

GIRLS' HIGH SCHOOL & COLLEGE PRAYAGRAJ
SESSION 2020-2021
CLASS 10 A,B,C,D,E,F
SUBJECT- BIOLOGY
ASSIGNMENT-2

INSTRUCTIONS FOR THE E-LEARN ASSIGNMENT:

The Parents to ensure that their ward watches the video instructions for this assignment by clicking on the given link <https://youtu.be/-0-Q9ttnC8Q>

She should revise the lesson given in the book and then work on the assignment. The completed assignment is to be downloaded and filed/ pasted in the subject file/ copy and kept ready for submission. The day, date and procedure of submission shall be notified later.

CHAPTER- 4
ABSORPTION BY ROOTS

Answer the following questions:

Q1. Define the following terms:

- (a) Diffusion
- (b) Osmosis

- (c) Imbibition
- (d) Plasmolysis
- (e) Active transport

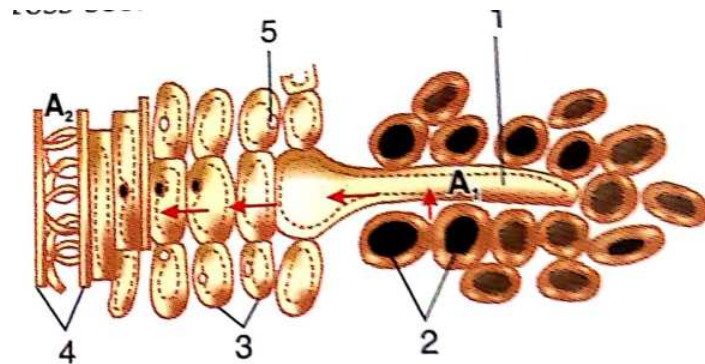
Q2. Differentiate between the following terms:

- (a) Endosmosis and Exosmosis
- (b) Plasmolysis and Deplasmolysis
- (c) Active transport and Passive transport
- (d) Turgor pressure and Wall pressure
- (e) Turgidity and Flaccidity
- (f) Hypotonic solution and Hypertonic solution

Q3. Give reasons for the following:

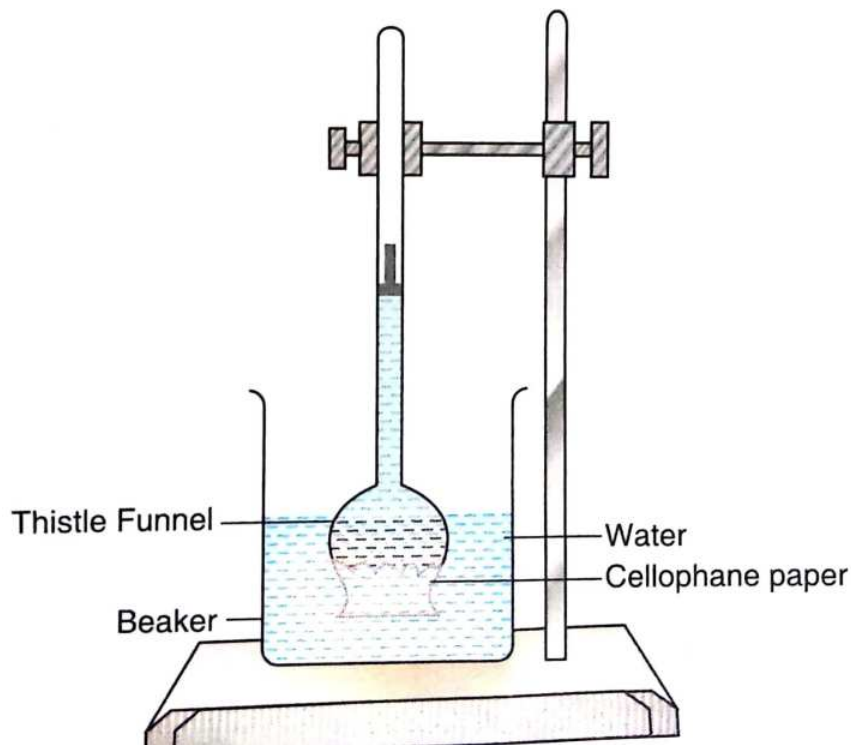
- (a) Fresh water fish cannot survive in sea water.
- (b) Grass is killed if salt is sprinkled on it.

Q4. Given below is a diagrammatic representation of a part of the cross section of the root in the root hair zone.



- (a) Name the parts indicated by guidelines 1 to 5.
- (b) Is the root hair cell unicellular or multicellular?
- (c) Name the process that is responsible for the entry of water molecules from the soil into A1 and then A2.
- (d) What pressure is responsible for the movement of water in the direction indicated by the arrow?
- (e) How does the pressure set up?

Q5. The diagram of a set-up to study a very important physiological process is given:



- (a) Name the process being studied.
- (b) Explain the process.
- (c) What change would you observe in the thistle funnel containing sugar solution after 10 minutes?

- (d) Is sugar solution hypertonic or hypotonic ?
- (e) Name the part of the plant cell which is represented by the sugar solution.

.....END.....