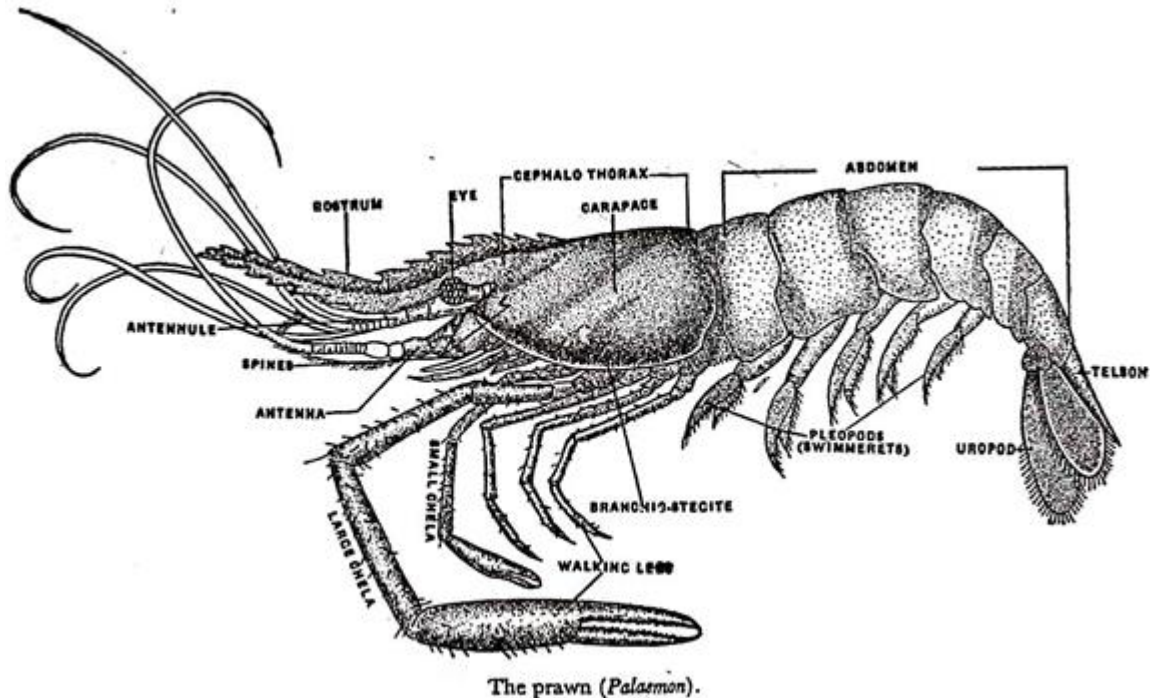
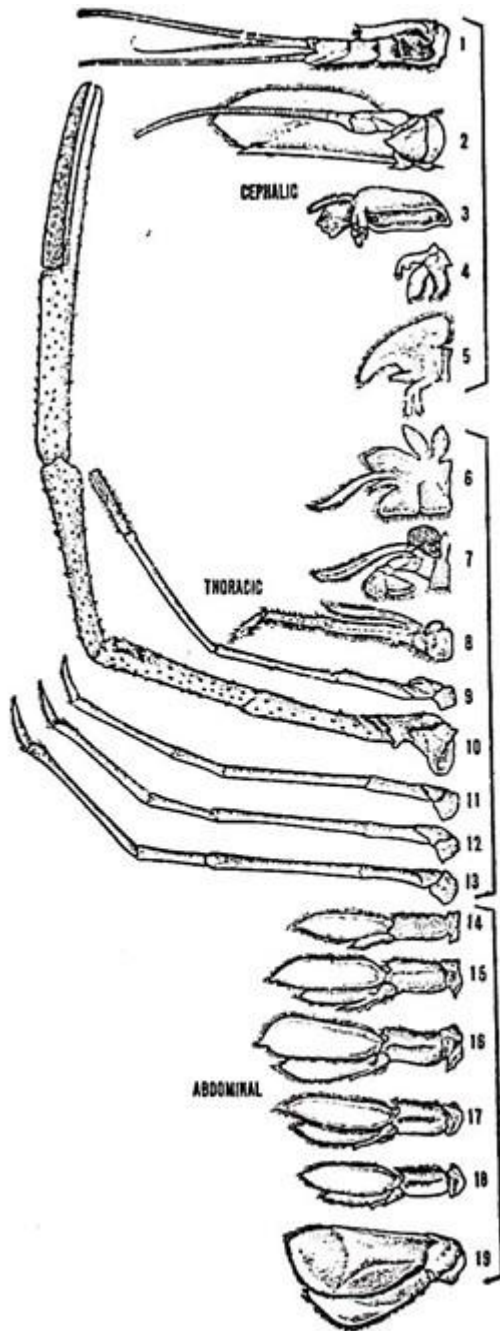


B.Sc First year Zoology (Honours) paper-1
Appendages of the prawn



Typically there is one pair of appendages in each segment of the body. The prawn carries, in all, nineteen pairs of appendages of which the first five are cephalic, the following eight are thoracic, and the remaining six are abdominal. Each of the first two segments bears a pair of prehensile antennae or feelers. The first antenna or antennule lies behind the eye. The second antenna or antenna is just posterior to the antennule.



Appendages of the prawn (taken out from the right side and arranged serially).

The antennules and antennae are pre-oral in position, that is, they lie in front the mouth. Following the antennae, there is a toothed appendage called mandible on each side of the mouth; these are used for cutting and crushing food.

Behind the mandibles, there are two pairs of leaf-like jaws, the first maxilla or maxillula followed by the second maxilla or maxilla. Next

to the jaws, there are three pairs of maxillipedes and five pairs of walking legs. The first and second maxillipedes are flat and foliaceous, while the third maxillipedes and the walking legs are elongated and pediform.

The jaws and the maxillipedes are employed for pushing food into the mouth, whereas the walking legs are used for crawling on the river bed. Of the five pairs of walking legs the first two pairs bear pincers at their free ends and are, therefore, called chelate legs; these along with the rostrum and the spines are regarded as organs of offence and defence.

The six pairs of abdominal appendages are known as pleopods or swimmerets; they help the prawn in swimming.

Appendages of Prawn:

The appendages of the prawn differ widely for performing different functions. The modification takes place either by variation of shape or by suppression of one or more parts. But all the appendages are built on the same general plan. An appendage is said to be biramous because it bears two branches or rami.

A typical biramous appendage consists of:

(1) A two jointed stalk of protopodite, the two segments of which are the coxa and the basis; the coxa lies proximal to the basis;

(2) Attached to the basis, there are two branches or rami, an outer exopodite and an inner endopodite. The proximal end of the coxa is lodged into a depression on the ventral surface of the animal, thus forming a ball and socket joint.

There are, as already indicated, nineteen pairs of appendages. According to their position on the body, the appendages are divided into cephalic, thoracic and abdominal. Of the thirteen pairs in the cephalothoracic region, the first five are cephalic and the following

eight are thoracic. The remaining six pairs on the abdomen are abdominal. Appendages of one side are described below.