PG-CET-BOTANY

PRACTICE BITS ON "Transport in plants"-I

1) "Father of plant physiology" is **[2]**

1) J.C. Bose 2) Stephen Hales 3) Peter Mitchell 4) Robert Hill

2) Root hairs are absent in **[4]**

1) Hydrophytes 2) Mycorrhizal roots 3) Epiphytes 4) All of these

3) Which transport mechanism does not require membrane proteins? **[1]**

1) Simple diffusion 2) Osmosis
3) Active transport 4) Facilitated diffusion

4) Which of the following show higher water potential value? **[1]**

1) Epidermis 2) Endodermis 3) Pericycle 4) Xylem

5) When living cells are placed in saline solutions **[2]**

1) The cells become turgid 2) The cells become flaccid
3) There is no change 4) Endosmosis takes place

6) Na/K pump is associated with **[4]**

1) Osmosis 2) Imbibition 3) Passive transport 4) Active transport

7) If both the molecules cross the membrane in the same direction then it is called **[3]**

1) Uniport 2) Antiport 3) Symport 4) Co-transport

8) "Store houses of potassium(K) ions" are **[3]**

1) vacuole 2) guard cells 3) subsidiary cells 4) Epidermal cells

9) Symplast of water in plants is not related to **[1]**

1) Cell wall 2) Vacuole 3) Cytoplasm 4) Cell membrane

10) Root pressure is measured by **[2]**

1) Osmometer 2) Manometer 3) Barometer 4) Auxanometer

11) The movement of water from one xylem vessel member to another is **[1]**

1) Apoplast 2) Symplast 3) Symport 4) Antiport

12) Stomata are widely open in **[4]**

1) Yellow light 2) Blue light 3) Green light 4) Red light

13) Guard cells differ from epidermal cells in having **[3]**

1) Vacuoles 2) Mitochondria 3) Chloroplasts 4) Nucleus

14) During guttation, water is lost in the form of **[3]**

1) Dilute solution of sugars 2) Dilute solution of salts
3) Dilute solution of salts and organic substances 4) Pure water drops

15) Flaccid cells kept in hypotonic solution will get **[4]**

1) Plasmolysed 2) Deplasmolysed 3) Lysed 4) Turgid

16) Water movement against gravity is caused by **[4]**

1) Diffusion 2) Osmosis 3) Imbibition 4) Transpiration

17) Which of the following cells have lowest water potential? **[3]**

1) Root hairs 2) Vascular bundle of roots
3) Transpiring leaves 4) Vascular bundle of stem

18) Desalination of water is associated with **[2]**

1) Osmosis 2) Reverse osmosis 3) Evaporation 4) Diffusion

19) Water lost during transpiration is **[1]**

1) Pure water 2) Rich in dissolved salts
3) Rich in dissolved organic solutes 4) None of the above

20) The space between protoplast and the cell wall of plasmolysed cell is occupied by the **[1]**

1) Hypertonic solution 2) Hypotonic solution
3) Cytoplasm 4) Pure water

21) Find out the wrong statement **[3]**

1) Ringing experiments are carried out in dicots only
2) Monocots are not suitable to perform ringing experiments
3) Scoto active stomata are found in CAM & C_4 plants
4) Guttation occurs during early morning

22) Which of the following phenomenon is not osmosis? **[3]**

1) Movement of water from soil to root hair
2) Movement of water from root hair to root cortex
3) Movement of water from root xylem to stem xylem
4) Movement of water from root endodermis to root pericycle

23) A plasmolysed cell can be deplasmolysed by placing it in **[4]**

1) Isotonic solution 2) Hypertonic solution
3) Saturated solution 4) Hypotonic solution

24) A girdle between fruit and leaves results **[3]**

1) Increases the size of fruit 2) No Change in the size of fruits
3) Decreases the size of fruit 4) Change the shape of fruit

25) The proteins that use energy to carry substances across the cell membrane are called **[2]**

1) Carriers 2) Pumps 3) Channels 4) Porins

26) Which of the following has low imbibing capacity? **[3]**

1) starch 2) Cellulose 3) suberin 4) Pectin

27) Most abundant solute in phloem sap is **[2]**

1) Starch 2) Sucrose 3) Glucose 4) Fructose

28) This plant which is ideal to demonstrate ascent of sap is **[4]**

1) Coconut plant 2) Cucumber 3) Banana 4) Balsam

29) Bacteria cannot survive in a highly salted pickle because **[4]**

1) Salt inhibits reproduction of bacteria
2) They become deplasmolysed
3) Nutrients in the pickle medium cannot support life
4) They become plasmolysed

30) When the bark is girdling from stem, which of the vascular tissue is removed? **[4]**

1) Primary Xylem 2) Primary Phloem
3) Secondary xylem 4) Secondary Phloem

ALL THE BEST

By

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