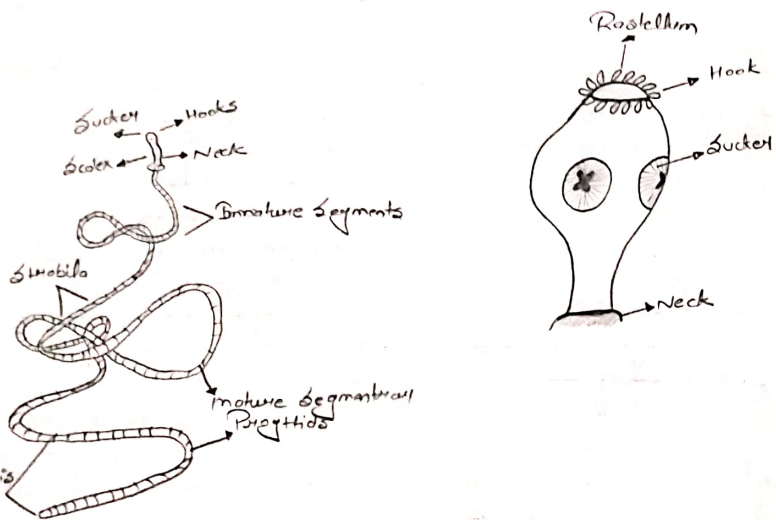
Phylum - Cnidaria  
Class - Anthozoa  
Order - Actinaria  
Genus - Adamsia

### Characteristics :-

- (i) The lower part of the body is called the basal disc, which is attached to a base. It is fleshy & glandular.
- (ii) The protruding part of the body is called the column.
- (iii) The oral disc is covered by tentacles & the mouth is slit-like.
- (iv) Some anemones display commensal relationships with other animals, such as hermit crabs on the shells of gastropods.



DIAG:- SEA-ANEMONE



DIAG:- TAENIA

Teacher Signature .....

Taenia

Classification :-

- Phylum - Platyhelminthes
- Class - Cystoda
- Order - Cyclophyllidia / Taenidia
- Genus - Taenia

Characteristics :-

- (i) Scolex, neck & segments are found in the body
- (ii) The smaller segments is towards the neck, followed by the mature & segments.
- (iii) The segments are called proglottids. There are four nymphs & a mass on the isolex. The rostellum has 28-32 hooks.
- (iv) The mature segments is bisexual.
- (v) There is immense consistency in reproduction.



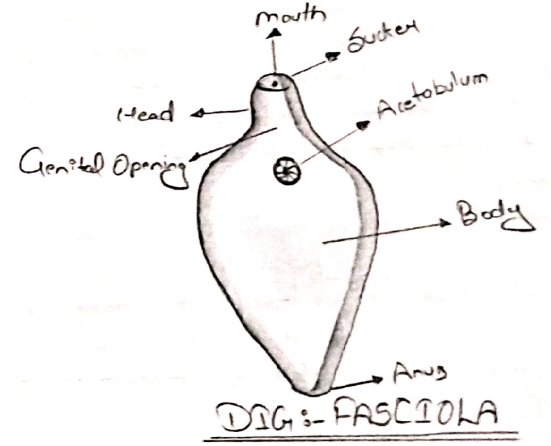
Fasciola

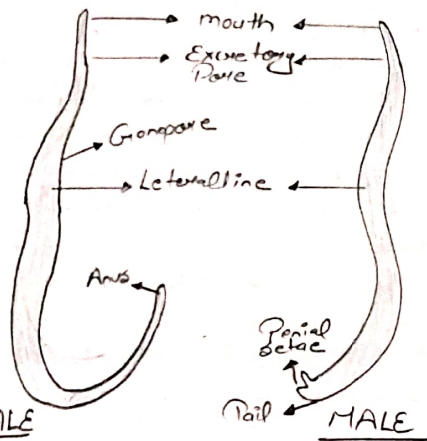
Classification :-

- Phylum - Platyhelminthes
- Class - Trematoda
- Order - Digenea
- Genus - Fasciola

Characteristics :-

- (i) Flat belly like structure.
- (ii) Mouth with oval sucker on half surface
- (iii) Genital opening between the oval sucker & the mouth
- (iv) The life cycle is completed in two hosts





FEMALE

MALE

DIAGRAM: ASCARIS

Teacher Signature .....

AscarisClassification :-

Phylum - Aschelminthes  
 Class - Nematoda  
 Order - Ascarida  
 Genus - Ascaris

Characteristics :-

- (i) The body is cylindrical & white & light pink in colour.
- (ii) The tail of the male is coiled & that of the female is pointed.
- (iii) The mouth is covered with one dorsal & two ventral lips.
- (iv) Sexual dimorphism is found; the male is smaller (15-30cm) & the female larger (20-25cm).
- (v) Skin is made up of cuticle.

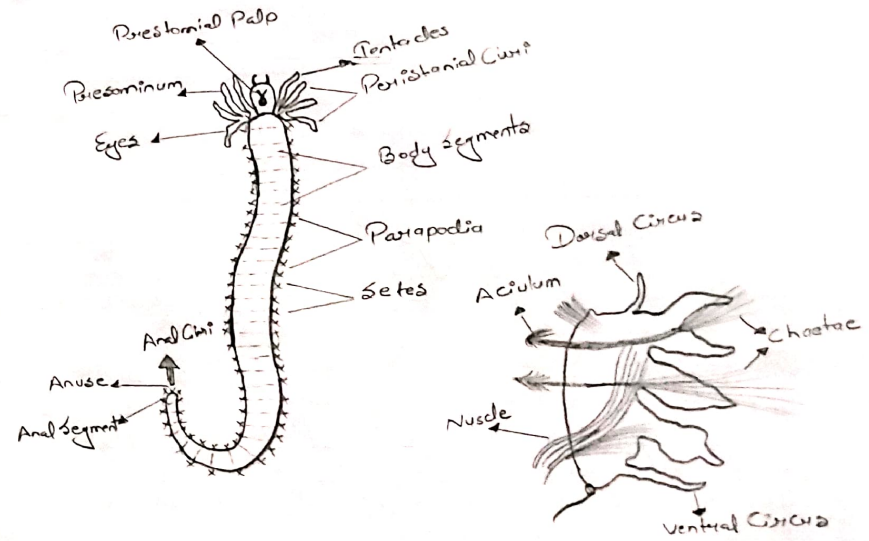
Neries

Classification :-

- Phylum - Annelida
- Class - Polychaeta
- Order - Eteimata
- Genus - Neries

Character :-

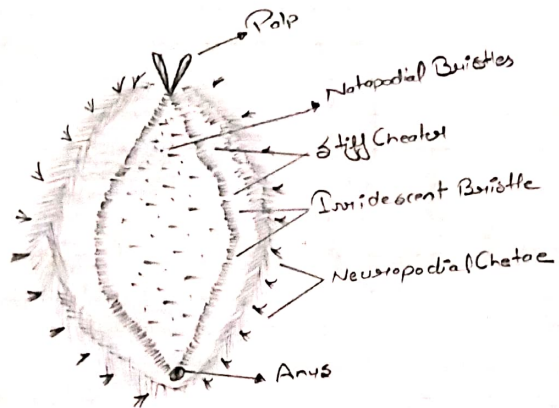
- (i) The body is segmented & about 6 inches long, containing 80 to 120 segments.
- (ii) At the anterior end the apex is divided into protomium & peristomium.
- (iii) Protomium is triangular on which two pairs of eyes, one pair of tentacles, one pair of palps are found. 4 pair of tentacles and cenes are found on peristomium.
- (iv) Trochophore larvae are found.
- (v) Autotomy & regeneration are found.



DIG:- NERIES

PARAPODIUM OF NERIES





DIAG:- APHRODITE

Teacher Signature .....

