

ACTIVITY 14 — (Transpiration)

Q 1. What is transpiration?

Ans. The loss of water from aerial parts of plant body in the form of water vapours is called transpiration.

Q 2. Do transpiration takes place at night?

Ans. At night very less transpiration takes place through lenticels and cuticle.

Q 3. What are the organs involve in loss of water?

Ans. The organs involve in loss of water are leaves, cuticle and lenticels.

Q 4. Do transpiration is an important process?

Ans. Transpiration is an important process because there is loss of water, as well as it is the removal of extra amount of water.

Q 5. What is Potometer?

Ans. Potometer is an instrument which is used to observe the rate of transpiration.

ACTIVITY 15 — (Opening and Closing of Stomata)

Q 1. What is stoma?

Ans. Stoma is an opening in the epidermis of leaf for exchange of gases and transpiration. It has two guard cells.

Q 2. Which of the epidermis contain stomata in bifacial leaf?

Ans. In a bifacial leaf both epidermises contain stomata.

Q 3. How guard cells are different from other epidermal cells?

Ans. The guard cells are different from epidermal cells because they are kidney shaped and contain chloroplast.

Q 4. Why stomata open at day time?

Ans. Stomata open at day time due to the presence of sunlight which is required for photosynthesis. The guard cells become turgid by taking water due to endosmosis.

Q 5. What is endosmosis?

Ans. The movement of water from outside to inside the cell is called endosmosis.