TOPIC: INTRODUCTION TO COELENTRATA-III

LECTURE NO:12
B.SC PART 1
ZOOLOGY(HONS.)-PAPER I-GROUP A
CHAPTER 5
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Order(e): Gorgonacea

Colony usually of plant like branching forms bearing short polyps.

It is commonly known as sea fans.

Separate or fused calcareous spicules or both. E.g. *Gorgonian* (Fig.10) and *Corallium* (Fig.11).

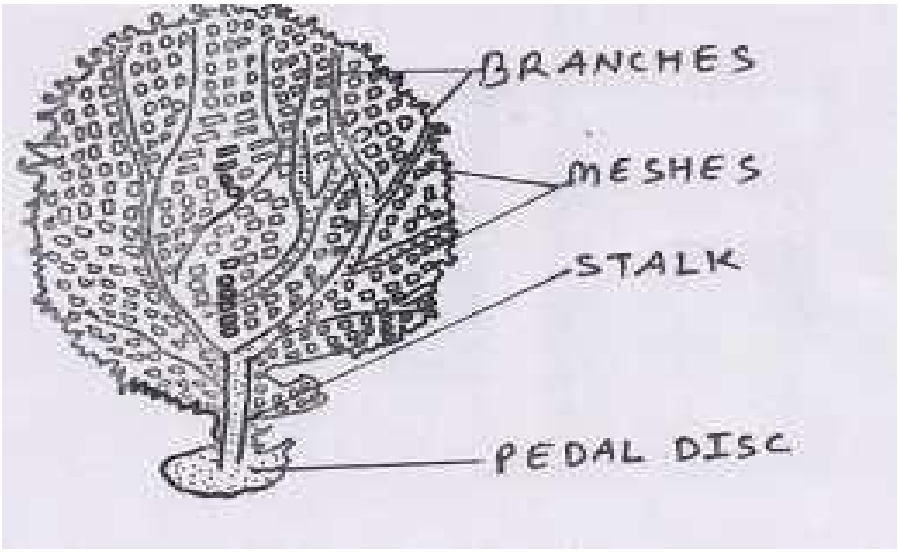

Fig.10 Gorgonia

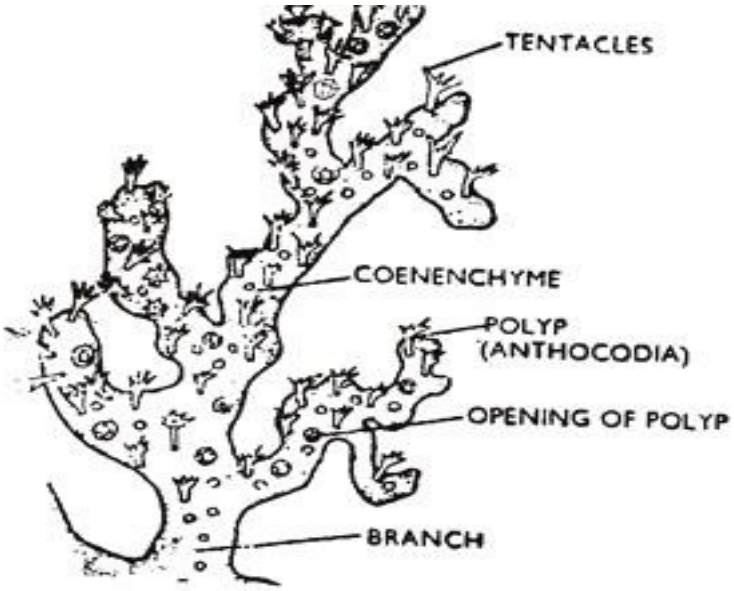

Fig.11 Corallium

Order(f): Pennatulacea

Colony elongated, sessile.

Lower part embedded in mud.

Upper parts consist of very long axial polyp with lateral branches bearing dimorphic polyps.

Axial skeleton of separate calcareous spicules or horny substance.

Eg. *Pennatula* (Fig.12) and *Renilla* (Sea pansy).