### Aphrodite

#### Classification :-

Phylum - Annelida  
Class - Polycheta  
Order - Eteonea  
Genus - Aphrodite

#### Characteristics :-

- (i) It is found in the sea & is found at the bottom of the deep sea mud.
- (ii) It is also commonly called sea rat.
- (iii) There are 30-35 segments in its body. The body is oval & flat like a dorsoventrum.
- (iv) A small head is found at the anterior end, which bears a median antenna & a pair of palps.
- (v) To protect itself from enemies, it wraps its body and, like Parcupine, it makes its hard spikes stand upright.

Hirudinaria

Classification :-

- Phylum -
- Class -
- Order -
- Genus -

Characteristics :-

- (i) Ventral flat suckers are present on both the ends of the body dorsum
- (ii) Body surface is greenish & light yellow.
- (iii) The body is divided into 33 segments
- (iv) If five segments are found at the tip. At the top where suckers, eye, mouth, jaws are present.
- (v) The male genital pore is located in the tenth segments & the female genital pore is located in the 11th segment

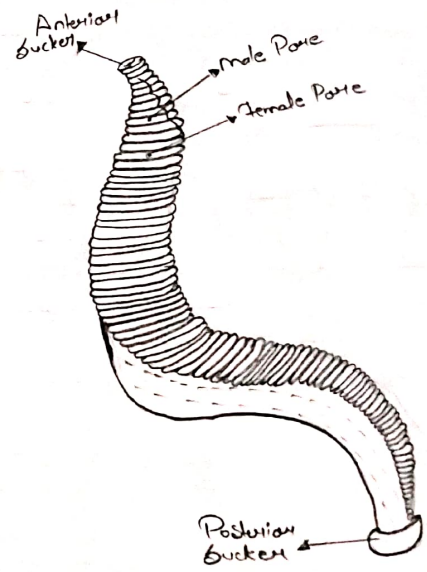


DIAGRAM :- HIRUDINARIA

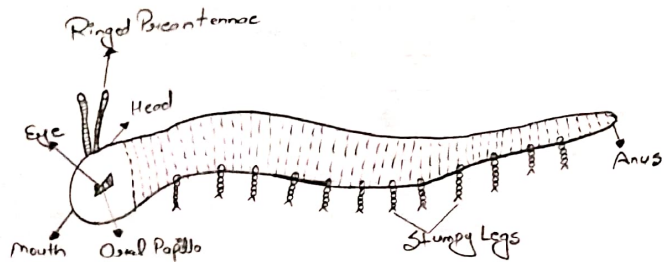


DIAGRAM: PERIPATUS

Teacher Signature .....

## Peripatus

### Classification :-

Phylum - Arthropoda  
Sub-Phylum - Onychophora  
Class - Onychophora  
Order -  
Genus - Peripatus

### Characteristics :-

- (i) It is an established animal & is found in cracks in rocks, bank of trees & moist places under stones.
- (ii) It is considered to be the connecting link between the Annelida & Arthropoda phyla.
- (iii) It is like a living fossil.
- (iv) A distinct head is found. A pair of antennae, a pair of main papillae & a pair of eyes are found on the head.
- (v) These are pupal.



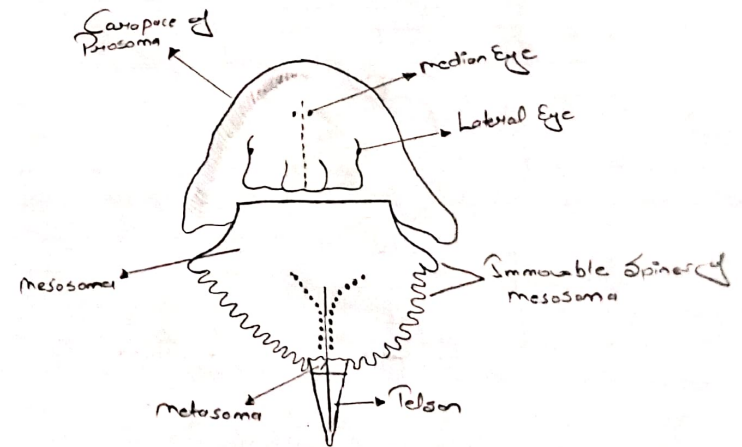
Limulus

Classification :-

- Phylum - Arthropoda
- Class - Merostomata
- Order - Xiphosura
- Genus - Limulus

Characteristics :-

- (i) It is found at the bottom of sea water.
- (ii) It is commonly known as king crab.
- (iii) A pair of medial & two lateral eyes are found on the forebrain.
- (iv) A huge house-shoe-shaped carapace is found above the prosoma.
- (v) This is called living fossil.



Diag :- LIMULUS

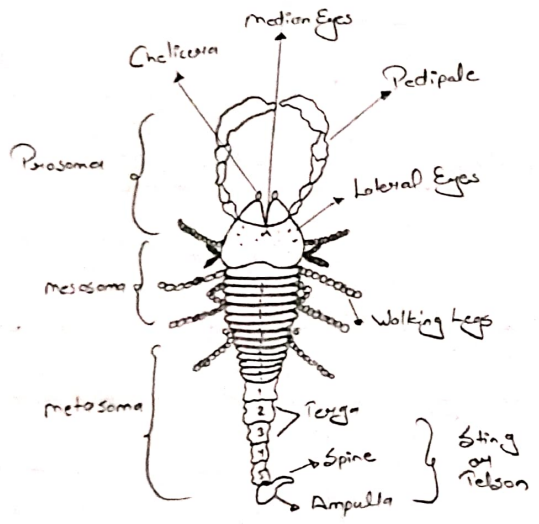


DIAGRAM:- SCORPION

Teacher Signature .....

Scorpion

Classification :-

- Phylum - Arthropoda
- Class - Arachnida
- Order - Scorpiones
- Genus - Scorpion

Characteristics :-

- (i) It is a terrestrial animal which hides in cracks under stones, under sand etc.
- (ii) It is a nocturnal carnivorous animal.
- (iii) Its distribution is worldwide.
- (iv) There are 7 pairs in the middle five narrow ones at the end. These are the parts of the appendages.
- (v) The male & female are separate. They are pupal.

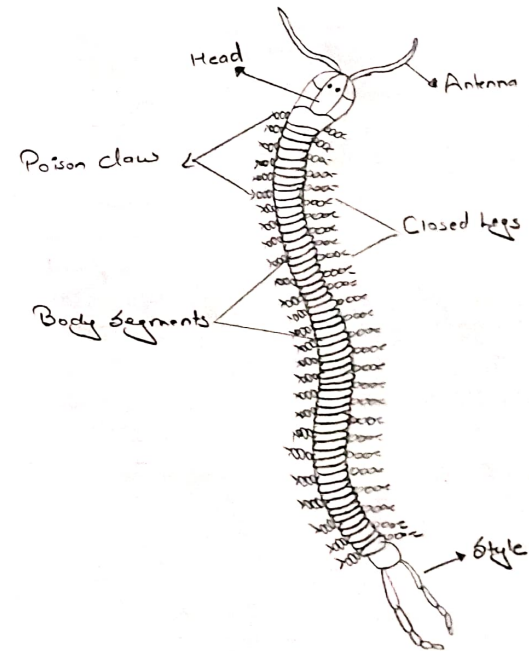
## Centipede

### Classification :-

Phylum - Arthropoda  
Class - Chilopoda  
Order -  
Genus - Scolopendrea / Centipede

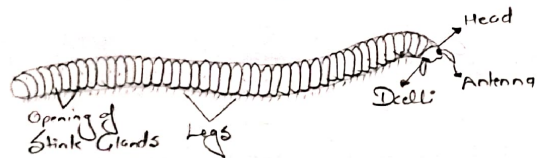
### Characteristics :-

- (i) This name is found in earth vessels, wood, logs, bark, basement etc.
- (ii) It is a nocturnal carnivorous & fast running predatory animal.
- (iii) It is commonly known as Shatundi or Earth Sticking.
- (iv) It is dark brown in colour & flattened from dorsal to posterior.
- (v) A pair of legs is found in each segment of the body.



