**3ed class Fish Biology L1**

**Locomotion of fishes**

Locomotion of fishes means movement of fishes for their survival It provides a number of interesting information to the Ichthyologists

The knowledge of the different methods of locomotion is yet not fully understood because fishes in aquaria or somewhere else other than their natural inhabitation tend to behave in a manner somewhat different from the normal.

There are three primary methods employed by fishes to produce forward movement in aquatic environment:

- Body movement due to alternate expansion and contraction of the myomeres (myosomes).

- Movement of the appendages (Fins).

- Movements caused by the action of jets of water expelled from the gill openings during the process of respiration.

Types of Locomotion in Fishes

Locomotion in fishes has been classified into three types:

- Anguilliform or eel like.

- Ostraciform or trunk fish like.

- Carangiform or jack like.

1- **Anguilliform**

Anguilliform type of locomotion is serpentine or purely undulatory in nature and is found in eels It is brought about by sequential, alternate contraction of the myotomes on each side of the body this most of the body participates.



2- Ostraciform

It is a wig wag motion, seen especially in the sculling action of the tail and found in trunkfishes It is induced by simple alternate contraction of all the muscle segments on one side of the body and then on the other. The alternating contractions cause the tail to switch back and forth like a paddle behind the relatively rigid trunk of the fish The body moves in a series of short cross arcs in the water as the fish progresses forward We can say simply that it is due to:

- Oscillation of caudal fin.

- Assisted with pectoral fins.



3- Carangiform

Carangiform is the most common type of locomotion In this type, the fish drives itself forward by side by side sweeps of the tail region It is actually an intermediate type between I st and II nd types (e g Herrings, Sardines In this :

* Posterior body flexes.
* Anterior ½ or 2 3 body inflexible.



