

Puspa Shrestha

Best Quality Resource Site for Class 11 And 12
Students (Based on Updated Curriculum 2077)



PDF Collections

Notes

Books

Model Questions

This PDF was downloaded
from **puspas.com.np**

Visit our website for more
materials.



puspas.com.np

Follow us on:



AR Dinesh



puspas.com.np



Puspa Shrestha

COMMENTS ON LEECH

1. Hirudinaria granulosa is commonly called cattle leech.
2. Body is dorsoventrally flattened and elongated.
3. Body segment number is definite i.e. 33.
4. Well developed anterior and posterior suckers present.
5. Five pairs of eyes are present on the first five segments.
6. Alimentary canal is straight tube.
7. Seventeen pairs of segmentally arranged nephridia are on 6-22 segment.
8. Hermaphrodite
9. Sexual reproduction is common.

TO STUDY THE MUSEUM SPECIMEN

Roll No. : 11
Date : 20/7/2027

Classification

Phylum — Annelida
Class — Hirudinea
Genus — Hirudinaria
Species — granulosa

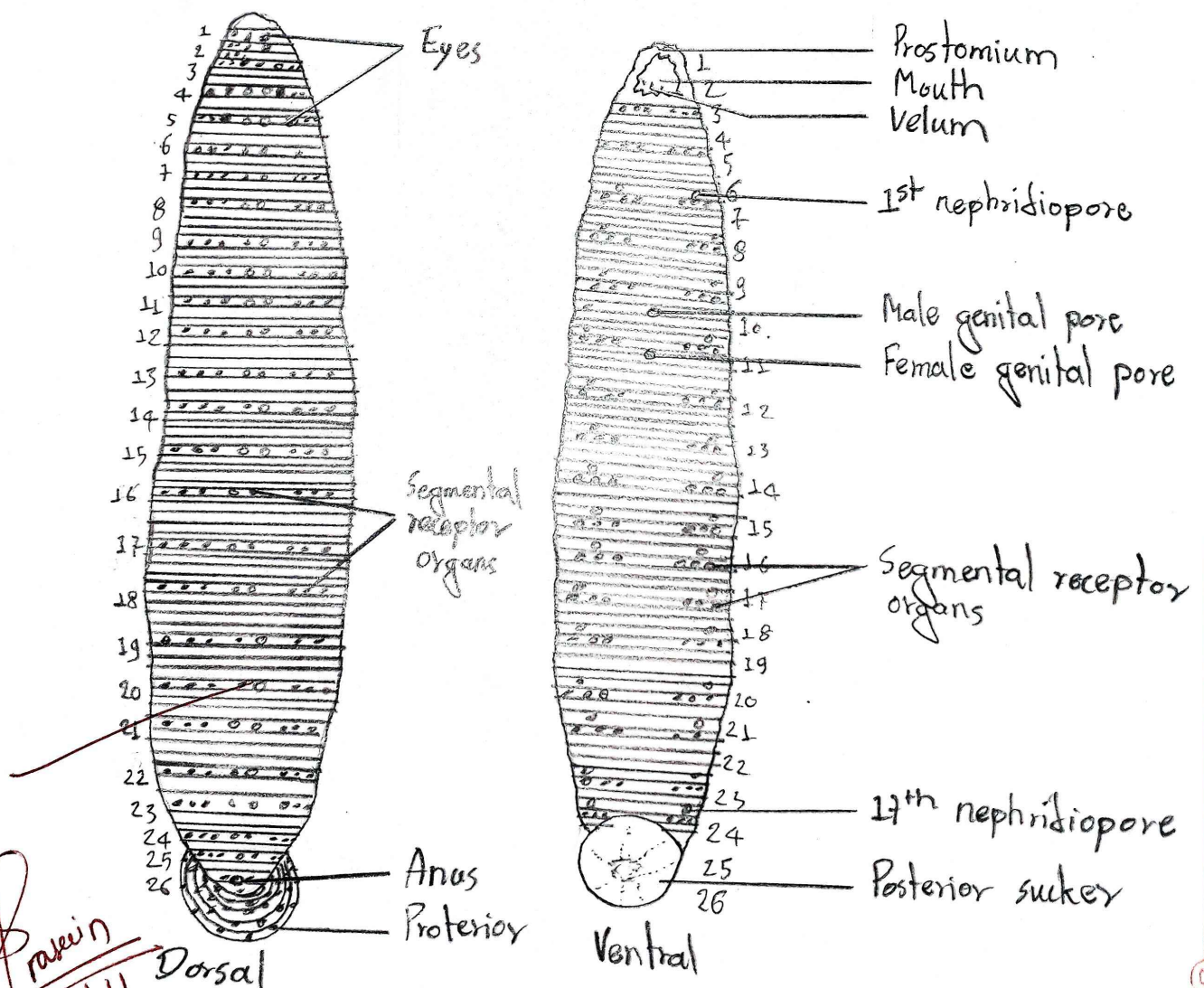


fig. Hirudinaria granulosa

Ravein
20/7/2027

COMMENTS ON PRAWN

1. *Macrobrachium rosenbergii* is commonly known as prawn.
2. Body is divisible into cephalothorax and abdomen.
3. Bilaterally symmetrical, elongated spindle shaped.
4. Cephalothorax large, unsegmented and covered with carapace.
5. Cephalothorax prolongs into a saw-toothed rostrum, anteriorly.
6. Presence of stalked compound eyes.
7. Abdomen comprises moveable six segments and a terminal pointed piece, telson.
8. There are 14 pairs of appendages, each segment of the body bears a pair of jointed appendages.
9. Cephalic appendages include a pair of maxillae, a pair of antennae, a pair of antennules, a pair of maxillulae and a pair of mandibles.
10. Thoracic appendages comprise ~~three~~^{five} pairs of walking legs and three pairs of maxillipedes.
11. Abdomen bears six pairs of biramous pleopods.
12. Species of *macrobrachium* are found in fresh water, ponds, rivers, lakes, reservoirs, stream but *macrobrachium rosenbergii* is found only in cultivated form in Nepal.

TO STUDY THE MUSEUM SPECIMEN

Roll No. : 11
Date : 2017/10/27

Classification

Phylum - Arthropoda
Subphylum - Mandibulata
Class - Crustacea
Genus - Macrobrachium
Species - rosenbergii