DIG :- CENTIPEDE





DIG:- MILLIPEDE

Teacher Signature .....

Millipede

Classification :-

- Phylum - Arthropoda
- Class - Diplopoda
- Order -
- Genus - millipede

Characteristics :-

- i) This moist dark place is hidden in cracks, stones, logs & under the bark of wood.
- ii) It is a nocturnal, timid, lazy & vegetarian animal.
- iii) The body is long, cylindrical & segmented.
- iv) The genital pore is located at the front of the body.
- v) A pair of small antennae is found on the head.

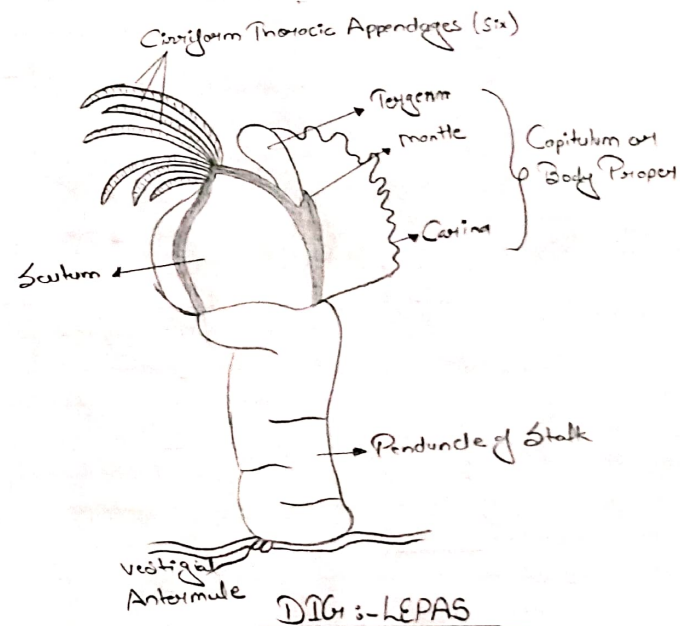
Lepas

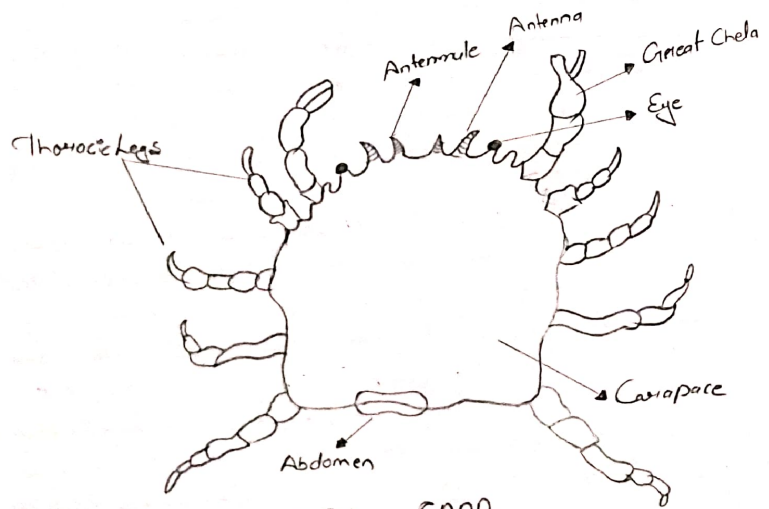
Classification :-

Phylum - Arthropoda  
Class -  
Order -  
Genus - Lepas

Characteristics :-

- i) It is found in sea water & sticks to the floating plants, logs, ships & twines at the bottom of the sea water.
- ii) It is commonly called the goose barnacle, ship barnacle.
- iii) There is a lack of antennae & eyes.
- iv) It is bisexual.
- v) Development is asexual; the larva is nauplius.





DIAG :- CRAB

Crab

Classification :-

- Phylum - Arthropoda
- Class - Crustacea
- Order - Decapoda
- Genus - Cancrus

Characteristics :-

- (i) It is found in shallow clean water habitats in mud, stones & rocks.
- (ii) Antennule & antennae are small & a pair of sensitive eyes are found.
- (iii) There are five pairs of bursty legs, of which only the first pair is forked.
- (iv) The abdomen is symmetrical.
- (v) The male has two pairs & the female has four pairs of pleopods.



Mantis

Classification :-

- Phylum - Arthropoda
- Class - Insecta
- Order - Arthropoda
- Genus - mantis

Characteristics :-

- (i) It is also called "praying mantis" because its front legs remain in a prayer posture when at rest.
- (ii) Its body is long, soft & light coloured.
- (iii) The body is divided into head, abdomen & stomach.
- (iv) There are 10 sections & a pair of anal domes.
- (v) The eggs are laid in egg shells formed by viscous secretion.

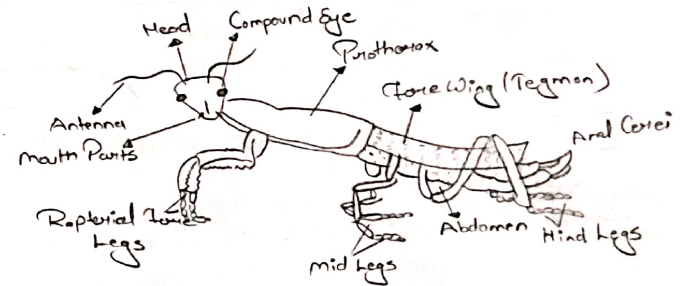


DIAGRAM :- MANTIS

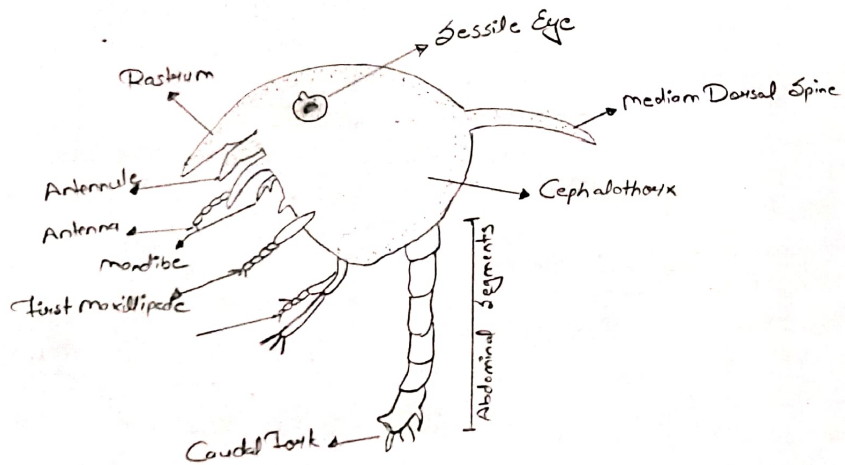


DIAGRAM :- ZOEAL LARVA

### Zoea Larva

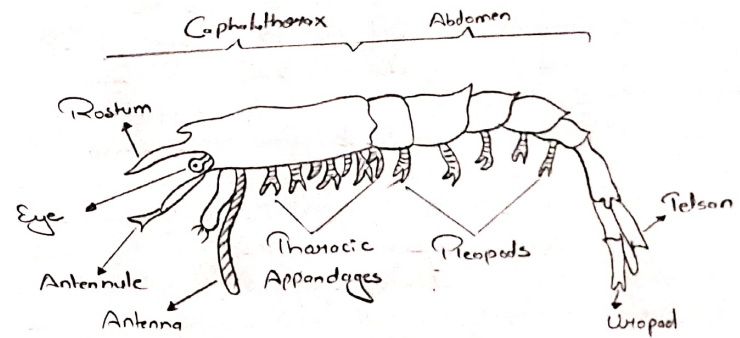
#### Characteristics :-

- (i) This is the second important larval stage in the development of animals of the Crustacea class.
- (ii) Its body is differentiated into head & abdomen.
- (iii) A pair of hearing eyes are found in the head.
- (iv) The abdomen is 6 segmented & without appendages. A tail fluke is found at the last segment.
- (v) It metamorphoses into metazoan & megalopa larvae.

