Ch-1 THE FUNDAMENTAL UNIT OF LIFE.

Exercises

1) Make a comparision & write down ways in which plant & animal cells are different.

Ans)

PLANT CELL.	ANIMAL CELL.
-> Plant cells have cell wall.	-> Animal cells do not have cell wall.
-> They donot have centrioles.	-> They contain centrioles.
-> vacuoles are large & in the centre of the cell.	-> Vacuole is small.
-> They contain chloroplast.	-> They don't have chloroplast.
-> Nucleus is present in the side of the plant cell.	-> Nucleus is present in the centre of the animal cell

2) How a prokaryotic cell different from eukaryotic cell?

Ans) A prokaryotic cell is different from eukaryotic cell because:-

→ Prokaryotic cell is generally small in size (1-10 μm) where as eukaryotic cell is generally large in size (5-100 μm).

→ Nuclear region is poorly defined in a prokaryotic cell where nuclear region is well defined & surrounded by a nuclear membrane in a eukaryotic cell.

→ Prokaryotic cell has a single chromosome where as eukaryotic cell has more than one chromosome.

→ Membrane - bound cell organelles are present in eukaryotic cells where as it is absent in prokaryotic cells.

3) What would happen if the plasma membrane ruptures / breaks down?

Ans) → If plasma membrane ruptures / breaks down then molecules of some substances will freely move in & out.

4) What would happen to the life of a cell if there was no Golgi apparatus?

Ans) → Golgi apparatus has the function of storage, modification & packaging of the products in vesicles. If there were no golgi bodies,

packaging and dispatching of materials synthesized by the cell will be stocked.

5) Which organelle is known as the powerhouse of the cell? Why?

Ans) Mitochondria is known as powerhouse of the cell because it releases the energy in the form of ATP which is required for different activities of life.

6) Where do the lipids & proteins constituting the cell membrane get synthesized?

Ans) Lipids & proteins are synthesised in Endoplasmic Retiuluum. [ER].

7) How does amoeba obtain its food?

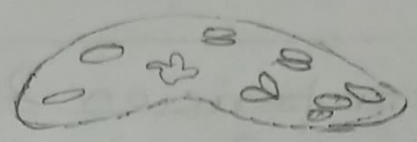
Ans) Amoeba takes it food by the cell membrane which forms the food vacuole.

8) What is osmosis?

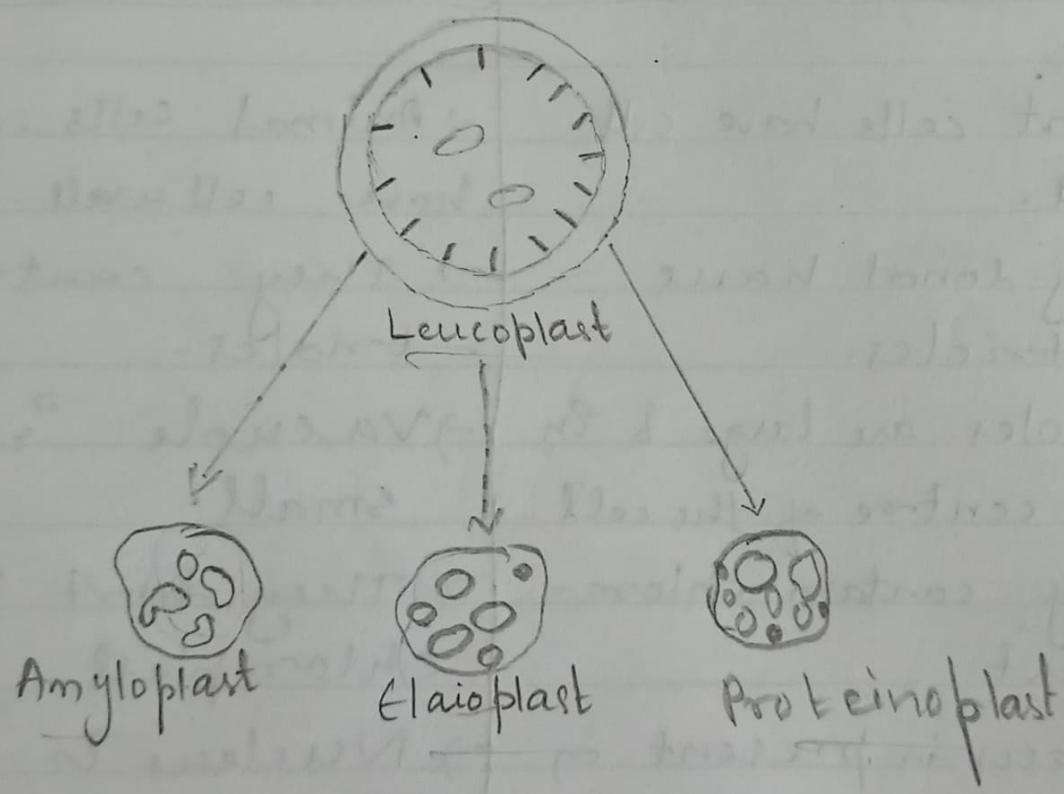
Ans) Osmosis is the process of movement of water molecule from a region of higher water concentration through a semi-permeable membrane to region of lower water-concentration.

