

Phylum Mollusca :

Mollusca are invertebrates animals have muscular foot , visceral mass and mental .

1 - ALL These animals (snails , oysters , octopus) are all **mollusks** , 76000 species

2 - Mollusca is a second largest animal phylum after **Arthropoda** , Most **mollusks** are marine some inhabit fresh water .

3 – Mollusks are soft bodies animals but most are protected by hard shell made of calcium carbonate secreted by soft mantle , but **octopus** have no shell .

5 - Most of them have internal organs , muscles and soft mantle .

6 - They are **Triploblastic** and **bilateral symmetric** structure .

7 - Found in deep seas some of the **terrestrial** , **Sluggish** movement .

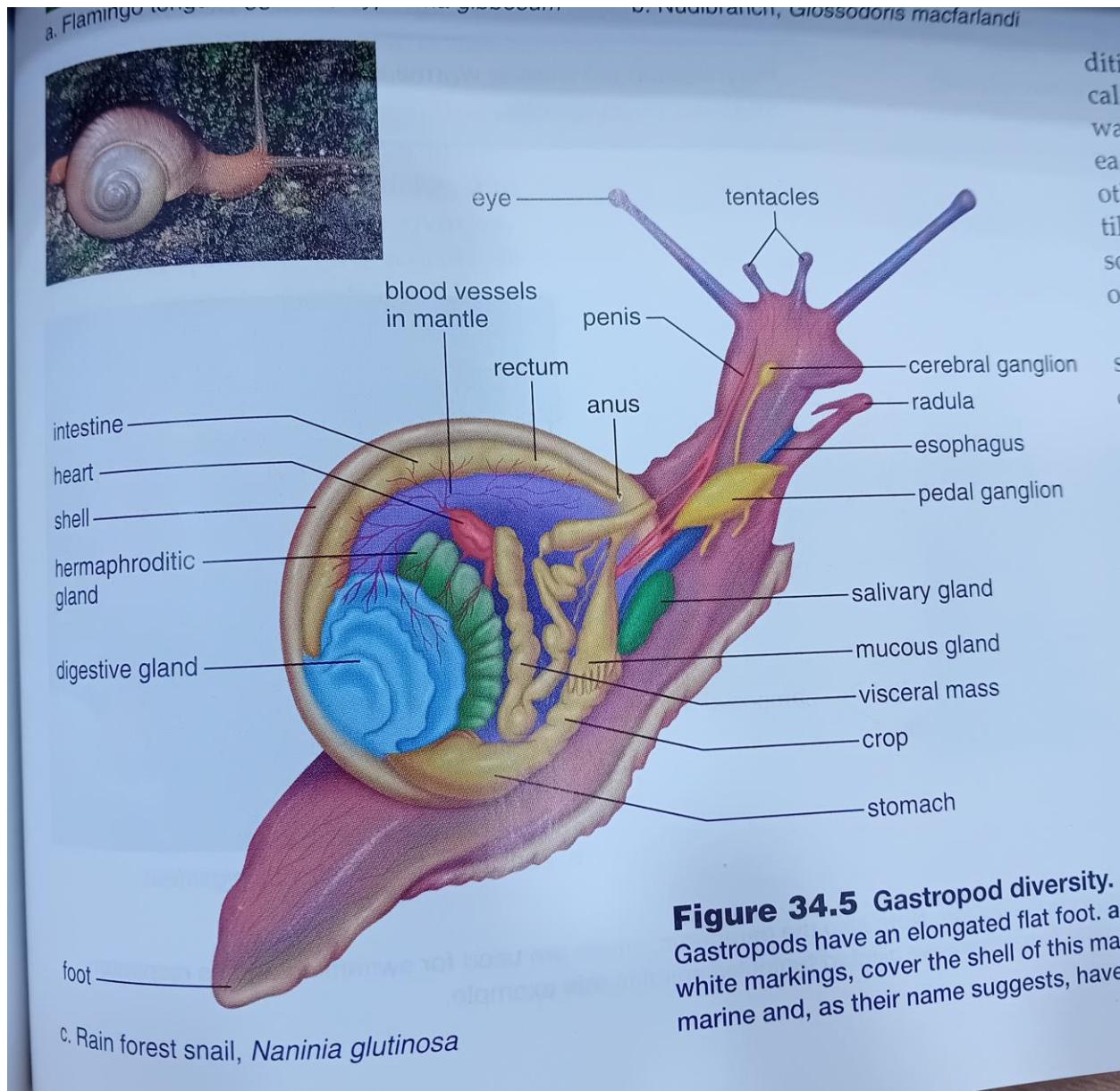
Snails :

- 1 - Some land snails (terrestrial) and some sea snails .**
- 2 - Enclosed by shell in which retract completely for Protection .**
- 3 – Snails are gastropod (no legs), slow movement , with help of muscular foot and mucous .**
- 4 - Snails have moist body live in humid land .**
- 5 - Snails covered by exoskeleton shell (Spiral shell)**



Protective shell

- 6 – Land snail have lung because breath air ,**
- 7 - Found under stones or climbing stem or leafs of plants in the garden .**
- 8 - Size of snail from 1 mm till 12 inches (30 cm).**



9 - Snails move slowly with a help of mucous to reduce friction ,

10 – Snails have eyes and organ of sense of smell of food. .