Mysis Larva

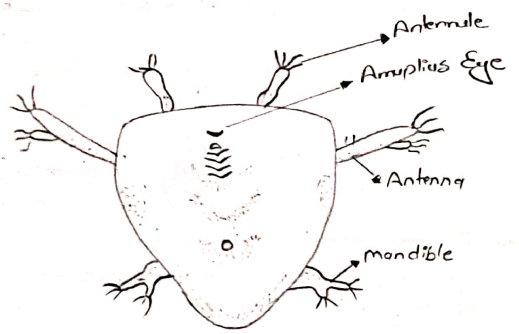
Characteristics :-

- (i) It is called as shizopoda larva
- (ii) Its body is divided into cephalothorax & abdomen. It has a total of 13 pairs of appendages which are of bifurcated type.
- (iii) The carapace of cephalothorax is covered with a mound
- (iv)
- (v) It transforms into an adult after metamorphosis.



DIAG :- MYSIS LARVA





DIG :- NAUPLIUS LARVA

Teacher Signature .....

Nauplius Larva

Characteristics :-

- i) This is the first larval stage of development of animals of the Crustacea class.
- ii) Its body is compact, pear-shaped & solid.
- iii) A simple eye is found in its front middle position.
- iv) Three pairs of appendages are found in it.
- v) This is a secretive larva.

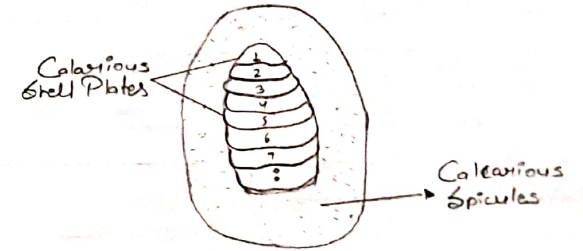
## Chiton

### Classification :-

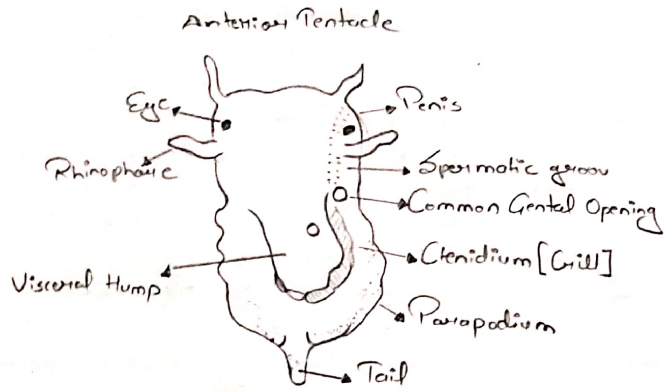
- Phylum - Mollusca
- Class - Amphineura
- Order - Polyplacophora
- Genus - Chiton

### Characteristics :-

- (i) It is found in the intertidal zone of seawater & sticks to rocks.
- (ii) It is a nocturnal & sluggish animal.
- (iii) Its body is oval, biconvex & flattened from side dorsal to anteroposterior.
- (iv) Its body can be divided into a small, vague head, legs, & a basal body.
- (v) The head lacks tentacles & eyes.



DIG. :- CHITON



DIG :- APLYSIA

Aplysia

Classification :-

- Phylum - Mollusca
- Class - Gastropoda
- Order -
- Genus - Aplysia

Characteristics :-

- (i) A marine animal that crawls among the marine vegetation.
- (ii) Its distribution is worldwide.
- (iii) Its commonly called sea slug.
- (iv) It is bisexual.



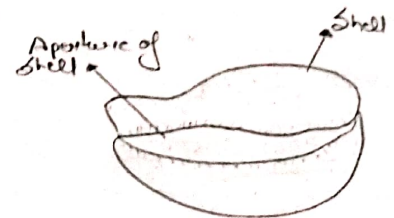
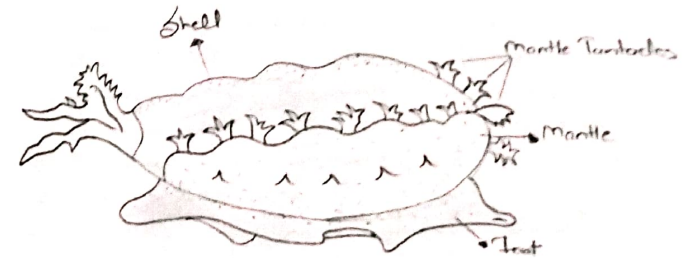
Cypraea

Classification :-

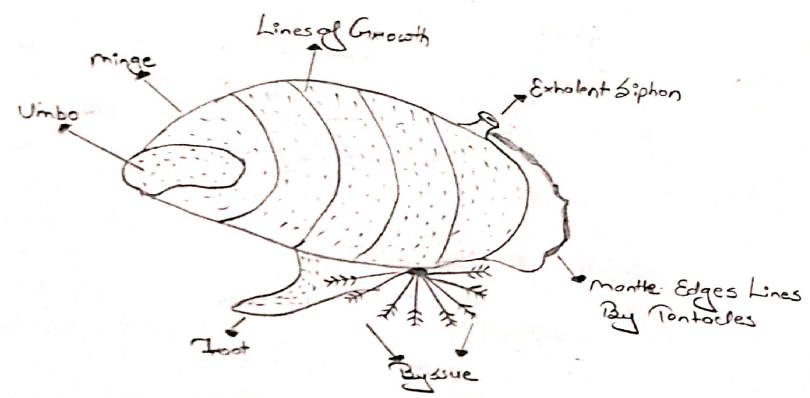
- Phylum - Mollusca
- Class - Gastropoda
- Order - Pectinibranchata
- Genus - Cypraea

Characteristics :-

- i) It is also commonly known as "Todi".
- ii) The shell is flat, curved, smooth & shiny.
- iii) An oval whorl is found on the shell. The shell is flattened towards the dorsal & ventricular surface. A sucker-like crack-like pore is found in the middle of the ventricular surface along its entire length. Its edges are wavy & serrated.
- iv) The lateral folds of the mantle completely cover the shell. Mantle tentacles are found on the mantle.
- v) It lies on rocky ground in shallow sea waters.



DIG : CYPRAEA



Di. :- MYTILUS

Teacher Signature .....

Mytilus

Classification :-

- Phylum - Mollusca
- Class - Pelecypoda
- Order - Filibranchia
- Genus - Mytilus

Characteristics :-

- (i) It is found in seawater. It sticks to pieces of wood in tidal zones in shallow water.
- (ii) Its distribution is worldwide.
- (iii) It is commonly called sea snail.
- (iv) The head is rudimentary; tentacles & eyes are absent.
- (v) The gills are plate-like & head-like.