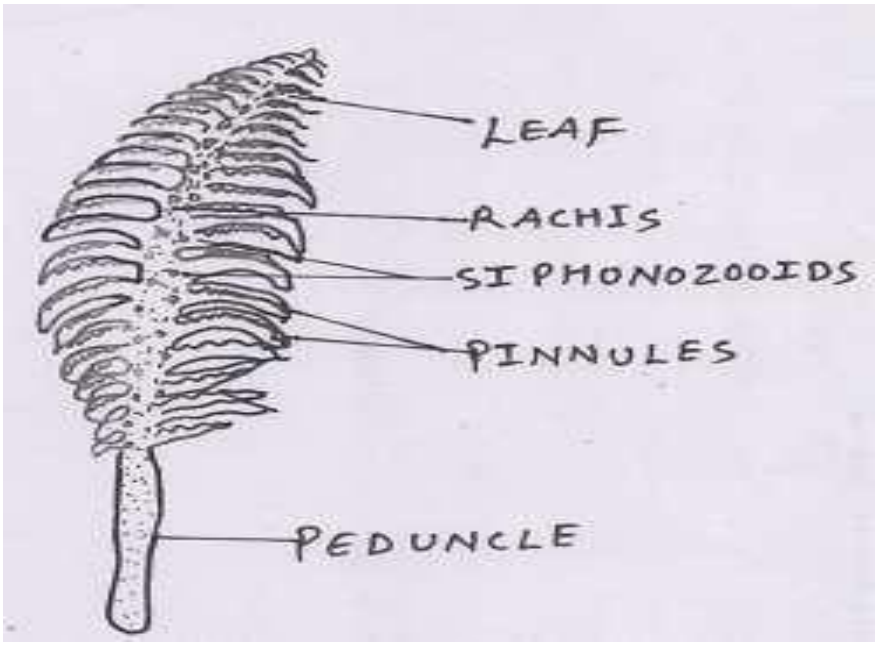

Fig.12 Pennatula

Subclass 2. Hexacorallia (Zoantharia)

They may be solitary or colonial.

The tentacles are usually unbranched, numerous arranged in the multiple of 5 to 6 but never 8.

Endoskeleton is calcareous type. Polyps are monomorphic.

They included five orders:

Order (a): Zoanthidea

They may be solitary or colonial.

No skeleton but body wall may contain calcareous bodies.

Polyps are small in size.

Mesenteries are paired.

E.g. *Zoanthus* and *Epizoanthus*

Order (b): Actiniaria

Colonial or solitary.

Skeleton absent.

Tentacles and mesenteries are numerous.

Large sized solitary anemones.

Body muscular, often with an aboral pedal disc. Ex. Sea-anemones (Fig.13), Metridium and Actinia.

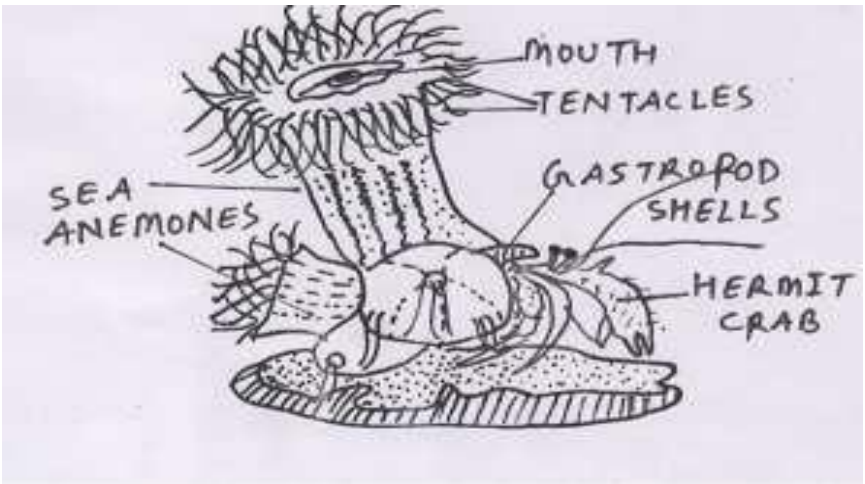

Fig.13 Sea-anemones

Order(c): Ceriantharia

Long, solitary, anemones like form living in sea bottom.

Body smooth and cylindrical.

Without pedal discs and skeleton.

Tentacles numerous, arranged in to whorls- oral and marginal. E.g. Cerianthus.

