SELF ASSESSMENT TEST

(Chapter 6 : Plant water relation)

Time : 1 Hour] **[Marks : 20**

Notes :

1. All questions are compulsory.
2. Figures to the right indicate full marks.

SECTION – A

Q. 1. Multiple Choice Questions (MCQ) : *(1 mark each)*

(i) In guard cells, when sugar is converted into starch, the stomatal pore ..... .

(a) closes almost completely (b) opens partially

(c) opens fully (d) remains unchanged **[1]**

(ii) Plasmolysed cell becoming turgid is process of ..... .

(a) replasmolysis (b) incipient plasmolysis

(c) deplasmolysis (d) exosmosis **[1]**

(iii) Epistomatic leaf shows ..... .

(a) stomata on upper side (b) stomata on lower side

(c) stomata on both surfaces (d) absence of stomata **[1]**

(iv) What will be the condition of guard cells during night-time?

(a) Show increased turgor pressure

(b) Become flaccid

(c) Increase uptake of K^+ and Cl^- ions

(d) Starch converted to sugar **[1]**

Q. 2. Very Short Answer Questions (VSA) : *(1 mark each)*

(i) What is apoplast pathway? **[1]**

(ii) What is loading of vein? **[1]**

SECTION – B

Q. 3. Short Answer Questions (SA - I) : *(2 marks each)*

(i) Classify the following to form Column B as per the category given in Column A :

[Capillary water, Combined water, Hygroscopic water, Gravitational water]

Column A	Column B
(1) Water adsorbed on soil particles	----------
(2) Water penetrated deep in soil	----------
(3) Water present as hydrated oxides	----------
(4) Water present between soil particles	----------

[2]

(ii) Define the following terms :

(a) Transpiration (b) Active absorption. **[2]**

SECTION – C

Q. 4. Short Answer Questions (SA - II) : *(3 marks each)*

(i) Why is transpiration called 'a necessary evil'? **[3]**

(ii) Explain the principles of cohesion tension theory and its limitations? **[3]**

SECTION – D

Q. 5. Long Answer Questions (LA) : *(4 marks)*

Complete the Table : **[4]**

Event	Physical process
(1) Soaking of Seeds	----------
(2) Water entering guard cells	----------
(3) Exchange of gases	----------
(4) Loss of water in liquid form	----------
(5) Water coming out through earthen pot	----------
(6) Loss of water in vapour form	----------
(7) Absorption of solutes passively by carrier	----------
(8) Spreading of fragrance of incense stick	----------