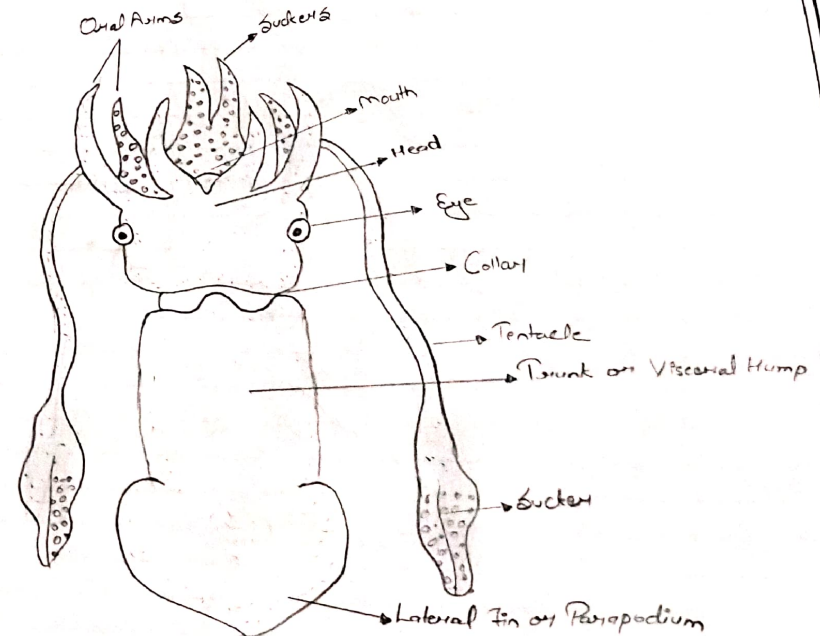
Loligo

Classification :-

- Phylum - Mollusca
- Class - Cephalopoda
- Order - Decapoda
- Genus - Loligo

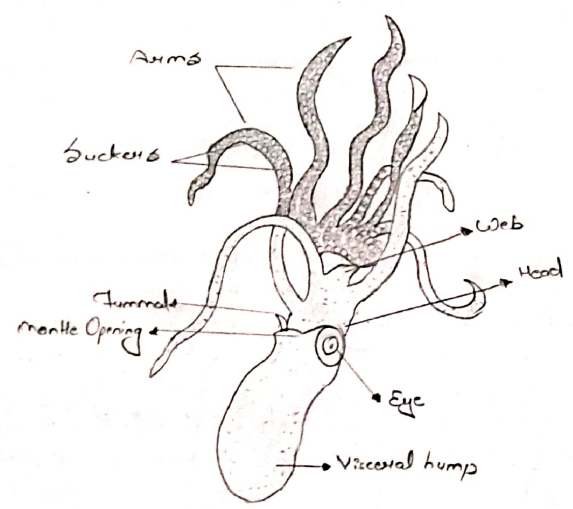
Characteristics :-

- It is found in shallow & deep waters of warm seas.
- This is an animal that swims at high speed in the open sea.
- It is known by the name of squid or caligari. It is also called sea cuttle.
- Its body is fleshy & flat from dorsal to posterior.
- It is unisexual & development is direct.



DIG :- LOLIGO





DIG :- Octopus.

Teacher Signature .....

Octopus

Classification :-

- Phylum - Mollusca
- Class - Cephalopoda
- Order - Octopoda
- Genus - Octopus

Characters :-

- (i) In the middle of its eight limbs there are two eyes & a beak-like mouth.
- (ii) It can also change shape of its soft body to pass through small spaces.
- (iii) They move by expelling a stream of water from their siphon & use it for both respiration & movement.
- (iv) Its nervous system is complex & it is considered one of the most intelligent living creatures.
- (v) These are solitary animals that live in large sea areas.

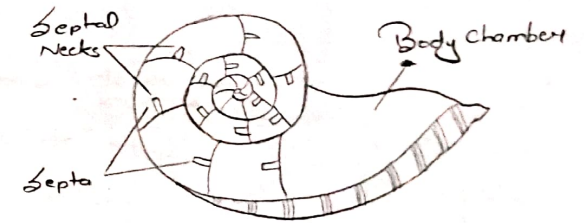
Nautilus

Classification :-

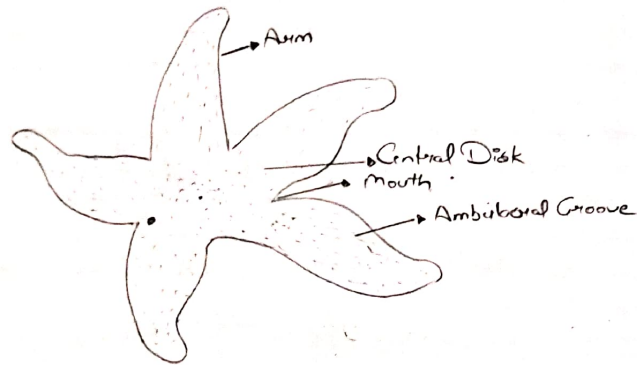
- Phylum - Mollusca
- Class - Cephalopoda
- Order -
- Genus - Nautilus

Characteristics :-

- (i) It is found in deep sea waters.
- (ii) It is a nocturnal, companion & carnivorous animal.
- (iii) It is found in the Indian & Pacific Oceans.
- (iv) This predator is called Nautilus.
- (v) It has 4 gills, 4 kidneys & four abriums.



DIG :- NAUTILUS



DIG :- ASTERIAS

Teacher Signature .....

Asterias

Classification :-

- Phylum - Echinodermata
- Class - Asterozoa
- Order - Scyphozoa
- Genus - Asterias

Characteristics :-

- (i) Marine creatures found in the Indian & Pacific oceans
- (ii) The body is star shaped with a central disc & 5 arms.
- (iii) On the upper oral surface of the animal there is a central disc, a madreporite pore & anus.
- (iv) The body is covered with a skeleton made of pentagonal calcareous bones or ossicles.
- (v) It is a harmful organism which consumes the pearl oyster & harms the pearl production.