Order (d): Antipatharia

Antipatharia showed plant like colonial forms.

It is found in the deep sea

Tentacles and mesenteries comparatively few (6 to 24) in number.

Skeleton as branched, chitinoid axis.

Order (e): Madreporaria

Generally found in colonial forms.

Exoskeleton is hard, compact, often massive and calcareous.

Polyps are small living in cup like cavities on exoskeleton.

E.g. True or stony corals, Astraea (Fig.15) and Acropora or Madrepora (Stag Hor n coral, Fig.14).

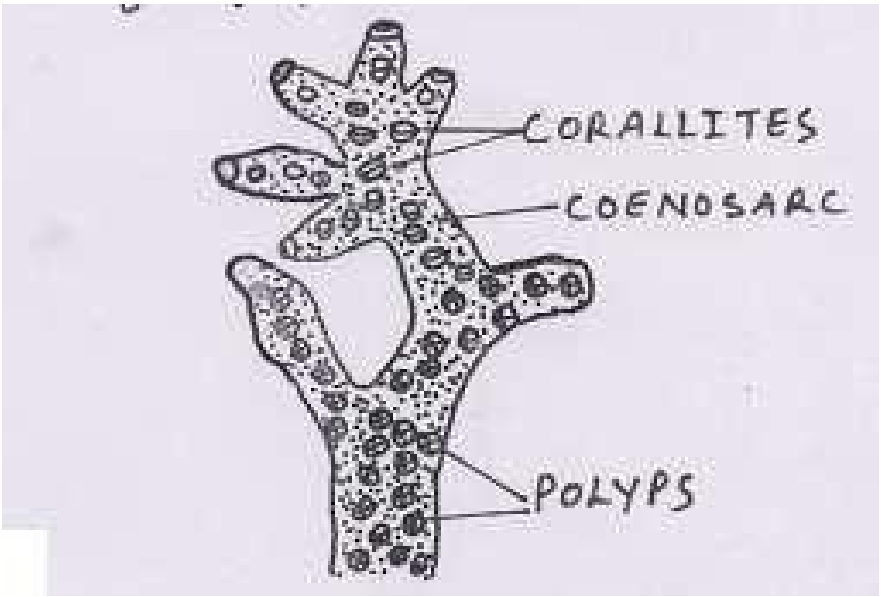

Fig.14 Madrepora

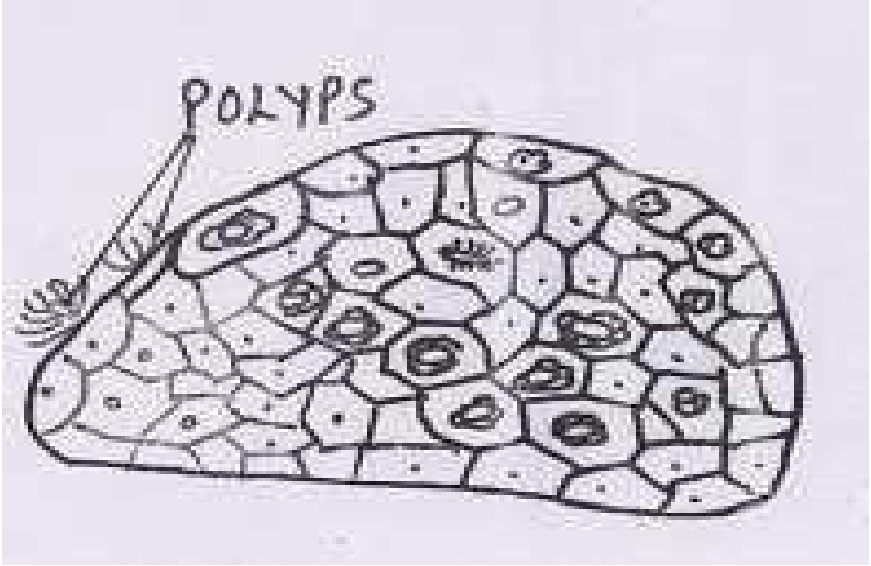

Fig.15 Astraea

Subclass 3. Tabulata

These include extinct colonial anthozoans with heavy calcareous skeletal tubules containing horizontal platforms or tubulae.

E.g. Favosites and Halysites.