


CHAPTER – 4

ANIMAL KINGDOM

SYNOPSIS:


 **Basis of classification** are some fundamental features of organisms, namely

- (1) Level of organization
- (2) Symmetry
- (3) Cell organization
- (4) Coelom
- (5) Segmentation
- (6) Notochord

 Animal kingdom is classified into **eleven major phyla**.

 **Phylum – Porifera :**

Members are commonly called 'sponges'. It includes multicellular, asymmetric and marine animals having characteristic flagellated choanocytes.

 **Phylum – Coelenterata :**

Includes marine, radially symmetrical animals having tentacles and cnidoblasts.



Phylum – Ctenophora :

Includes exclusively marine, radially symmetrical, diploblastic animals having ciliated comb plates.



Phylum – Platyhelminthes :

The members are called 'flat worms'. They show bilateral symmetry.



Phylum – Aschelminthes :

Their body is circular in cross-section. They are pseudocoelomates.



Phylum – Annelida :

The members are metamerically segmented with true coelom.



Phylum – Arthropoda :

Includes insects which cover two-third of all species on earth.



Phylum – Mollusca :

They have a soft body surrounded by external calcareous shell.



Phylum – Echinodermata :

They possess spiny skin and the water vascular system.



Phylum – Hemichordata :

Includes a small group of worm like marine animals, having cylindrical body with proboscis, collar and trunk.



Phylum – Chordata :

Includes animals possessing a notochord either throughout or during early embryonic life. The central nervous system is dorsal, hollow and single. Other features are pharynx perforated by gill slits, ventral heart and presence of post-natal part (tail).



Chordata is divided into three subphyla :

- (1) Urochordata
- (2) Cephalochordata
- (3) Vertebrata



Subphylum vertebrata is divided into seven classes :

- (1) Cyclostomata
- (2) Chondrichthyes
- (3) Osteichthyes
- (4) Amphibia
- (5) Reptilia
- (6) Aves
- (7) Mammalia