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PARISHRAMA NEET ACADEMY

TARGET NEET - 2022

BIOLOGY

TOPIC: TRANSPORT IN PLANTS

1. Which of the following is not a feature of active transport of solutes in plants?
   (1) Occurs against concentration gradient
   (2) Non-selective
   (3) Occurs through membrane
   (4) Requires ATP

2. The type of transport taking across the biomembranes without the help of protein is
   (1) facilitated diffusion
   (2) active transport
   (3) simple diffusion
   (4) diffusion via symport

3. Which of the following is not true for active transport?
   (1) It is a chemical process
   (2) Energy is required for this process which is obtained in the form of ATP
   (3) It takes place through special organic molecules called carrier molecules
   (4) This process is not modified by enzymes

4. Na^+/K^+ pump in a cell is an example of
   (1) osmosis
   (2) diffusion
   (3) passive transport
   (4) active transport

5. The concentration of solute in four cells is 0.4 M. They are placed in four separate containers I, II, III and IV filled with saline water of concentrations of 0.1 M, 0.4 M, 2 M and 3 M respectively. In which container will the cell swell?
   (1) Container I
   (2) Container II
   (3) Container III
   (4) Container IV

6. A and B are the two adjacent living cells. The cell A has solute potential (ψ_s) of –9 bars and pressure potential (ψ_p) of 4 bars, whereas cell B has solute potential (ψ_s) of –8 bars and pressure potential (ψ_p) of 5 bars. What will be the direction of water movement between these cells?
   (1) Do not move in any direction
   (2) Cell A to Cell B
   (3) Moves in both the direction
   (4) Cell B to Cell A

7. Bacteria cannot survive in a highly salted pickle because
   (1) salt inhibits reproduction of bacteria
   (2) enough light is available for photosynthesis

(3) they become plasmolysed and death occurs
(4) nutrients in the pickle medium cannot support life

8. When water moves out of the plant cell and the cell membrane of a plant shrinks away from its cell, then this condition is known as
(1) plasmolysis (2) exosmosis
(3) hydrolysis (4) endosmosis

9. Osmotic pressure of a pure solvent at 25 °C and 1 atm is always
(1) less than its solute
(2) more than its solution
(3) negative
(4) zero

10. An osmometer is filled with 0.5 M solution of NaCl in water. In which of the following solutions it must be immersed in order to make it shrink?
(1) 0.5 M solution
(2) 0.05 M solution
(3) Distilled water
(4) 0.75 M solution