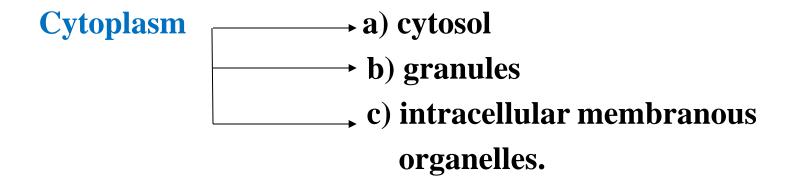
Cytoplasm

It is the extra nuclear protoplasm of eukaryotic cells.



a) Cytosol:

• It is the aqueous phase of the cytoplasm with its dissolved solutes exclude the organelles.

• It is not simple dilute aqueous solution but has gel-like consistency.

Dissolved solutes in the cytosol:

e.g.

enzymes

building block biomolecules

proteins

metabolites

mineral ions

• All components of the cytosol are maintained in certain constant conc. through different transport processes occur across the plasma membrane.

b) Particles and granules

i) Free ribosomes:

- Supramolecular complex particles.
- Site of protein synthesis

ii) Granules:

- Starch granules
- Glycogen granules
- Fat globule

c) Intracellular membranous organelles

- 1) Nucleus
- 2) Endoplasmic reticulum
- 3) Golgi apparatus
- 4) Mitochondria
- 5) Peroxisome
- 6) Lysosome
- 7) Chloroplast in plants