YAKEEN-2022

Transport in Plants -DPP -02

1. What are the meaning of short distance transport in plants?
   (a) Transport within the cell
   (b) Transport across the membranes
   (c) Transport from cell to cell within the tissue
   (d) All of the above
2. In a flowering plant the substances that would need to be transported are:
   (a) Water and mineral nutrients only
   (b) Water, mineral nutrients, organic nutrients and plant growth regulators.
   (c) Plant growth regulators and water only
   (d) Organic nutrients and plant growth regulators only
3. Over small distances substances move by:
   (a) Diffusion and by cytoplasmic streaming supplemented by active transport.
   (b) Diffusion and by cytoplasmic streaming without supplemented by active transport.
   (c) Diffusion only
   (d) Cytoplasmic streaming only
4. In rooted plants, transport in xylem is:
   (a) Sometime unidirectional, from roots to the stems
   (b) Multidirectional transport from roots to the stems
   (c) Essentially unidirectional, from roots to the stems
   (d) Essentially unidirectional, from stems to the roots
5. Long distance movement of substance through the vascular tissue in plant is called:
   (a) Diffusion (b) Translocation
   (c) Osmosis (d) Imbibition
6. Transport of substance over small distance occurs by:
   (a) Diffusion
   (b) Cytoplasmic streaming
   (c) Osmosis
   (d) Both (a) and (b) are correct
7. Transport of water and minerals through the xylem is:
   (a) Unidirectional (b) Bidirectional
   (c) Multidirectional (d) All are correct
8. The organic compound synthesized by the leaves during photosynthesis, are transported to all other parts in:
   (a) Unidirectional (b) Bidirectional
   (c) Multidirectional (d) All are correct
9. The diffusion rates depend on:
   (a) Gradient of concentration
   (b) Permeability of membrane
   (c) Temperature
   (d) All these factors
10. Permeability of the membrane to a substance depends on which factor:
    (a) Size of molecules
    (b) Solubility of the substance in lipids
    (c) Solubility in water
    (d) All these factors
11. When water moves out of the cell and the cell membrane of a plant cell shrinks away from its cell wall called as:
    (a) Plasmogenesis (b) Deplasmolysis
    (c) Lysis (d) Plasmolysis

12. Choose the correct answer on the basis of given statement.
Both the molecules cross the membrane in the same direction called as:
(a) Antiport (b) Symport
(c) Uniport (d) Plasmolysis

13. Attraction of water molecules to polar surface called:
(a) Cohesion (b) Adhesion
(c) Surface Tension (d) Capillary

14. Small distance substances move by:
(a) Diffusion
(b) Cytoplasmic streaming supplemented by active transport
(c) Vascular system (Xylem and Phloem)
(d) Both (a) and (b) are correct

15. Which of the following statement is correct?
(a) Facilitated diffusion cannot cause net transport of molecules from lower to high concentration this would require energy.
(b) For facilitated diffusion require special protein
(c) The porins are proteins that found in the membrane of the plastids, mitochondria and some bacteria allowing in transportation of substances
(d) All are correct

16. Diffusion rates are affected by the:
(a) Gradient of concentration
(b) The permeability of the membrane separating them
(c) Temperature and Pressure
(d) All of the above

17. Special proteins helps to move substances across membranes without expenditure of ATP energy is called:
(a) Simple diffusion
(b)Facilitated diffusion
(c) Active Transport
(d) All of these

18. Protein that form huge pores in the membrane to allow molecules to pass through it is called:
(a) Plasmodesmata (b) Prions
(c) Porins
(d) Intermediate filament

19. Transport of molecules or substance across the membrane independent of other molecules or substances is called:
(a) Uniport (b) Symport
(c) Antiport (d) All are correct

20. Transport of two types of molecules across the membrane in the opposite direction is called:
(a) Antiport (b) Symport
(c) Active transport (d) Uniport

21. Protein in the membrane is responsible for which type of diffusion?
(a) Facilitated (b) Active transport
(c) Simple diffusion (d) Both (a) and (b)

22. The _____ proteins that form huge pores in the outer membranes of plastids, mitochondria and bacteria:
(a) Porins (b) Albumin
(c) Globulin (d) Immunoglobulin

23. Mark the correct statement.
(a) Water potential depend on pressure potential and solute potential.
(b) Pure water potential is not zero
(c) Solute potential is both positive and negative
(d) Solute potential depends on solute and pressure.

24. Choose the correct answer.
(a) Imbibition is a special type of diffusion when water is absorbed by solid
(b) Plasmolysis occurs when water moves inside the cell.

(c) Water potential is a concept fundamental to understand solute movement

(d) In the Antiport, both molecules move together in same direction

25. Choose the correct answer:

A concentration gradient must present for molecules to diffuse even if facilitated by the proteins called as:

(a) Diffusion

(b) Facilitated diffusion

(c) Active diffusion

(d) All of these

26. Mark the incorrect

(a) Cytoplasmic streaming is active process.

(b) Transport protein is carrier or channel.

(c) Unit for water potential is pascal

(d) Pump not get saturated

27. Pure water solute potential is

(a) Zero

(b) Positive

(c) Negative

(d) All of the above

28. Osmosis occur in direction

(a)High water potential to low

(b) Hypertonic to hypotonic

(c) More solute concentration to low solute concentration

(d) All of the above

29. Plasma membrane is of cell is

(a) Selective permeable

(b) Permeable

(c) Impermeable

(d) All of these

30. Suberin in cell is to make cell

(a) Selective permeable

(b) Permeable

(c) Impermeable

(d) None of the above

ANSWERS

-1.(d)
2. (b)
3. (a)
4. (c)
5. (b)
6. (d)
7. (a)
8. (c)
9. (d)
10. (d)
11. (d)
12. (b)
13. (b)
14. (d)
15. (d)
16. (d)
17. (b)
18. (c)
19. (a)
20. (a)
21. (d)
22. (a)
23. (a)
24. (a)
25. (b)
26 (d)
27 (a)
28 (a)
29 (a)
30 (c)

***Note* - If you have any query/issue**

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