



Q1-Choose the correct statement:

- a) Cell wall controls entry and exit of substances
- b) Plasma membrane provides shape only.
- c) Cell wall provides rigidity and protection
- d) Plasma membrane is present only in plant cells

Q 2-In an onion peel experiment, plasmolysis occurs due to:

- a) Entry of water.
- b) Loss of water.
- c) Gain of solute.
- d) Cell division

Q.3-If a cell lacks a cell wall, it is more likely to:

- a) Resist pressure.
- b) Burst in hypotonic solution.
- c) Remain unchanged
- d) Become rigid

Q. 4-Which statement best explains "Omnis cellula -e- cellula"?

- a) Cells can arise spontaneously
- b) Cells are formed only in plants
- c) New cells are produced from existing cells
- d) Cells are independent structures

Q.5-Which situation best represents osmosis?

- a) Movement of oxygen in lungs
- b) Pumping of ions using energy
- c) Movement of water across semi-permeable membrane.
- d) Movement of blood

Q.6-If a cell is placed in a solution where solute concentration outside equals inside, then:

- a) Only inward movement occurs.
- b) Only outward movement occurs

c) Dynamic equilibrium is maintained.

d) Cell shrinks

Q 7-A plant cell placed in distilled water does not burst like an animal cell because:

a) Plasma membrane is stronger.

b) Cell wall provides resistance

c) Nucleus controls water entry.

d) Cytoplasm is dense

Q8-A cell shrinks in a solution. Which condition explains this?

a) Hypotonic solution outside. b) Hypertonic solution outside

c) Isotonic solution outside.

d) No solution present

Q.9-Match the column and select the correct option:- (1)

Column -I

Column II

A)Leewenhoek.

i)Protoplasm

B)Robert Brown

ii)cell

C)Robert hooke.

iii)Nucleus

D)Purkinje.

iv)Free living cell

a)A-(iv), B-(iii), C- (i), D-(ii).

b)A- (iv) , B- (iii), C-(ii), D-(i).

c)A-(i), B-(ii), C-(iii), D- (iv).d)A- (ii), B-(iii), C-(iv), D- (i)

Q.10-Identify the correctly matched pair:

a) Plasmolysis – Cell gains water.

b) Diffusion – Requires semi-permeable membrane

c)Active transport –No energy required

d)Osmosis – Movement of water across membrane

Q.11During diffusion, if temperature increases, the rate will:

a) Decrease.

b) Increase.

c) Remain same.

d) Stop

Q12-Which statement is incorrect about diffusion?

a) It occurs in gases and liquids

b) It requires energy

c) It occurs from high to low concentration

d) It does not require energy

Q. 13-Which statement is incorrect?

a) Gain of water in animal cell

c) Equal movement of water in and out

Q.14-Which statement is incorrect?

a) Low concentration

c) High concentration

d) It does not require membrane

Q. 13-Which statement best explains plasmolysis?

- a) Gain of water in cell.
- b) Loss of water causing shrinkage
- c) Equal movement of water.
- d) Cell division

Q.14-Which is the correct sequence for movement in osmosis?

- a) Low water → High water.
- b) High solute → Low solute
- c) High water → Low water .
- d) No movement

Q.15-If we remove nucleus from a plant cell, the cell will

- a) grow faster
- b) Divide faster
- c) die after some time
- d) make more food

Q.16-The plasma membrane is mainly composed of:

- a) Cellulose and protein.
- b) Lipids and proteins
- c) Starch and lipids.
- d) DNA and protein

Q. 17-Which of the following correctly matches organism and cell wall composition?

- a) Plant – Chitin
- b) Fungi – Cellulose.
- c) Bacteria – Peptidoglycan.
- d) Animal – Cellulose

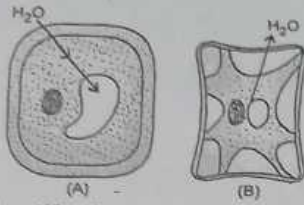
Q.18-Which of the following does NOT have a cell wall?

- a) Plant cell.
- b) Bacterial cell.
- c) Animal cell.
- d) Fungal cell

Q. 19-Which of the following statements is correct?

- a) All cells have cell wall
- b) Plasma membrane is present in all cells
- c) Only plant cells have plasma membrane
- d) Animal cells have cell wall

Q. 20 Look at the given figure and answer the following questions - (3)



a) Identify the process occurring in Diagram A & B

b) Name the type of solution in figure A and B .

c) what happened to the cell in figure A and B

Q.21 What happened – (2)

1) When egg placed in salt solution. _____

2) when RBC are kept in hypertonic solution. _____

Q 22-Differentiate on the basis of following (3)

1) cell wall and plasma membrane (basis on permeability)

2) Diffusion and osmosis _____

3) Exocytosis and endocytosis _____

Q 23-Give the answer of following questions:-4)

1) Which cell organelle is called 'Powerhouse of the cell'?

2) Which cell organelle is called 'Suicidal bags'?

3) Name the outermost layer in a plant cell.

4) Which cell lacks a well-defined nucleus?