

Chapter – 8 | Cell: The Unit of Life**QUIZ
PART-04**

1. Eukaryotic cells include —

- A. Protists, plants, animals and fungi
- B. Only bacteria
- C. Only viruses
- D. Only mycoplasma (A)

Explanation : All protists, plants, animals and fungi are eukaryotic.

2. Plant cells differ from animal cells because plant cells have —

- A. Cell wall
- B. No cytoplasm
- C. No nucleus
- D. No ribosomes (A)

Explanation : Plant cells have a cell wall made of cellulose, while animal cells lack it.

3. Centrosome is generally —

- A. Present in plant cells
- B. Present in animal cells
- C. Present only in bacteria
- D. Absent in animal cells (B)

Explanation : Centrosome is present in animal cells and helps in spindle fibre formation.

4. Cell membrane mainly consists of —

- A. Lipids and proteins
- B. Cellulose and pectin
- C. DNA and RNA only
- D. Starch and sugar only (A)

Explanation : The cell membrane is mainly composed of lipids and proteins.

5. The major lipids in the cell membrane are —

- A. Steroids
- B. Phospholipids
- C. Waxes
- D. Carotenoids (B)

Explanation : Phospholipids are arranged in a bilayer in the membrane.

6. The fluid mosaic model was proposed by —

- A. Schleiden and Schwann
- B. Singer and Nicholson
- C. Hooke and Brown
- D. Watson and Crick (B)

Explanation : Singer and Nicholson proposed the fluid mosaic model in 1972.

7. Proteins present on the surface of membrane are called —

- A. Integral proteins
- B. Peripheral proteins
- C. Histone proteins
- D. Enzyme granules (B)

Explanation : Peripheral proteins are located on the membrane surface.

8. Proteins partially or completely embedded in membrane are —

- A. Integral proteins
- B. Peripheral proteins
- C. Chromatin proteins
- D. Tubulin proteins (A)

Explanation : Integral proteins are embedded in the membrane.

9. Movement of molecules from high concentration to low concentration without energy is —

- A. Active transport
- B. Diffusion
- C. Endocytosis
- D. Cell division (B)

Explanation : Diffusion is passive transport and does not require energy.

10. Na^+/K^+ pump is an example of —

- A. Passive transport
- B. Active transport
- C. Simple diffusion
- D. Osmosis only (B)

Explanation : Na^+/K^+ pump requires ATP and moves ions against concentration gradient.