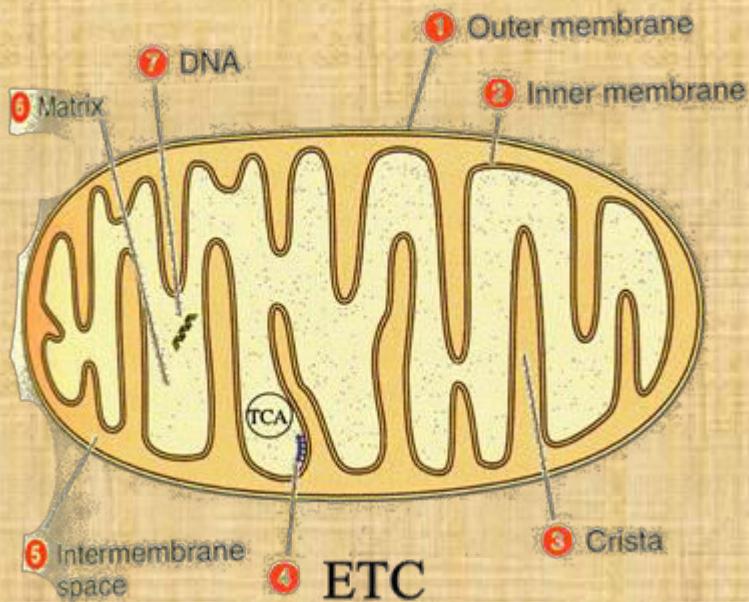


Chapter 8

CELL-THE UNIT OF LIFE

Mitochondria:

1. Mitochondria is also called as,
 - Power house of the cell
 - Most busy and active cell organelle
 - Semi-autonomous cell organelle
2. All mitochondria present in the cell are collectively called as Chondriome.
3. Animal cells have more mitochondria when compared to plant cell.
4. No of mitochondria depends upon physiological activity of cell.
5. Mitochondria differ in size and shape usually may be sausage (or) cylindrical shape.
6. Mitochondria is a double membrane bound structure with outer membrane and inner membrane dividing its lumen into two compartments.
i.e., Outer and inner compartment
7. The inner compartment is also called as Matrix.



8. The outer membrane acts as continuous limiting boundary of the organelle. It contains more amount of phospholipids and cholesterol.

9. The inner membrane is folded into a number of finger like cristae and it contains more amount of proteins.

10. In metabolically active mitochondria number of cristae are higher.

11. The matrix of mitochondria contains circular DNA molecules, a few RNA molecules, ribosomes and components of protein synthesis.

12. Mitochondria divide by fission.

Functions:

Mitochondria are the sites of aerobic respiration and ATP production.