

DIGESTIVE SYSTEM OF HERDmania

Q: Describe the alimentary canal of Herdmania and mention feeding mechanism and mode of digestion.

Ans: Digestion is a hydrolysis process in which elements of water molecule is used for cleave. The enzyme participate in process of digestion is called hydrolases and organs is known as digestive organs.

Herdmania possesses well developed digestive system which divided into alimentary canal and digestive gland.

The alimentary canal is U-shaped. It is distinguish into fore, mid and hindgut.

(i) Foregut: It consists of branchial aperture, Stomodaeum pharynx and oesophagus. Branchial aperture lies on projection called branchial siphon. It is four-sided ~~open~~ opening and is also called mouth. The four lobes of test around the mouth form lips. Lips are provided with annular muscle.

(ii) Stomodaeum:- The branchial aperture leads into a narrow cavity called Stomodaeum or buccal cavity. It lies within the branchial siphon. It is lined internally by epidermis and inpushing of outer test. The base of Stomodaeum is surrounded by a ring of branchial tentacles called Stomodaeal tentacle. The tentacles are placed at right angles to the wall of the siphon and meet in the centre to form a sieve preventing the entry of large particles.

Pharynx :- The Stomodaeum leads into the Pharynx. It is spacious sac like apert structure. It is distinguished into two regions. Anterior non-ciliated prebranchial region and a posterior branchial sac. The two regions are separated by two circular ciliated regions called Peripharyngeal bands situated on the inner surface. These two peripharyngeal bands enclose a groove called peripharyngeal groove.

The branchial sac is the largest part of the alimentary canal. It is perforated by a numerous

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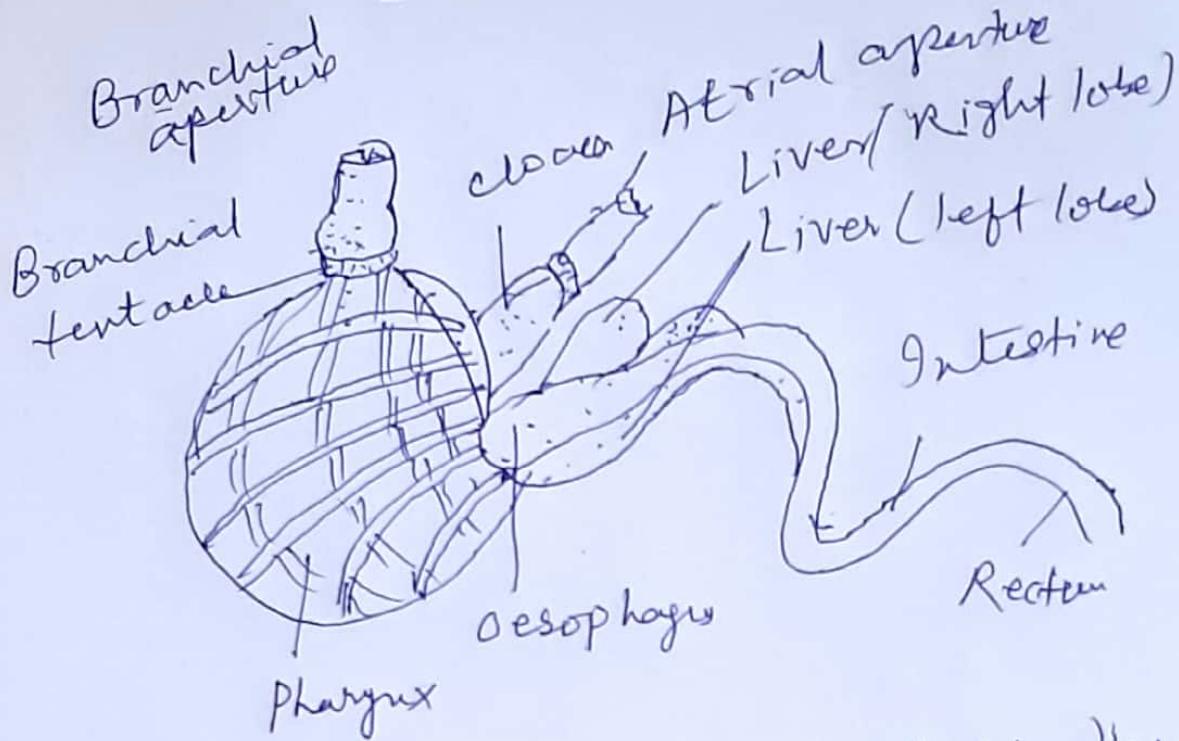


