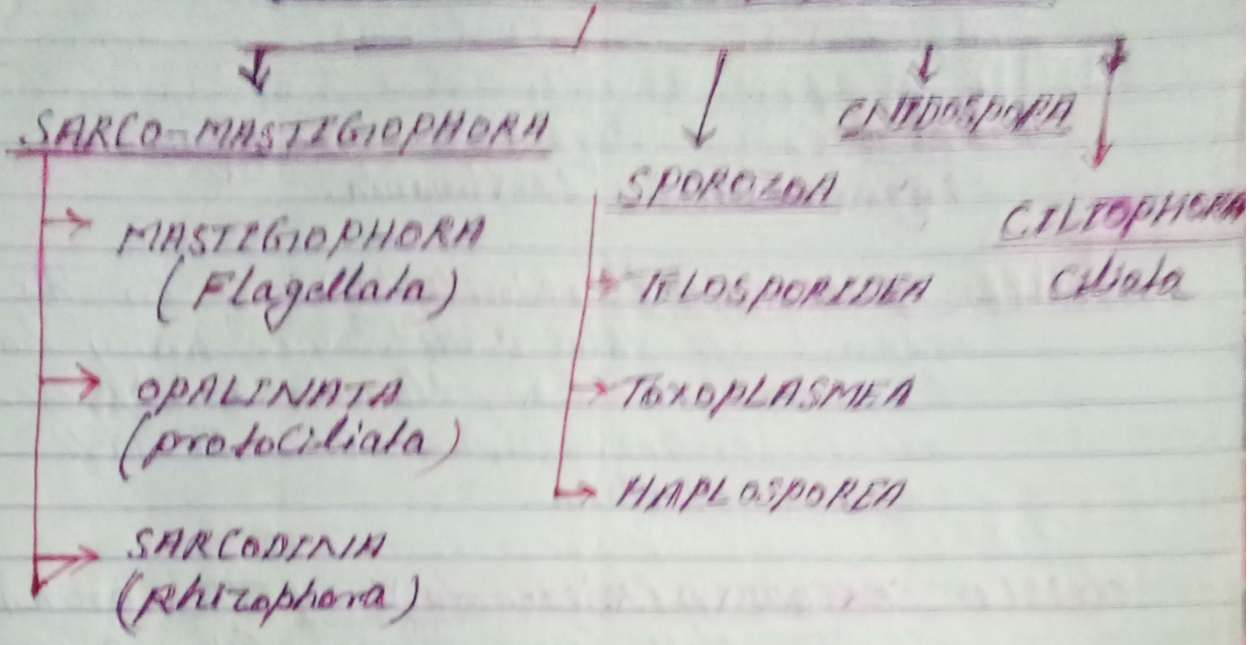


Date - 13/01/2022

Zoology Honors (B.Sc-I)
Paper - I (Com-4)

Dr. Prifam Jaiswal
Dept of Zoology,
Sherlock College, Saharanpur
V.K.S. University, Ara

CLASSIFICATION OF PROTOZOA



Entamoeba (Amoebiasis), Plasmodium (malaria), Leishmania (Kala-azar) etc. on the basis of mode of locomotion and ingestion of food, the phylum protozoa may be divided into four subphylum which are as follows: —

(1) Sarcomastigophora (2) Sporozoa (3) Ciliophora and (4) Ciliophora.

Subphylum (1) SARCOMASTIGIOPHORA :- (sarco - finger + mastig - thread + ferre = to bear) — in this phylum animals consist finger like projection, or hair like short - wigs for locomotion and ingestion of food. it may be ~~still~~ divided into three classes: —

Class (A) (A) MASTIGIOPHORA,
 " (2) (B) OPALINATA, and.
 " (3) (C) SARCODINIA

CLASS (1) - MASTIGIOPHORA (Flagellata) :- The

The animals of this class, some hair-like structures are present for locomotion and ingestion of food. Such type of hairs are called flagella and hence this class is also called Flagellata. e.g. - *Euglena*, *Trypanosoma*, *Leishmania*.

class (2) OPALINATA (Protociliata): - In this animals of this class some many hair-like or cilia like flagella are present at the entire surface of the cell. e.g. - *Opalina*.

class (3) SARCODINA (Rhizopoda): - The animals of this class some finger like structures are present for locomotion and ingestion of food called pseudopodia. e.g. - *Amoeba*, *Entamoeba* etc.

Subphylum (2) SPOROZOA: - The animals of the subphylum, any cilia, flagella or pseudopodia are absent for locomotion. In the animals during reproduction, some spores are produced. In each spore, one to many sporozoites are present. This subphylum may be divided into three classes: - (1) *Tetrasporidea*, (2) *Toxoplasmea* and (3) *Haplosporica*.

class (1) Tetrasporidea: - The animals of this class, elongated sporozoites are present. e.g. - *Plasmodium* (malaria parasite), *Monocystis* etc.

are Contractiles or their derivatives. The basal granules show nine peripheral subfibre triplets, each disposed in a twist-like fashion.

(4) PELLICULAR CONTRACTILE STRUCTURES

In many protozoa are found contractile structures, called the myonemes, in the outer pellicle, these may be in the form of ridges and grooves (e.g. - Euglena), or contractile fibrils (e.g. - larger ciliates) or microfibrules (e.g. - Trypanosoma).

