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Zoology Hons (B.Sc-I)

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PROTOZOA

Definition :- Protos - First + Zoon - Animal
Protozoa may be defined as microscopic and unicellular animalcules, without tissues and organs, having one or more nuclei, but no nucleus, ever in charge of a specialised part of cytoplasm.

General characters :-

- (1) Small, usually microscopic animalcules,
- (2) Simplest and most primitive of all animals - also with protoplasmic grade of organization.
- (3) Body unicellular, containing one or more nuclei which are monomorphic or dimorphic.
- (4) Body form usually constant, varied in some, while changing with environment or age in many.
- (5) Locomotor organelles are finger-like pseudopodia or whip-like flagella or hair like cilia or absent.
- (6) Nutrition holozoic (animal like), holophytic (plant-like), saprozoic or parasitic, with or without definite oral and anal apertures.

Digestion occurs intracellular inside food vacuoles.

- (7) Respiration through general surface of the body by diffusion.
- (8) Excretion through general surface or through contractile vacuules, which serve mainly for osmoregulation.
- (9) Reproduction asexual by binary or multiple fission and budding, and sexual by

Conjugation of the adults (hologamy)
or by fusion of gametes (syngamy).

(10) Life history often complicated with alternation of asexual and sexual phases.

(11) Encystment commonly occurs to help in dispersal as well as to resist unfavourable conditions of food, temperature and moisture.

(12) Free-living protozoa mostly aquatic, inhabiting fresh and sea waters and damp places.

parasitic and commensal protozoa live over or inside the bodies of animals and plants.

(13) protozoa is a phylum or group of animals in which approx. 30,000 to 40,000 species are found.

(14) The body of animals is made by protoplasm, i.e. protoplasmic grade of organization are found in animals.

(15) Animals are unicellular but in some animals complete cell is absent. Such type of animals are called acellular animals.