

CHAPTER-4

ANIMAL KINGDOM

GLOSSARY :

 **Acoelomates :**

Animals lacking body cavity.

E.g. Platyhelminthes.

 **Asymmetry :**

Body, which can't be divided into equal halves by any plane of division.

E.g. Amoeba.

 **Appendages :**

Projecting parts of the bodies which are used for specific functions like feeling, locomotion and sensation.

E.g. tentacles in Hydra.

 **Bilateral symmetry :**

All important organ and limbs are paired and arranged on two sides of a central axis so that the body is divided into two halves by a plane.

✦ **Cephalization :**

Differentiation of head in the anterior region.

✦ **Coelom :**

Internal or body cavity, filled with a fluid and lined by peritoneum derived from mesoderm, either formed by splitting a mesoderm or as outgrowth of embryonic gut.

✦ **Coelomates :**

Animals possessing coelom.

✦ **Deuterostomes :**

True coelomates, with radial cleavage of egg and blastopore forming the anus.

✦ **Diploblastic :**

Animals, in which the cells are, arranged in two embryonic layers an external ectoderm and an internal endoderm.

✦ **Ectoderm :**

The outer, of the three germ layers of the embryo (the other two being mesoderm and endoderm), gives rise to epidermis and neural tissue.

 **Endoderm :**

One of the germ layers formed during animal embryogenesis.

 **Germinal Layers :**

Primary layers which differentiate at the time of gastrulation in a developing embryo.

 **Homeothermous animal :**

A multicellular organism of the kingdom Animalia, differing from plants in certain typical characteristics such as capacity for locomotion, nonphotosynthetic metabolism, pronounced response to stimuli, restricted growth and fixed bodily structure.

 **Metameric segmentation :**

Body structure, having repeated segments.

 **Metamorphosis :**

Change, in the form and often habits of an animal during normal development after the embryonic stage.

 **Mesoderm :**

Middle of the three germ layers, gives rise to the musculoskeletal, blood, vascular and urinogenital systems, to connective tissue (including that of dermis) and contributes to some glands.

✦ **Notochord :**

Mesodermally derived, rod like structure on the dorsal side during embryonic development in some animals.

✦ **Ovoviviparous :**

Producing eggs, which hatch within the female's body without obtaining nourishment from it.

✦ **Poikilothermic :**

An organism, such as a fish or reptile, having a body temperature that varies with the temperature of its surroundings; an ectotherm.

✦ **Protostomes :**

True coelomates, which have spiral cleavage of egg with blastopore forming mouth.

✦ **Pseudocoelomates :**

In some animals, the body cavity is not lined by scattered pouches in between the ectoderm and endoderm, such a body cavity is called 'Pseudocoelom' and the animals possessing them are called 'Pseudocoelomates'.

✦ **Radial symmetry :**

The body is cylindrical or discoid; with similar parts radiating on all sides so that is divisible into two halves by vertical plane passing through central axis.

E.g. many sponges.

✦ **Symmetry :**

Exact configuration, on opposite sides of a dividing line or plane or about a center or an axis.

✦ **Triploblastic :**

Animals, where the developing embryo has a third germinal layer mesoderm in between the ectoderm and endoderm.

✦ **Viviparous :**

Giving birth to living offspring that develop within the mother's body.