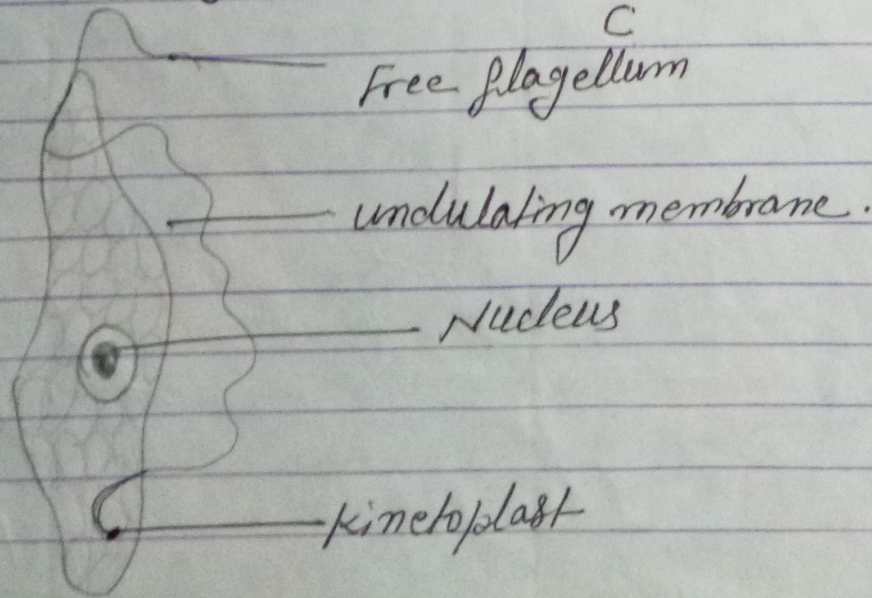
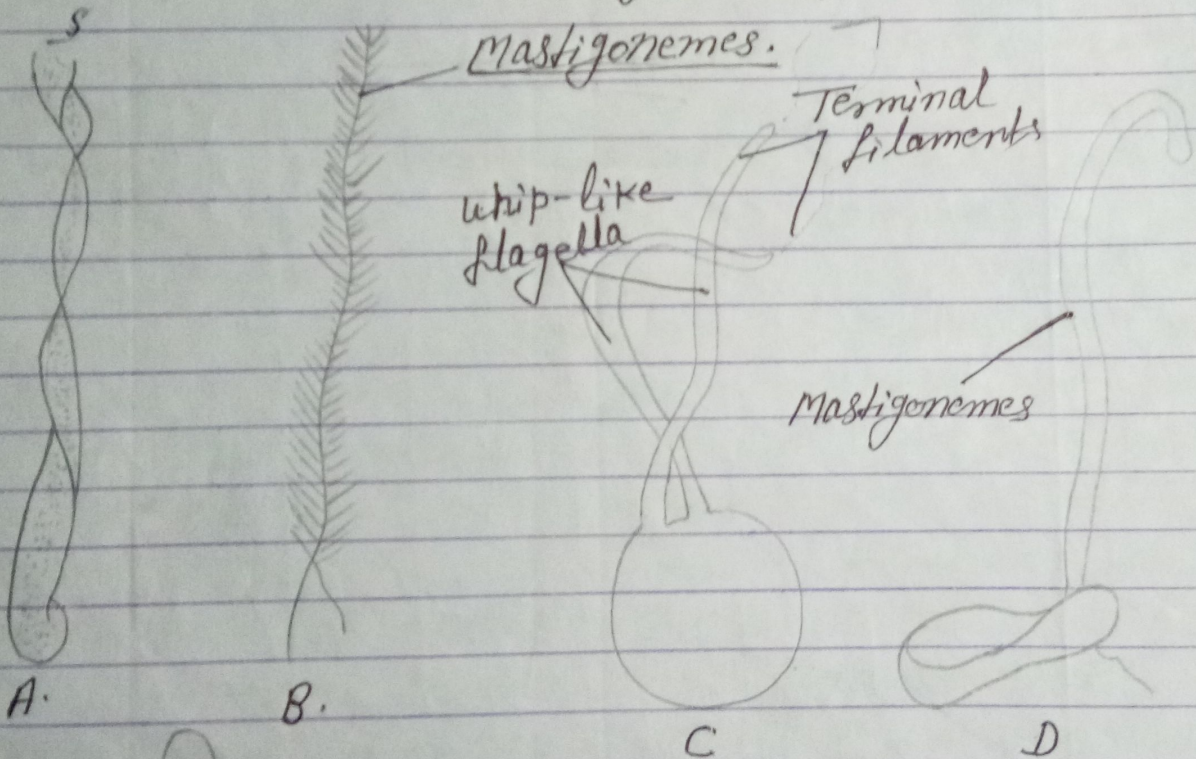


Fig - Types of flagella in protozoa. A - Flagellum of Trachelomonas, B - Flagellum of Euglena with mastigonemes, C - whip like flagella of polytoma, D - Flagellum of ureocelis with mastigonemes. E - undulating membrane of Trypanosoma with a flagellum.