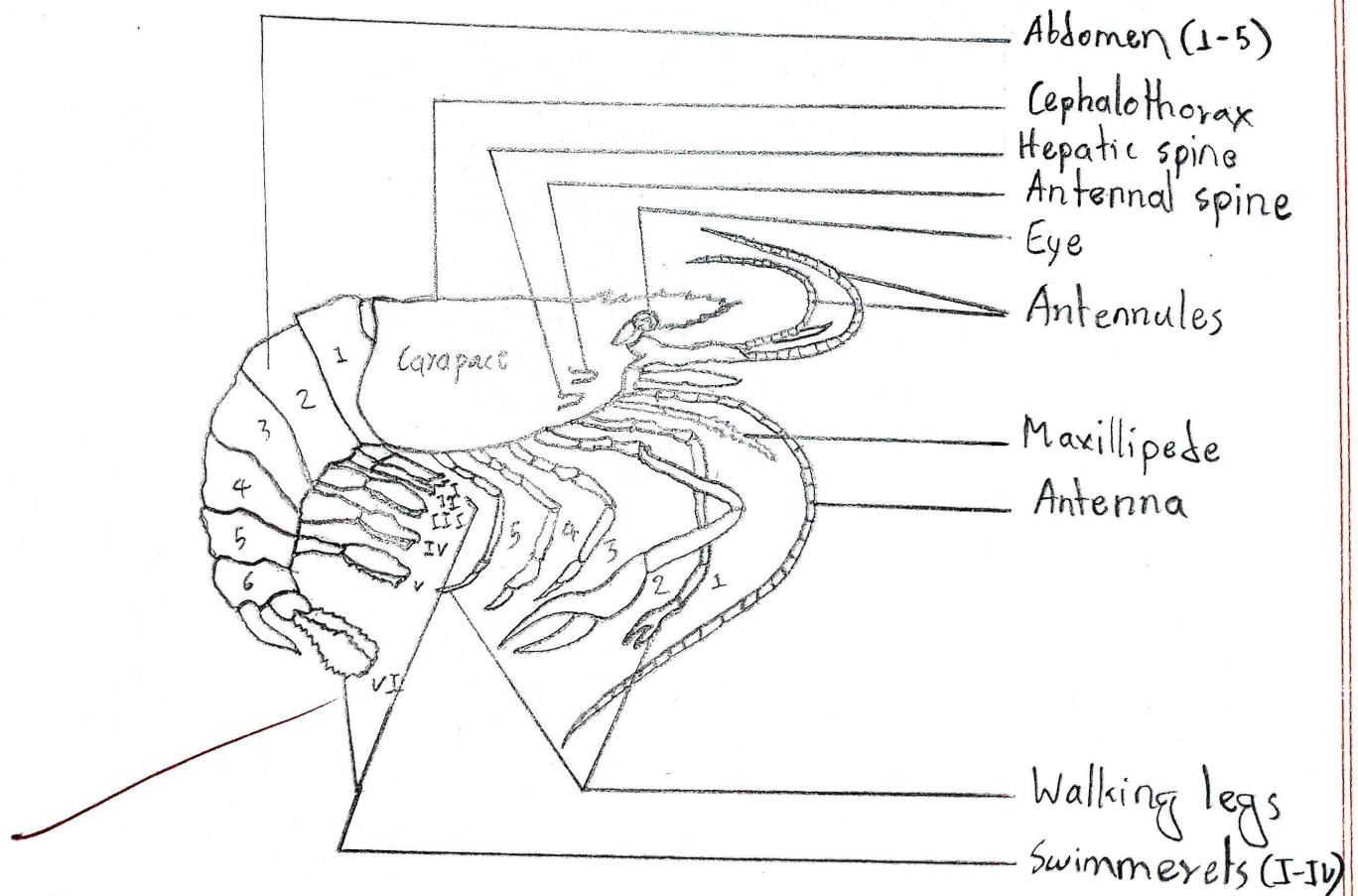


fig. Macrobrachium rosenbergii

Pravin
2017/11/11

COMMENTS ON MOTH

1. It is small sized slender body, measures 15 mm long. It is creamy-white or yellow in colour with hairy body.
2. The body is divided into three parts - head, thorax and abdomen.
3. It is small, bears a pair of compound eyes. The antennae are short and feathery.
4. Mouth parts consists of proboscis for sucking up the nectar of flower.
5. Thorax consists of three segments - prothorax, mesothorax and metathorax. Each thoracic segment bears a pair of legs.
6. Wings are two pairs, membranous and heavily covered with scales. Wings are marked by several faint or brown lines. At rest, these wings are held horizontally.
7. Abdomen is broad, segmented and hairy.
8. Respiration takes place by tracheal system (trachea, tracheoles and spiracles).
9. Circulatory system is open type consisting of perivisceral and pericardial sinuses. Blood vessels are absent.
10. Excretion takes place by malpighian tubules.
11. Sensory organs include antennae and compound eyes.
12. They are unisexual i.e. male and female sexes are separate. Fertilization is internal.
13. Metamorphosis is complete and the larva is called the caterpillar.