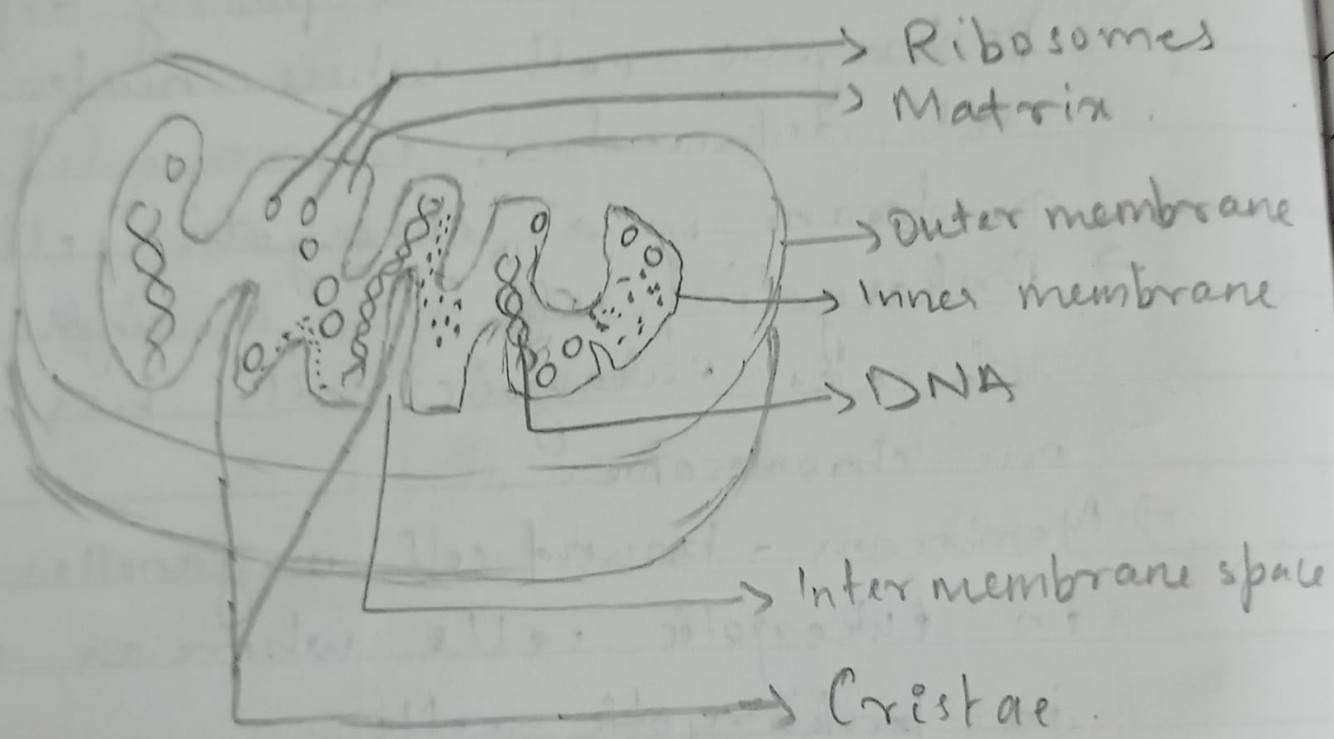
PLASTIDS

Chromoplast

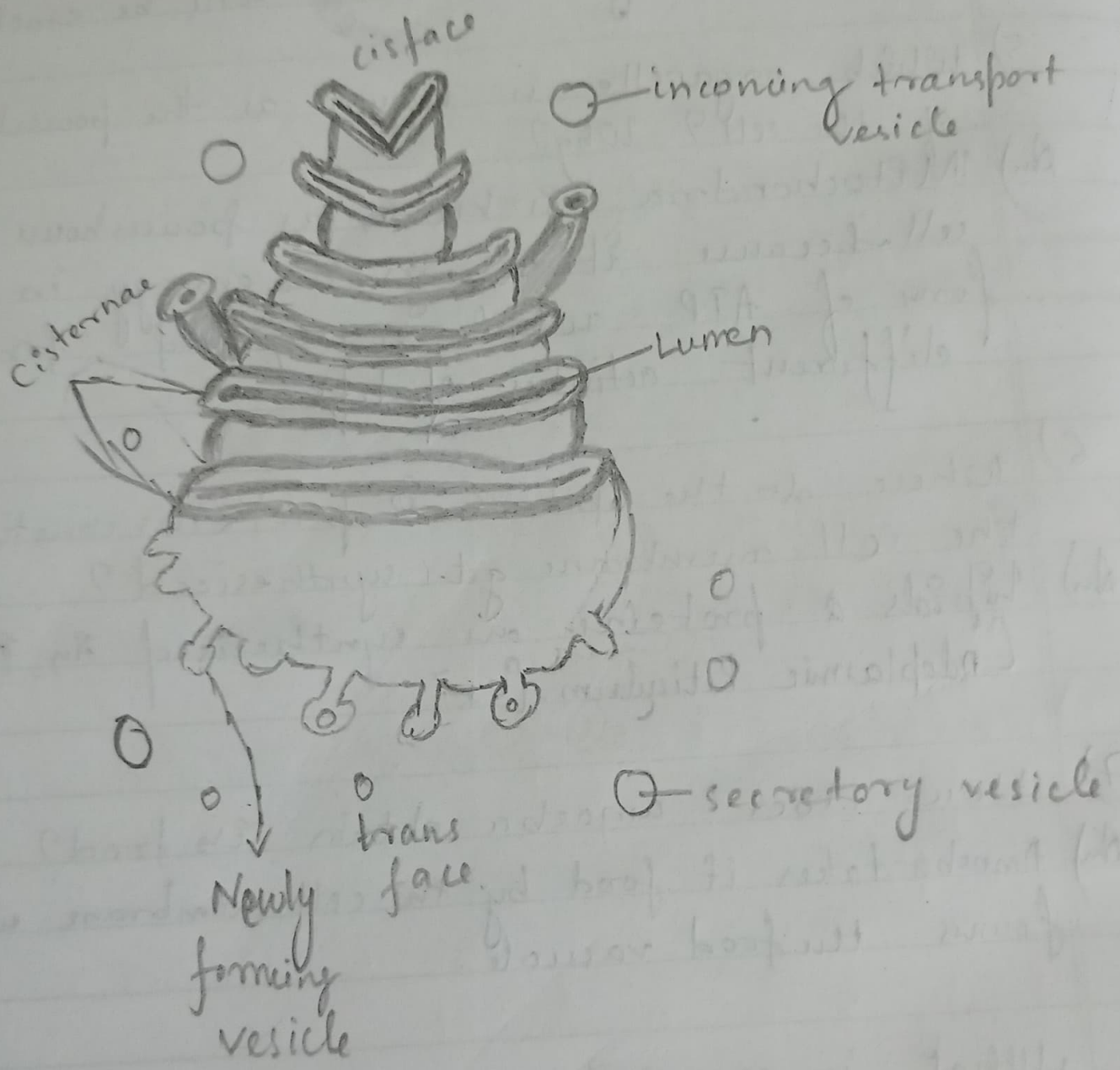