11 - Snails are most active at night .

12 - Most snails are hermaphrodite (both sexes organs in one snail) or separated (snail male or female) .

13 - Reproduction or egg fertilization can occur in one single snail or mating with another (between two snails)

14 - Snail can live 10 – 15 years .

15 - Sometimes Snails carry parasites (Intermediat host) for human and animals .

Oysters :

1 – Different kinds live in salt water (Marine habitat) bivalve , Calcified shell . Irregular in shape .

2 - Pearl Oysters are pearl producer with in mantle (harvested for pearls) .

3 – Shell bearing Oysters : can secrete pearls and can form it in both salt water and fresh water .

4 - Pearls can be extracted from Both cultured and natural oysters .

5 - Oysters produce pearls by a minute invasive object with (nacre) , over a years the irritating objects covered with a layers of nacre to become pearl .

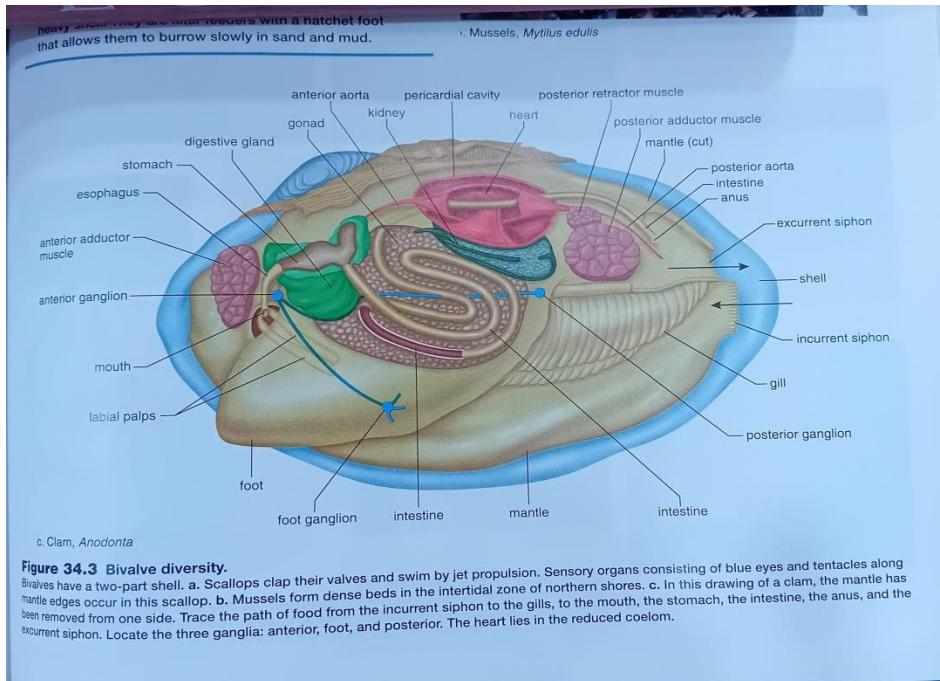


6 - Not all Oysters produce pearls but pearls isolated from oyster of fresh water oysters are not the same quality Of salt water oysters ,

7 - Oysters breath by gills , many small blood vessels and heart (three chambered heart Two atria and one ventricle).

8 - Oysters have two kidneys .

9 - Nervous System \ three pairs of ganglia with two nerve cords ,



10 - Some oysters have both sexes (contain sperms and eggs).

11 – Fertilized eggs discharged by female into water ,
larvae developed in six hours and exist in water until it
reaching sexual maturity with in a year ,

12 - Scallop \ type of oysters .



Octopus :

1 - Have 8 arms muscular , contractile equipped with two rows of suckers at ventral surface \ No shell \ soft body .

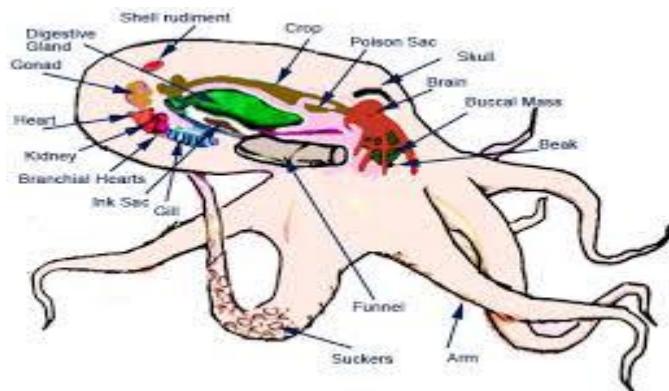
2 - The blood is blue or green in colour due to presence of pigment contain copper called haemocyanin .

3 - 300 species \

4 - life span 3 – 6 years .

5 – Rounded body , bulged two eyes

6 - Pacific Octopus (Giant) , length of arm reach 5 – 9 meters .



7 – Octopus takes water through its mouth into its mental and expels the water after respiration through short funnel or siphon .

8 - Octopus move by crawling along the bottom of the sea using arms and suckers .

9 – Octopus is the most clever animal in invertebrates .

10 - Octopus reproduce sexually . Female keep fertilized eggs until moderate temperature , lay about 200000 eggs in one time .