TO STUDY THE MUSEUM SPECIMEN

Roll No : 11
Date : 20/10/27

Classification

Kingdom	-	Animalia
Phylum	-	Arthropoda
Class	-	Insecta
Genus	-	<u>Bombyx</u>
Species	-	<u>mori</u>

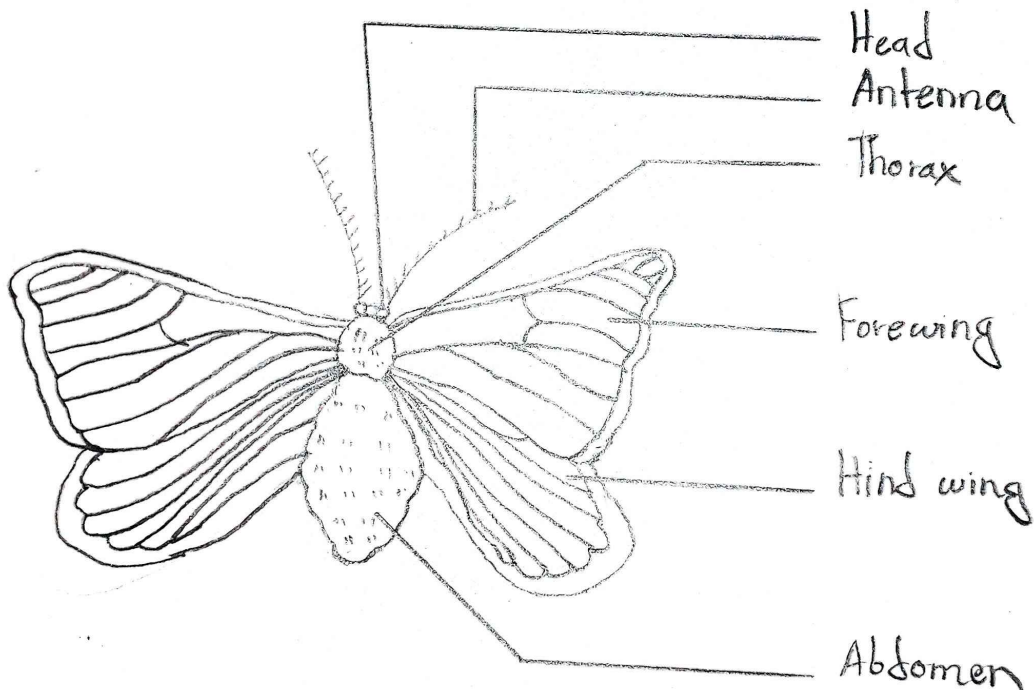


fig. Bombyx mori

Praveen
20/10/27

COMMENTS ON GARDEN SNAIL

1. *Lissachatina fulica* is commonly known as garden snail.
2. They prefer humid places.
3. Nocturnal, spend day time under the logs, stones, bricks, even on the vegetation.
4. They climb vertical walls, trees upto the height of about 19 feet.
5. They aestivate during summer to avoid desiccation.
6. The head is comparatively long, bears two pairs of contractable tentacles. Larger tentacles bears eyes at ends.
7. Operculum is absent.
8. Genital aperture is located at the right side posterior to the head.
9. Digestive system comprises alimentary canal and digestive glands.
10. Respiration by pulmonary sac.
11. Sexes are united, hermaphrodite.
12. Herbivore, the worst pest of vegetables, flowers etc and the world's worst invader.
13. It is an alien invasive species to Nepal. It is native to east Africa.

TO STUDY MUSEUM SPECIMEN

Roll No. : 11

Date : 20/7/20/21

Classification

Kingdom - Animalia
Phylum - Mollusca
Class - Gastropoda
Genus - Lissachatina
Species - Fulica

