



**ST. LAWRENCE HIGH SCHOOL**  
**A JESUIT CHRISTIAN MINORITY INSTITUTION**



**WORK SHEET – 28**

**Class: IX      Sub: LIFE SCIENCE      Date: 16.05.2020**

**Topic: Passive transport - part-2**

**Tonicity of solutions and significance of osmosis    F.M. : 15**

**Choose the correct option:**

**(1x15=15)**

1. A less concentrated solution with respect to the cell is called :-  
a) Hypertonic solution b) Hypotonic solution c) Isotonic solution d) All of these  
**Answer : Hypotonic solution (b)**
2. If a cell is placed in a Hypotonic solution \_\_\_\_\_ takes place.  
a) Endosmosis b) Exosmosis c) Plasmolysis d) None of these  
**Answer : Endosmosis (a)**
3. If resins are kept in the water what would happen to the resins after sometime?  
a) No change b) Resins shrink c) Resins swell up d) None of these  
**Answer : Resins swell up (c)**
4. What happens when a RBC is kept in 15% saline solution ?  
a) RBCs swell up b) RBCs become crenated c) No change d) All of these  
**Answer : RBCs become crenated (b)**
5. When water molecules come out of the cells by exosmosis cells become \_\_\_\_\_  
a) Swollen b) Turgid c) No change d) Flaccid  
**Answer : Flaccid (d)**
6. The net movement of solvent molecules is at equilibrium when a cell is kept in \_\_\_\_\_ solution.  
a) Isotonic b) Hypertonic c) Hypotonic d) None of these  
**Answer : Isotonic (a)**
7. The extra pressure that can check the inflow of solvent molecules into a system is called \_\_\_\_\_.  
a) Turgor pressure b) Wall pressure c) Osmotic pressure d) Atmospheric pressure  
**Answer : Osmotic pressure (c)**
8. The pressure build up due to cell to cell osmosis in cortex of roots is called :-  
a) Root pressure b) Cortex pressure c) Diffusion pressure d) All of these  
**Answer : Root pressure (a)**

9. Dehiscence of anther lobes is directly controlled by the phenomenon of :-  
a) Diffusion b) Osmosis c) Plasmolysis d) Active transport  
**Answer : Osmosis (b)**
10. The following is not an importance of osmosis :-  
a) Plant movements b) Development of root pressure c) Opening of stomata  
d) Dissolution of sugar in water when the solution is left undisturbed  
**Answer :Dissolution of sugar in water when the solution is left undisturbed (d)**
11. In unicellular organisms osmosis is important because it plays a role in :-  
a) Taking up food from the surroundings b) Entry of water from surroundings c) Maintenance of water balance d)Both (b) and (c)  
**Answer : Both (b) and (c)**
12. A membrane which allows only the passage of water molecules is called :-  
a) Fully permeable b) Semi permeable c) Impermeable d) Differentially permeable  
**Answer : Semi permeable (b)**
13. An example of a fully permeable membrane is :-  
a) Cell wall b) Tonoplast c) Plasma membrane d) Nuclear membrane  
**Answer : Cell wall (a)**
14. \_\_\_\_\_ is an example of an impermeable membrane.  
a) Cuticle b) Rubber sheet c) Tonoplast d) Both Cuticle and Rubber sheet  
**Answer :Both cuticle and Rubber sheet (d)**
15. A \_\_\_\_\_ membrane allows the passage of few solutes across the cell.  
a) Semi-permeable b) Impermeable c) Differentially permeable d) All of these  
**Answer : Differentially permeable (c)**

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