

* General characteristics of Chlorophyceae or ¹ green algae .

⇒ The chlorophyceae are characterised by
the following features —

- 1) They are grass green in colour owing to the pre-ponderance of chlorophyll-a and chl-b over carotene and xanthophylls .
- 2) The pigments are localised in the green plastids known as chloroplasts .
- 3) The chloroplast normally contain one or more rounded proteinaceous bodies , the pyrenoid .
- 4) The cell has a well defined nucleus and in the higher forms , a central sap cavity is also formed .
- 5) The cell wall invariably contains cellulose .
- 6) The reserve carbohydrates are usually stored in the form of starch .
- 7) Majority produce motile reproductive cells furnished with two to four flagella .
- 8) The flagella are of equal length and of whipsh type .

- 9) Sexual reproduction ranges from isogamy² to oogamy.
- 10) The sex organs are always unicellular.
- 11) Zygote generally is the only diploid structure in the life cycle.
- 12) The plant body is unicellular or multicellular.
- 13) Unicellular plant body may be solitary or colonial.
- 14) The multicellular forms show a considerable range of variation in the form and structure of the plant body.