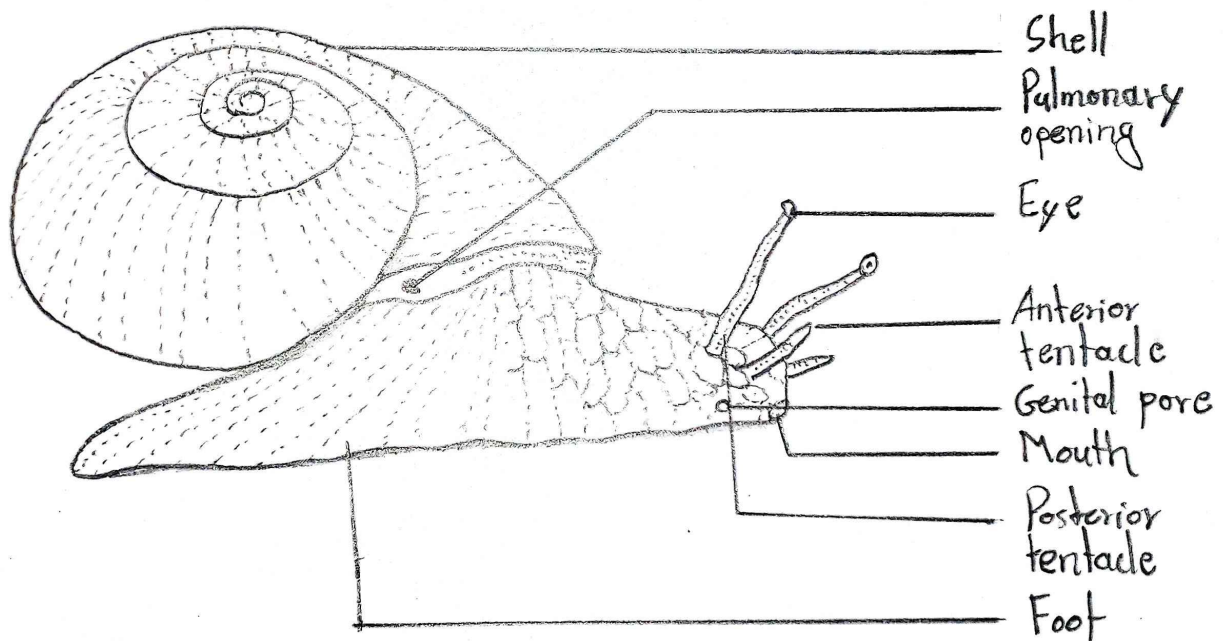


fig. Lissachatina Fulica

Praveen
20/7/20/21

COMMENTS ON STARFISH

1. *Asterias* sp. is commonly known as starfish or sea star.
2. Body is radially symmetrical with a central disc, five radiating arms. Arms are broad at their proximal ends and tapered at distal ends.
3. Oral and aboral surfaces are distinct.
4. Madreporite is situated on the aboral surface in between the bases of two arms.
5. Ambulacral grooves are bordered laterally by two or three rows of movable calcareous spines or ambulacral spines.
6. Each ambulacral groove is provided with two rows of tube-feet which serve as locomotary organs.
7. Pedicellariae are microscopic structures present all over the ~~world~~ body.
8. Water vascular system is well developed.
9. Sexes are separate. Fertilization is external.
10. Development includes free swimming bipinnaria larva.

