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Class 11th

Sub. Biology

Date: - 30.08.2020

Protista– Kingdom Protista includes Chrysophytes, Dinoflagellates, Eugleoids, slime mould and Protozoans.

- 1. It includes all unicellular and colonial eukaryotes.
- 2. Most of them are aquatic forming plankton.
- 3. Mode of nutrition may be photosynthetic, saprophytic, parasitic or holozoic.
- 4. Flagella if present are 11 stranded with 9+2 arrangement of microtubules composed of tubulin.
- 5. Genetic material consists of 2 or more DNA molecules.
- They includes diatoms and golden algae (desmids) found in fresh water as well as marine water.
- In diatoms cell wall forms two thin overlapping cells which fit together as in soap box.
- The siliceous indestructible cell wall pile up at the bottom of water reservoirs and form big heaps called diatomaceous earth. It may extend for hundred meter and used for polishing, filtration of oil and syrups. They are chief producer in oceans.
- They are basically unicellular, motile, biflagellate and photosynthetic protists.
- Predominate colour is golden brown but yellow, green, red and even blue also exists.
- Some Dinoflagellates like *Gymnodinium* and *Gonyaulax* grow in large number in the sea and make the water look red and cause the so called "red tide".
- They are Euglena like unicellular flagellates which possess pellicle instead of cell wall which make their body flexible.
- They have two flagella, one short and other long.
- They are photosynthetic in presence of sunlight and act as predators in absence of sunlight.
- Example- Euglena, Peranema.