

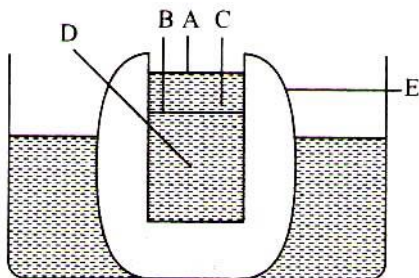
Class : XIth
Date :

Subject : BIOLOGY
DPP No. : 1

Topic :- Transport in Plants

- Choose correct statements regarding the flow of sap in xylem?
I. Flow is driven by higher concentration of sugar in the vessel elements
II. Flow from root to twigs and leaves would be reduced if leaves are removed
III. In the morning, sap begins to flow first in the twig then in trunk
IV. Rapid flow of water put tissues under pressure much more than atmospheric pressure
a) I and IV b) II and III c) I, II, III and IV d) No one is correct
- Stomatal opening is regulated by
a) Light b) Temperature
c) Atmospheric humidity d) Wind
- The direction of movement in phloem is ...A... and that of xylem is ...B... .
Choose the correct pair of options
a) A-downwards; B-downwards b) A-only upwards; B-only downward
c) A-unidirectional; B-bidirectional d) A-bidirectional; B-unidirectional
- Which of the following theories for ascent of sap was proposed by an eminent Indian scientist J C Bose?
a) Pulsation theory b) Relay pump theory
c) Transpiration pull theory d) Root pressure theory
- The potential energy of water is referred as
a) Water potential b) Osmotic potential c) Gravity potential d) Pressure potential
- If two solutions have the same osmoregularity, they are said to be
a) Hypertonic b) Hypotonic c) Isotonic d) None of these
- Plant obtain carbon and most of their oxygen from
a) Soil b) Water
c) CO₂ from the atmosphere d) Symbiotic organization

8. When plant cell is kept in saline drip, cell
 a) Decrease in size b) Bursts out c) Increase in size d) Unchanged
9. Carrier protein, which allows the diffusion of two type of molecules in the same direction is
 a) Symport b) Antiport c) Both (a) and (b) d) Uniport
10. Hydroponics is the method of
 a) Water conservation b) Plant development in water without soil
 c) Plant development without soil d) Plant development in saline soil
11. Imbibition is always accompanied by swelling or increase in the volume of imbibint However, the increase in the volume of the imbibant is
 a) More than the volume of water imbibed
 b) Same as the volume of the water imbibed
 c) Less than the volume of the water imbibed
 d) Depends upon the type of imbibant
12. Which of the following is responsible for the transport of water and minerals from roots to stems, leaves, flowers and fruits in rooted plants?
 a) Xylem b) Phloem c) Either (a) or (b) d) Both (a) and (b)
13. Loss of liquid water by guttation occurs through
 a) Hydathodes b) Stomata c) Cuticle d) Bark
14. The process by which water is absorbed by solids like colloid causing them to increase in volume, is called
 a) Osmosis b) Plasmolysis c) Imbibition d) Diffusion
15. Choose the correct combination of labeling of the potato osmoscope experiment.



- a) A-Final level B-Dotpin
 C-Initial level D-Sugar solution
 E-Potato tuber
- b) A-Initial level B-Dotpin
 C-Final level D-Water

- E-Potato tuber
- c) A-Final level B-Dotpin
 C-Initial level D-Water
 E-Potato tuber
- d) A-Final level B-Dotpin
 C-Initial level D-Water
 E-Container

16. How will you distinguish between the method of transport between xylem and phloem?
- Active transport move xylem but not phloem sap
 - Transport, in xylem is unidirectional and saps move upward, while phloem sap moves up and down
 - Transpiration does not move xylem sap, but it moves phloem saps
 - Transport of substances take place from source to sink by both the tissues
17. Which one of the following is not an antitranspirant?
- PMA
 - BAP
 - Silicon oil
 - Low viscosity
18. Statoliths are involved in
- Phototropism
 - Hydrotropism
 - Chemotropism
 - Gravitropism
19. In plasmolysed cell, the space between nucleus and plasma membrane is occupied by
- Hypotonic solution
 - Hypertonic solution
 - Isotonic solution
 - Air
20. The sugarcane plant has
- Dumb bell-shaped guard cells
 - Pentamerous flowers
 - Reticulate venation
 - Capsular fruits