TO STUDY THE MUSEUM SPECIMEN

Roll No. 11

Date: 2077-10-27

Classification

Kingdom - Animalia
Phylum - Echinodermata
Class - Asteroidea
Genus - Astarias

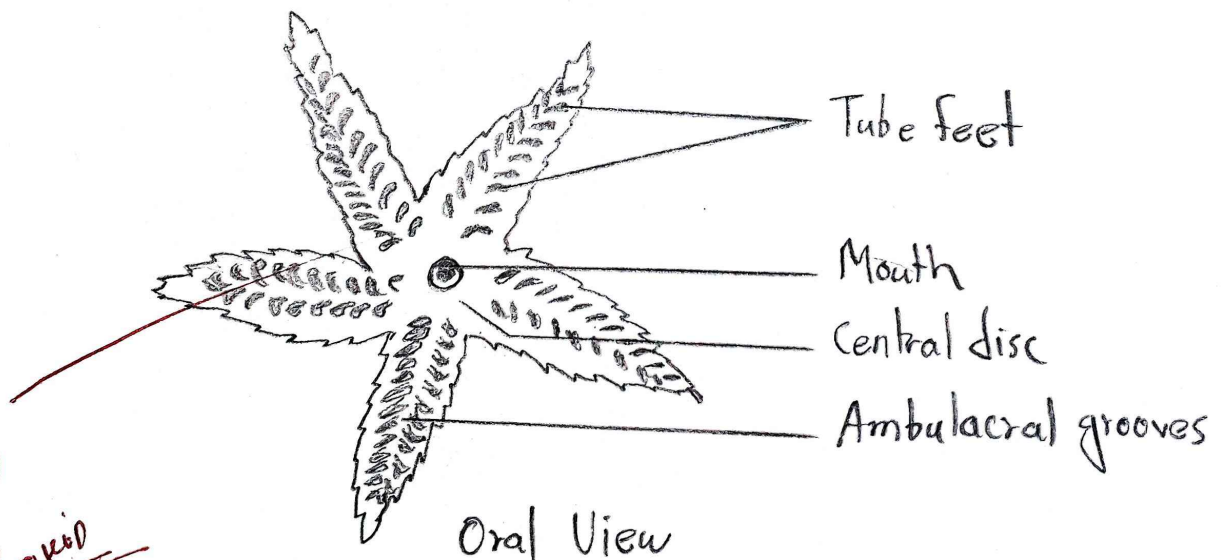
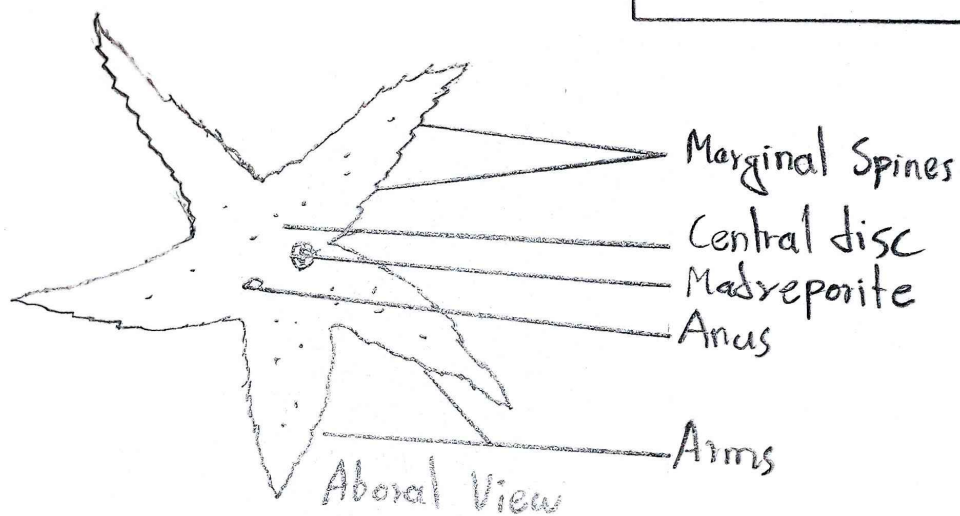


fig. Astarias

Aravind
29/11/11

COMMENTS ON HONEY BEE

1. *Apis* spp. are called honey bees as they collect nectar from flowers and produce honey.
2. They are social colonial and polymorphic insects that live in hive in the areas where flowering plants are abundant.
3. Each colony contains three types of bees - the queen bee (Fertile female), the worker bee (Infertile female) and the drone (Fertile male). Their body parts are modified as per their food habits and social life.
4. They are oval in shape with golden-yellow colour and dark brown bands. They are about 10-15 mm in length (worker bee).
5. Body of honey bee can be distinguished into three parts - head, thorax and abdomen.
6. Head bears a pair of antennae, a pair of compound eyes and three ocelli (simple eyes) which perceive a degree of light.
7. Thorax consists of three segments: prothorax, mesothorax and metathorax.
8. Each thoracic segment bears a pair of legs (total 3 pairs of legs). The hind legs of worker bees have pollen baskets on them.
9. Each meso and metathorax, bears a pair of wings (total 2 pairs of wings). Fore wings are stronger than hind wings. Legs and wings are locomotory organs.

