

①

Bisc. (H)
zoology
part - 5
part - 1st
soil layer

Protozoa (Salient features)

(Greek word. protos - first, zoon - animal.)

- Protozoans were first studied by Leeuwenhoek (1677). The name "Protozoa" was coined by Grodfuss (1817). The branch of biology, which deals with protozoa is called protozoology.
- It contains about 36,000 species.
- These are microscopic, unicellular animals existing singly or in colonies without tissue or organs having one or more nuclei.
- It shows protoplasmic grade of organization.
- It may be aquatic (fresh water or marine), terrestrial (damp soil), free living or parasitic. Parasite forms causes disease in humans & animals.
- Body naked or covered by pellicle but in some forms body is covered with shells and often provided with external skeleton.
- Body shape variable, it may be spherical, oval, elongated, or flattened, slipper.
- It shows radial or bilateral symmetry.
- Locomotion takes place by pseudopodia, flagella or cilia or none.
- Respiration by diffusion.
- Nutrition may be (holozoic) - animal like (holophytic), plant-like, saprophytic or parasitic.
- Excretion takes place by general body surface & some extent by CV (contractile vacuole) or cytophage.
- CV forms osmoregulation in fresh water forms & also helps in eliminate excretory products.
- Reproduction asexually by budding, binary fission or multiple fission & sexually by conjugation or by gamete formation.

- Life cycle often exhibits alternation of generation means, it includes Asexual & Sexual phases.
 - Encystment takes place to overcome unfavourable circumstances or for reproduction or for dispersal of the species.
 - The single celled Protozoa performs all the vital activities of life & therefore no physiological division of labour is exhibited System.
- — — — —