

المحاضرة الثامنة | شعبة الرخويات ( لحمية القدم )  
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## **Phylum Mollusca :**

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

**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 .**

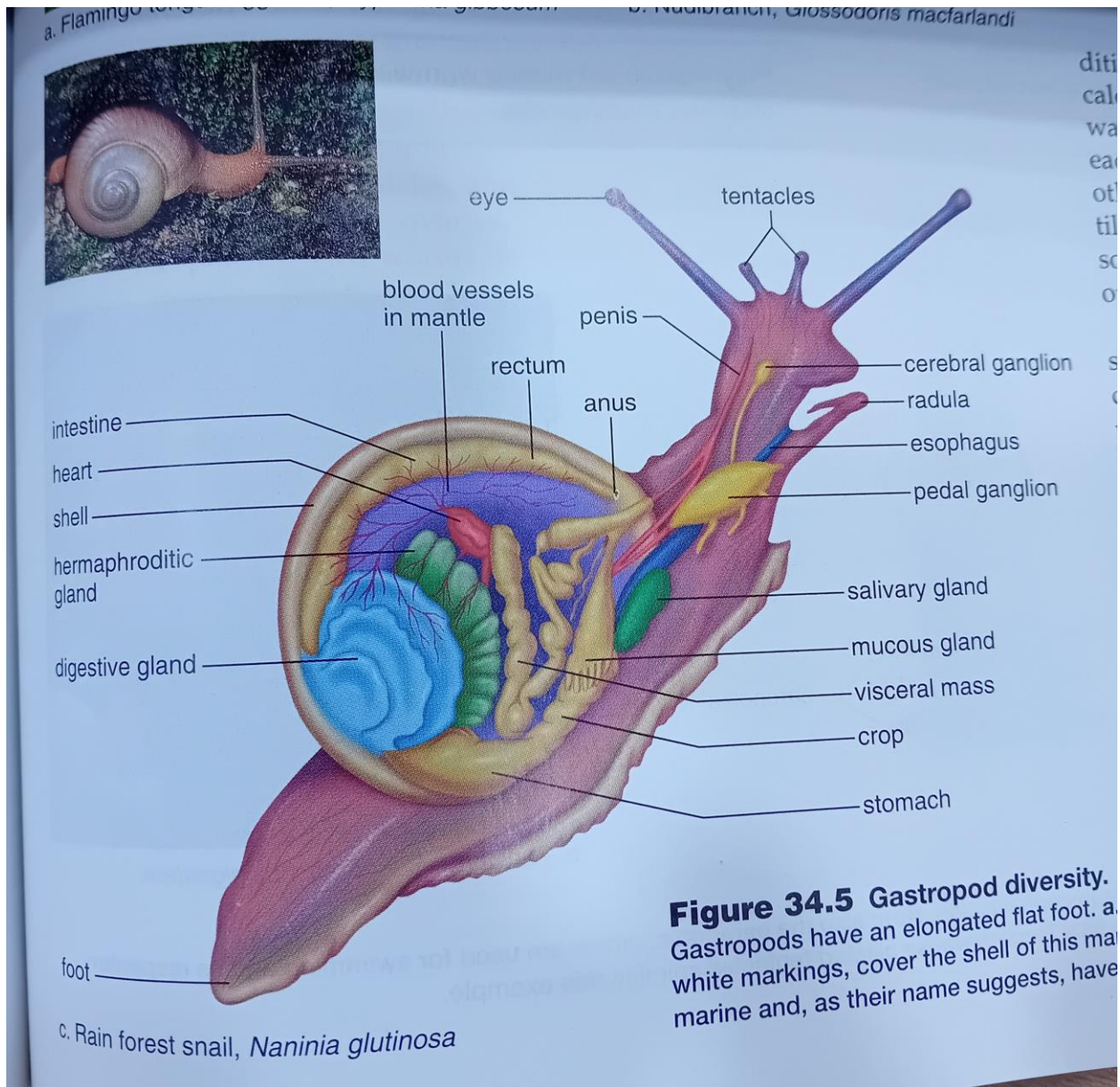
## **Snails :**

- 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 .**

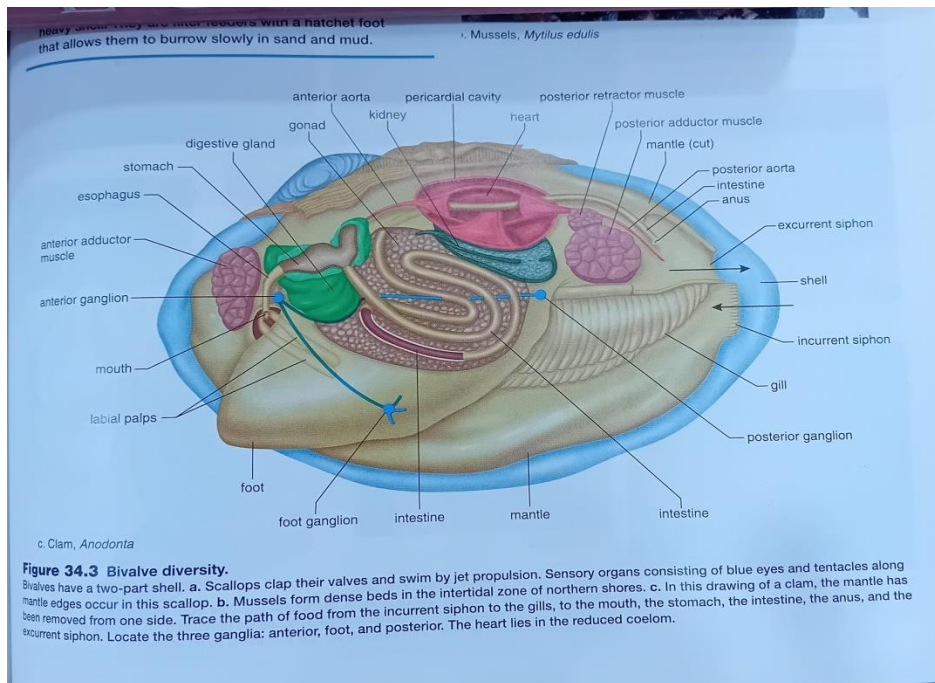


**6 - Not all Oysters produce pearls but pearls isolated from oyster of fresh water oysters are not the same quality Of salt water oysters ,**

**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 .**

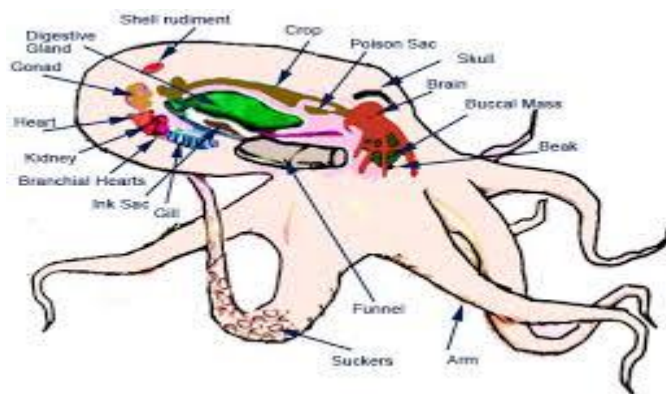
2 - The blood is blue or green in colour due to presence of pigment contain copper called haemocyanin .

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 mantle 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 .**

