



# 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
2. If a cell is placed in a Hypotonic solution \_\_\_\_\_ takes place.  
a) Endosmosis b) Exosmosis c) Plasmolysis d) None of these
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
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
5. When water molecules come out of the cells by exosmosis cells become \_\_\_\_\_  
a) Swollen b) Turgid c) No change d) Flaccid
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
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
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
9. Dehiscence of anther lobes is directly controlled by the phenomenon of :-  
a) Diffusion b) Osmosis c) Plasmolysis d) Active transport
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
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)
12. A membrane which allows only the passage of water molecules is called :-  
a) Fully permeable b) Semi permeable c) Impermeable d) Differentially permeable

13. An example of a fully permeable membrane is :-  
a) Cell wall b) Tonoplast c) Plasma membrane d) Nuclear membrane
14. \_\_\_\_\_ is an example of an impermeable membrane.  
a) Cuticle b) Rubber sheet c) Tonoplast d) Both Cuticle and Rubber sheet
15. A \_\_\_\_\_ membrane allows the passage of few solutes across the cell.  
a) Semi-permeable b) Impermeable c) Differentially permeable d) All of these

Shaista Ahmed