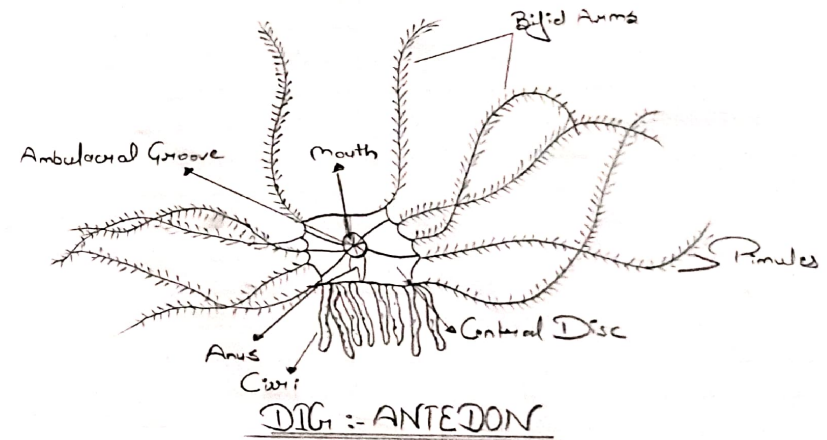
Antedon

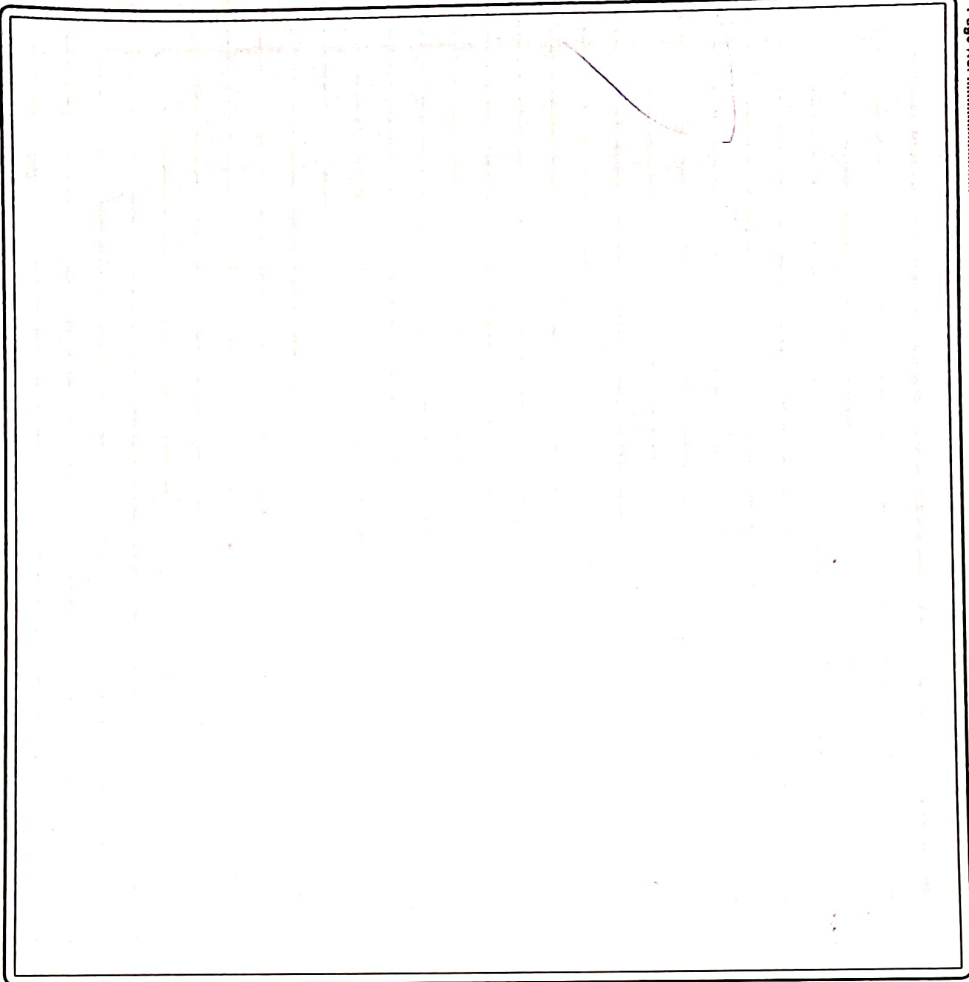
Classification :-

- Phylum - Echinodermata
- Class - Crinoidea
- Order - Antiflora
- Genus - Antedon

Characteristics :-

- (i) It is found in shallow marine water & sticks to rocks by means of cirri with prominent central veins.
- (ii) Its distribution is world-wide.
- (iii) It is also commonly known as 'sea lily' or 'feather star'.
- (iv) Its body is cup-shaped.
- (v) There is a central image in its body, around which long, thin & branched arms are found, out of which 10 are visible.





Q-1 Anatomy

(i) Draw a well labelled diagram of Pilo nervous system.  
(ii) Draw a well labelled diagram of Brown Adrenalgex

Q-2

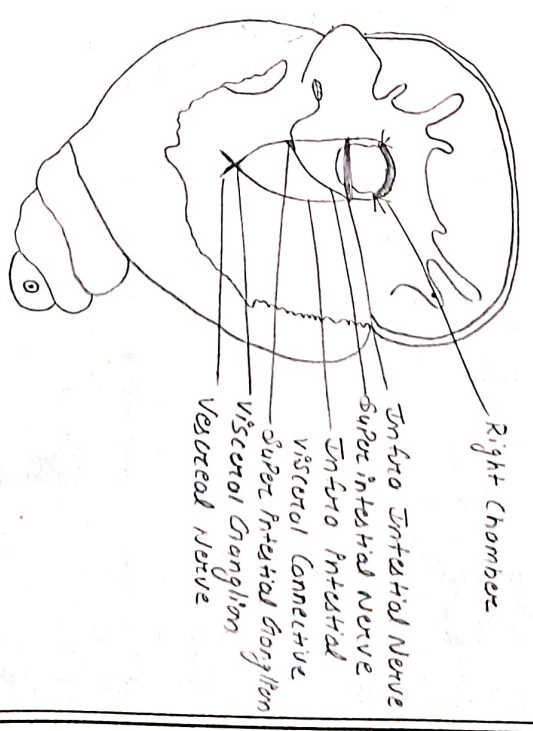
Prepare a Permanent slide of Gill lamella of Pila

Q-3

Identification labelled diagram and comments on SPAT



Di:- Pila - Nervous System





(11)

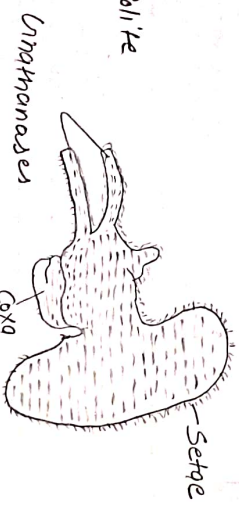
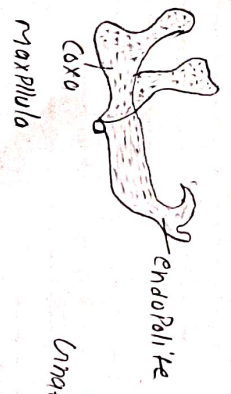
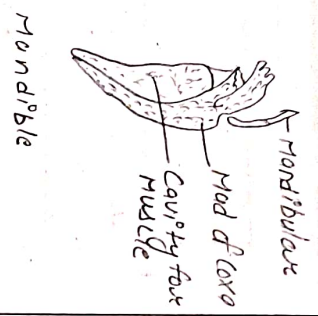
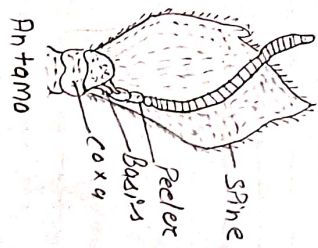
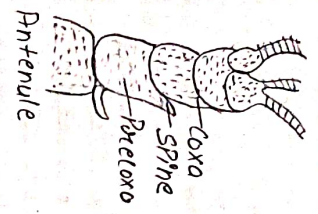
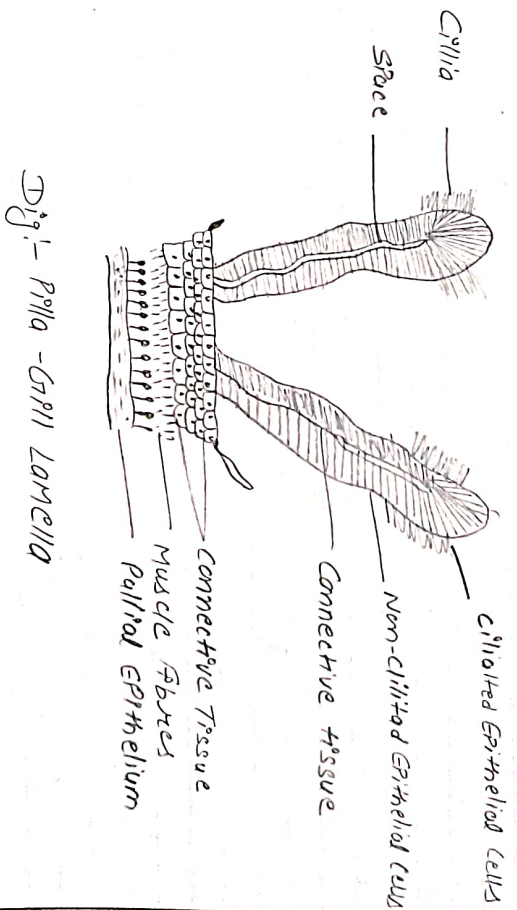


