Cellular Organelles and Cell Membranes

Review questions and notes

1. What is the structure of cell membranes?
   - Fluid Mosaic model

2. What is the function of golgi complex?
   - Maturation and processing of nascent proteins, glycosylation of proteins, secretion of newly synthesized proteins.

3. What is the function of endoplasmic reticulum?
   - Biosynthesis of proteins, drug metabolism, denaturation of fatty acids.

4. What is lysozyme?
   - It is an enzyme that is present in external secretions.

5. What is the function of lysozymes?
   - They are like bags of hydrolytic enzymes that bring about the degradation of macromolecules.

6. Where does protein synthesis takes place?
   - On the walls of the endoplasmic reticulum and also in the cytosol.

7. What are cathepsins?
   - They are intracellular proteolytic enzymes particularly found in the spleen.

8. What is the most important function of the mitochondria?
   - For the generation of ATP

9. What are the important metabolic events taking place in the mitochondria?
   - TCA cycle, Electron transport chain, Beta oxidation of fatty acids and Urea cycle.

10. What are ecto-enzymes?
    - Enzymes seen/ found on the outer portion of cell membranes.

11. Examples of ecto-enzymes