Biology (New Book) - 9th Class Biology Urdu Medium Chapter 3 Preparation

Q1. What is mitochondrian?

Ans 1: Mitochondria are spericaal, rod -like or elogated tiny organelles.
It produce energy for the cell
Structure:
Under EM a mitochondriaon is a double membrane structure. The outer memberane is smooth. The inner membrane is folded to fform cristae. Cristae provide a much greater area. Mitochondrial solution is called Matrix

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Q2. Which orgenelle detoxifies harmful substances and breaks down lipids?

Ans 1: i. Smoothe endoplasmic reticulum involved in lipid metabolism
ii. It also detoxifies the harmful chemicals that have entered the cells.

Q3. What makes red blood cells more suitable for the transport of oxygen.

Ans 1: Red blood cells have a noticeable biconcave disc shape which means they are cuved invward on both sides. This shape gives them more surface area and carry oxygen and carbon dioxide more efficiently.

Q4. How do lysosomes contribute to the cell's functioning.

Ans 1: i. Lysosomes bud off form Golgi apparatus.
ii. Cell engulfs the food material in the form of food vacuole
iii. Lysosomes fuses with food vacuole and its digestive enzymes break down the food presente in vacuole
iv. Lysosomes also have enzymes for breaking cellular water
v. They also engulf the damaged organelles and break them
vi. Lysosomes can store certain molecules for later use.

Q5. What key role does the Golgi pparatus play in eukaryotic cells?

Ans 1: i. It modifies molecuIs coming from rough ER and packs them into small membrane -bound sacs called Golgi vesicles.
ii. These sacs are kept in cell or are transorted to exterior in the form of sacretions.

Q6. Why are teh eristae important for cellular respiration.

Ans 1: Cristae are important for cellular respiration because they increase the surface area of a the inner mitochondrial memberane whcih allows the cell to produce more energy.

Q7. What are teh main functions of cell membrane.

Ans 1: i. It is selectively -permeable
ii. It allows very few molecules to pass through it while blocks many outher molecules.

Q8. How do the vacuoles in platn cells differ from vacuoles in animal cells?

Ans 1: Vacuoles in an Animal cell:
i. Animal cell may have many small temporary vacuoles
ii. They contain water and food substances
iii. Some freshwater organisms like amoebal and sponges have contractile vacuoles which collect and pump out extra water and other wastes
iv, Some cells ingest food by forming food vacuoles food facuoles also store food.

Ans 2: Vacuole in a plant Cell:
i. Most nature plant cells have a signle large, central vacuole
ii. It is formed by the fusion of many small vacuoles
iii. The membrane of plant vacuole is clled tongoplast and the sap inside plant vacuole is called cell sap
iv. It is watery solution of salts.

Q9. What are Golgi apparatus?

Ans 1: It was discovered by Italian scientist Camillo Golgi in 1898. Golgi apparatus is also known as golgi complex.It modifies the materials coming frm rough ER and enclose them into golgi vesicles.

Q10. What could happen if lysosomal enzymes stop working property.

Ans 1: If lysosomal enzymes stop working properly, they do not digest food and cells accumulate waste and eventually die.