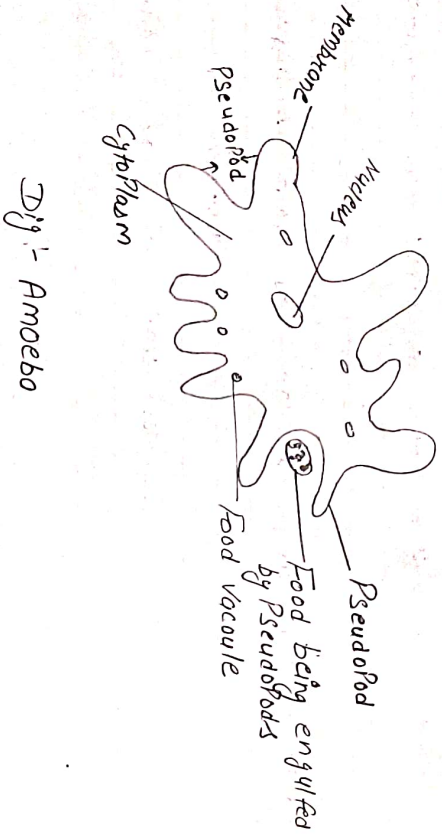
Fig. - Prawn Appendages

Answer Object :- Gill Plate of Pila

Procedure :-

Break the shell of Pila to expose the mantle  
 After identifying the epithelium of the mantle, observe  
 the Gill cavity. The Gill in the Pila cavity is of  
 the Monopeltic type. Isolate the Gill plate from  
 the + water Gill and place it on a Petri dish  
 observe under the microscope observe the slide  
 under a microscope



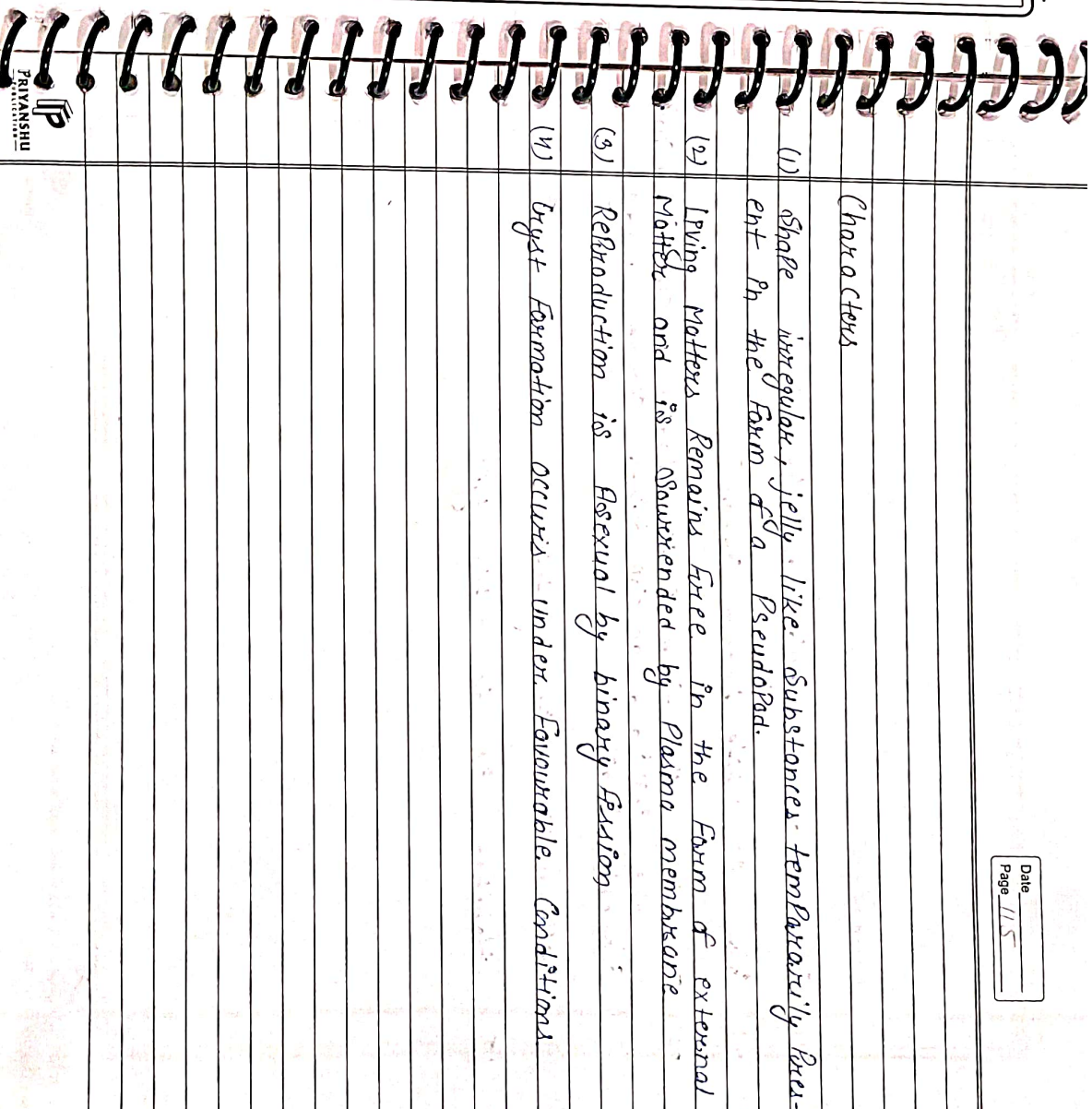


Diy - Amoeba

Teacher Signature .....

Character

- (1) Shape irregular, jelly like substances temporarily present in the form of a Pseudopod.
- (2) Living matters Remains free in the form of external matter and is surrounded by Plasma membrane
- (3) Reproduction is Asexual by binary Fission
- (4) cyst Formation occurs under Favourable Conditions





Characteristics

- (1) Colonies are irregular and loose
- (2) Color is white, brown, green
- (3) In winter they form resting bodies which remain in the soil and develop into spores under favorable condition
- (4) Reproduction is vegetative
- (5) Habitat is terrestrial type