Chloroplast

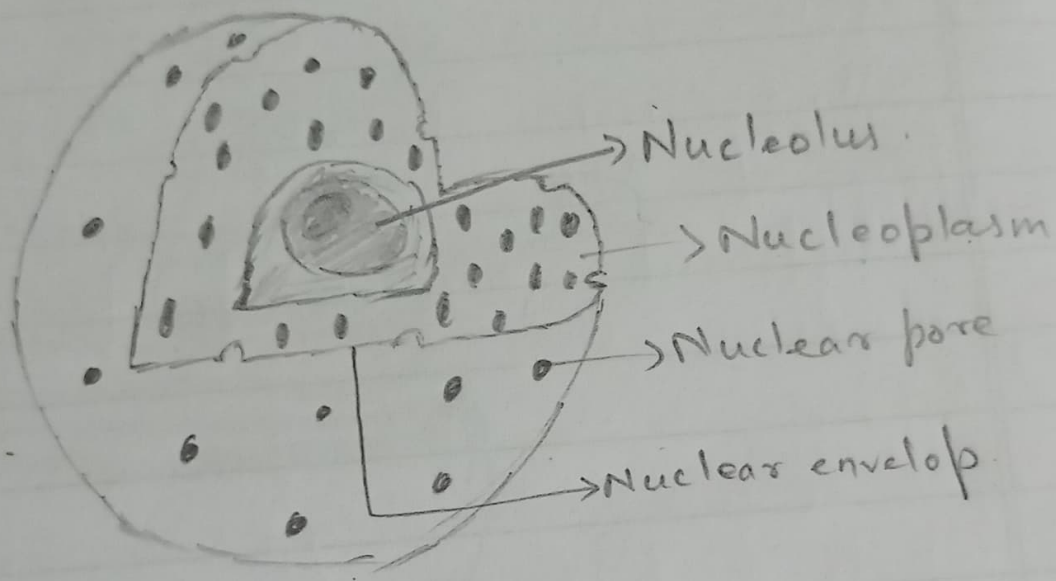




Mitochondria.



Golgi Bodies.



Nucleus