TO STUDY THE MUSEUM SPECIMEN

Roll No.: 12

Date: 20/7/11/18

Phylum	- Arthropoda
Class	- Insecta
Family	- Apidae
Genus	- <u>Apis</u>
Species	- <u>melifera</u>

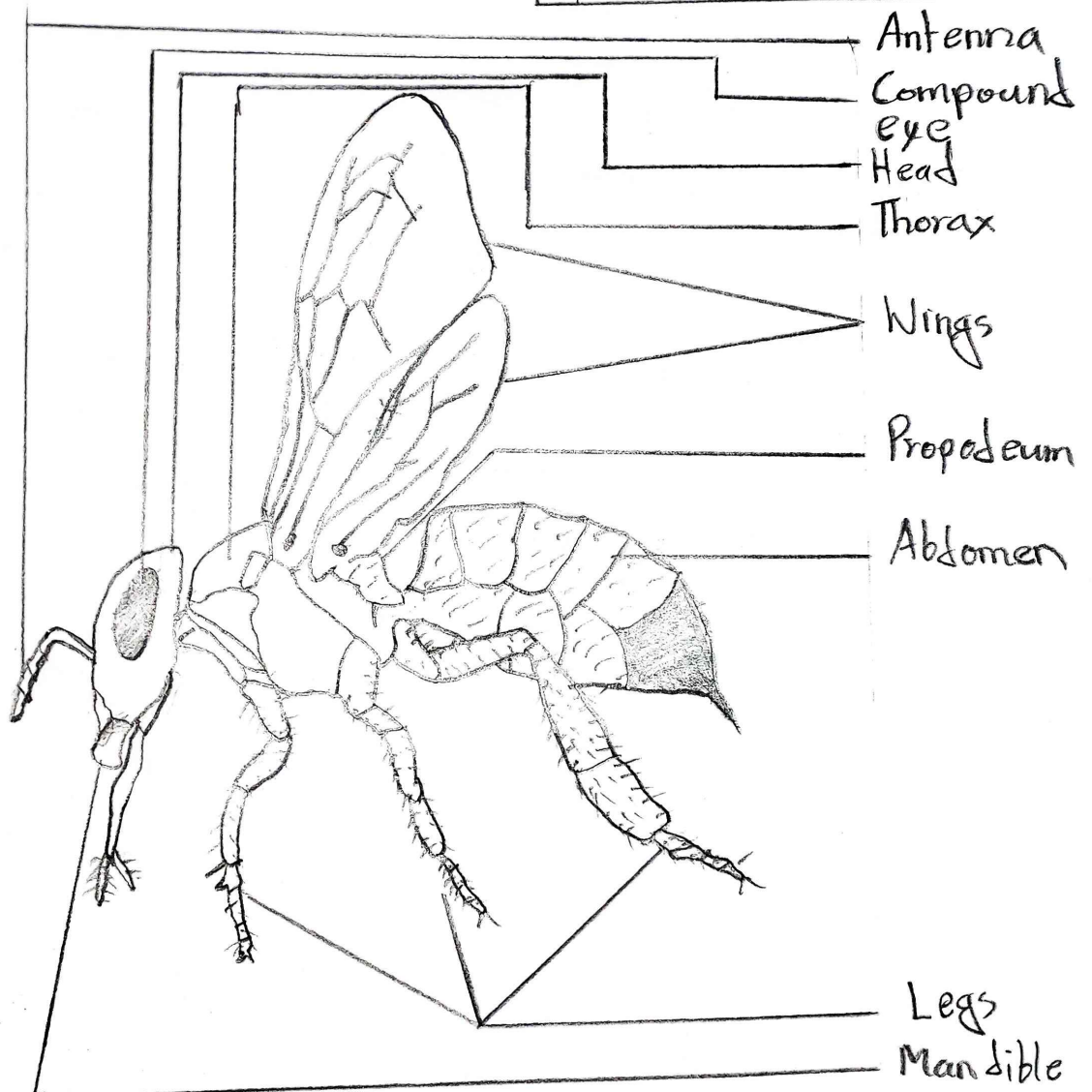


fig. Apis melifera

Signature
20/7/11/18