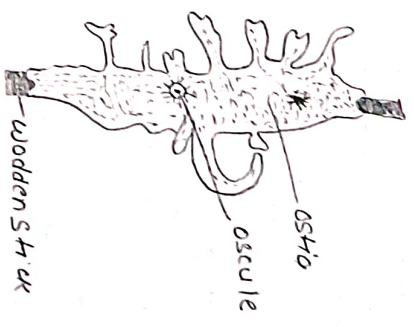
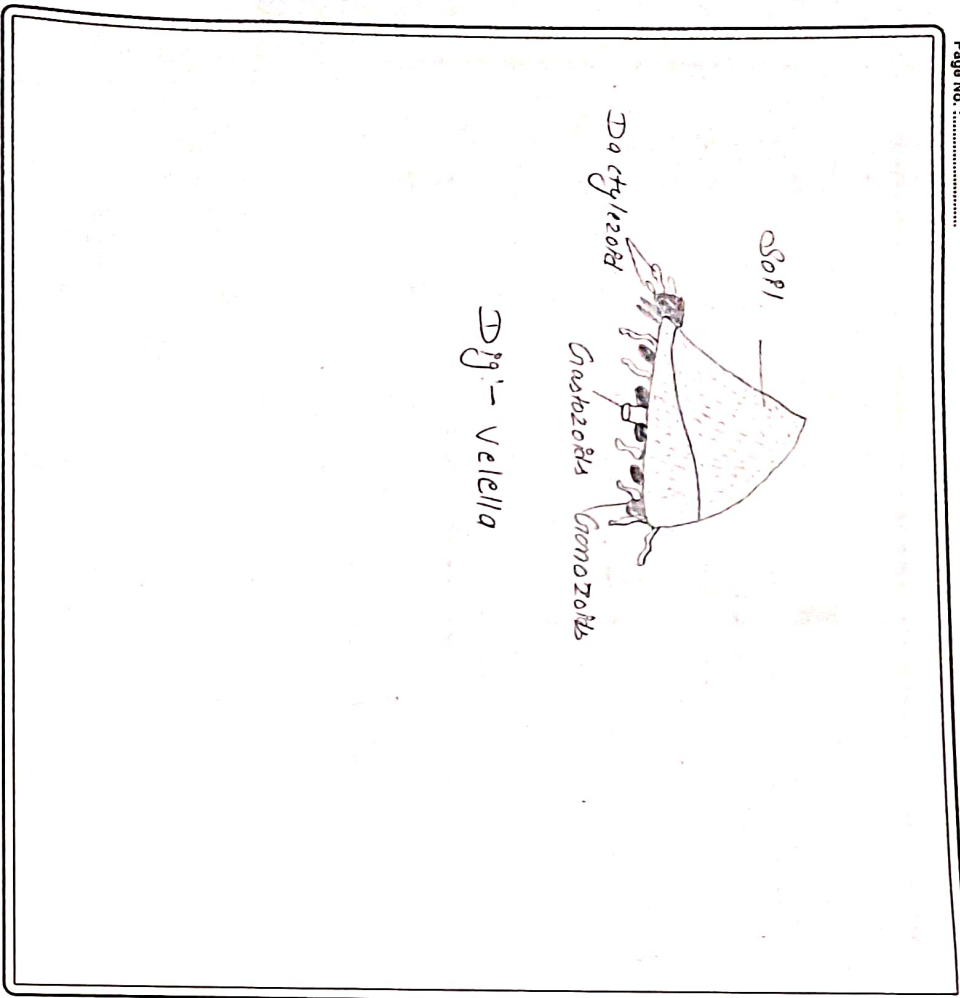


Fig. 1 - Spongilla



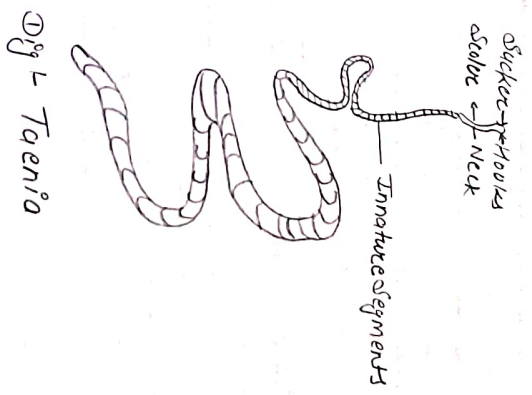
Characters

- ① Pneumatophores are present
- ② They resemble a standing boat with air chambers
- ③ In the central part of the upper surface of the Pneumatophore
- ④ At the margin, dactylozoanoids are present

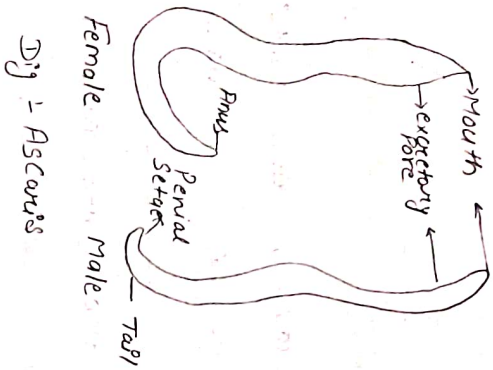


Characters

- ① Body consists of Scolex, Neck, and Proglottids
- ② Younger Proglottids are towards the neck followed by gravid and Mature Proglottids
- ③ Immense Reproductive Capacity
- ④ Scolex has four suckers and a Rostellum
- ⑤ Rostellum has Hooks







Dig - Ascaris

### Charactera

- ① Body is cylindrical, white, and light pink in color.
- ② Male's tail is coiled, while female's is hidden.
- ③ Mouth is surrounded by one dorsal and two ventral lips.
- ④ Sexual dimorphism is present. Males are smaller (16-30 cm) and females are larger (20-35 cm).
- ⑤ Body is covered by a cuticle.

### Characteres

- ① Body is elongated, segmented approximately 8 inches long
- ② Head is divided into Prostomium and Peristomium
- ③ Peristomium with four Pairs of tentacles or Cirri
- ④ Trochophore larva is Present
- ⑤ Parthogeny and Regeneration are Present

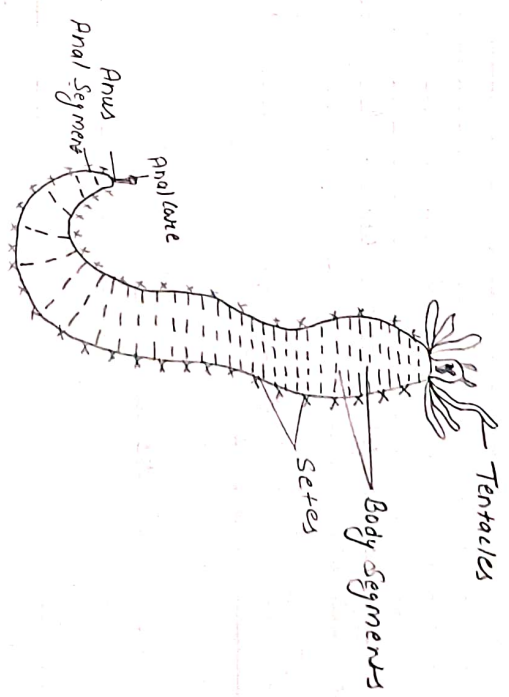
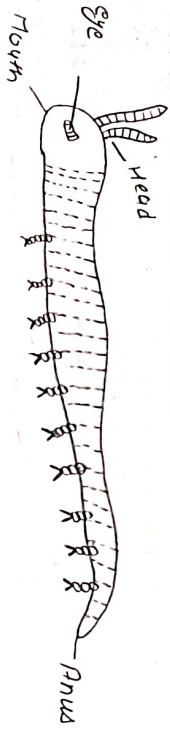


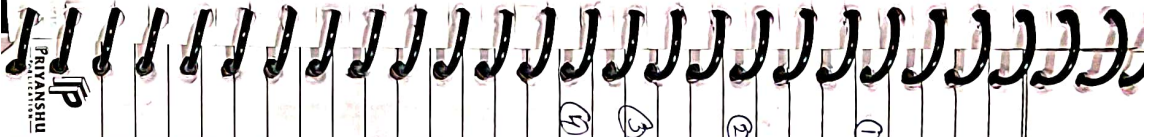
Fig:- NERIES



Dig - Peripatus

Characters

- ① This is a worm-like animal found in damp places like cracks in walls, under trees, bark and moist areas.
- ② It is considered a connecting link b/w the Arthropoda Phyla and Annelida.
- ③ It is like a living fossil.
- ④ They are hermaphrodites.





Characters

- (1) This is local earthworm that lives under stones in soil etc.
- (2) Nature Pt. As a nocturnal, carnivorous animal
- (3) Pt. As found worldwide
- (4) It has long, cylindrical body, As divided into segments, there are 7 segments.

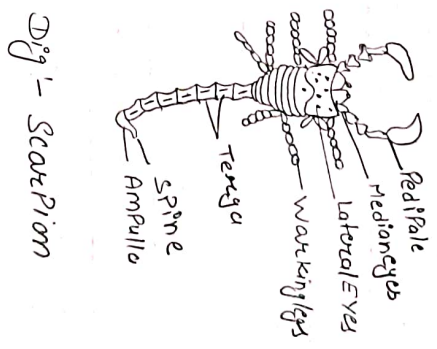


Fig - Scorpion