Fig. - Alimentary Canal of Herdmania

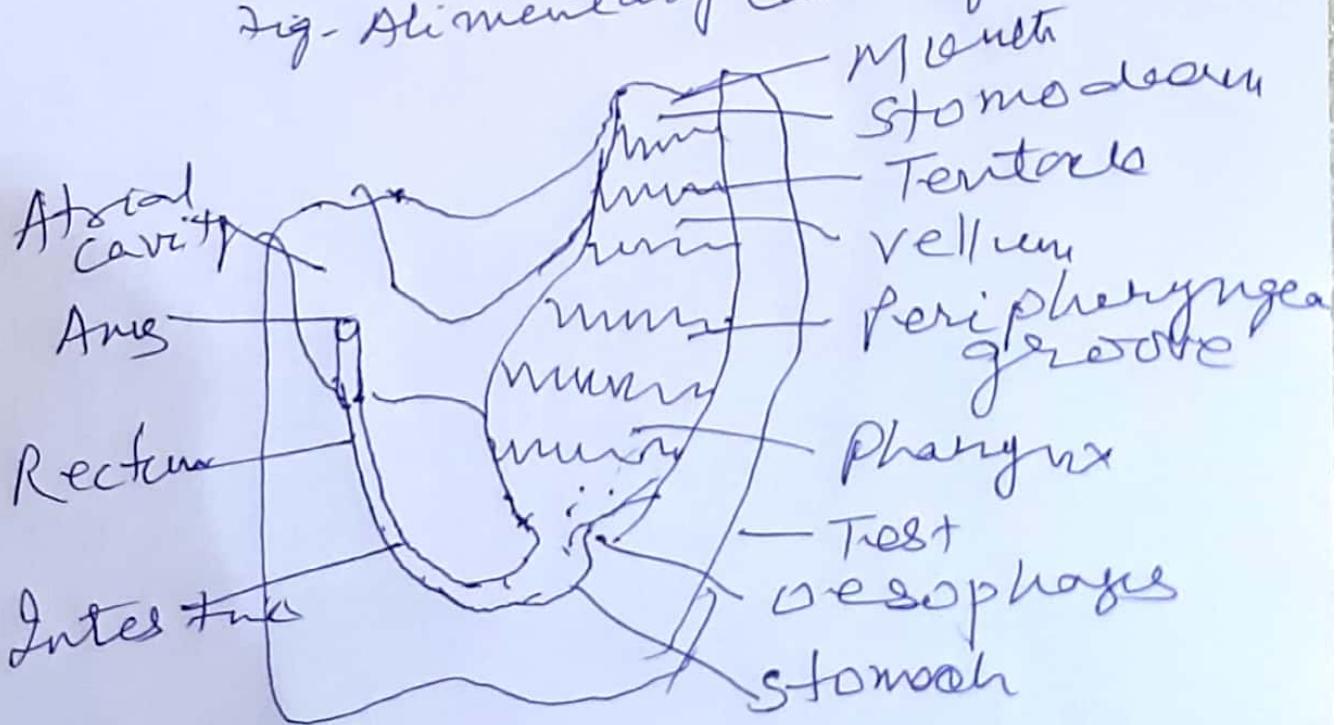


Fig. - Alimentary Canal of Herdmania.