

NEET TRANSPORT IN PLANTS — PHLOEM TRANSPORT: PRESSURE FLOW HYPOTHESIS — PYQS

Max. Marks: 28

Questions: 7

Section A (MCQ) — 7 questions

Q.1 "Girdling Experiment" was performed by Plant Physiologists to identify the plant tissue through which: [NEET (UG) 2022]

- (1) water is transported
- (2) food is transported
- (3) for both water and food transportation
- (4) osmosis is observed

Scan or tap for the full solution



Q.2 What is the direction of movement of sugars in phloem? [NEET (UG) 2019]

- (1) Downward
- (2) Bi-directional
- (3) Non-multidirectional
- (4) Upward

Scan or tap for the full solution



Q.3 A few drops of sap were collected by cutting across a plant stem by a suitable method. The sap was tested chemically. Which one of the following test results indicates that it is phloem sap?

[NEET 2016 (Phase 2)]

- (1) Acidic
- (2) Alkaline
- (3) Low refractive index
- (4) Absence of sugar

Scan or tap for the full solution



Q.4 In a ring girdled plant [AIPMT 2015 (Cancelled)]

- (1) the shoot and root die together
- (2) neither root nor shoot will die
- (3) the shoot dies first
- (4) the root dies first.

Scan or tap for the full solution



Q.5 Function of companion cells is :

[AIPMT 2011 (Mains)]

- (1) Providing water to phloem
- (2) Loading of sucrose into sieve elements
- (3) Loading of sucrose into sieve elements by passive transport
- (4) Providing energy to sieve elements for active transport

Scan or tap for the full solution



Q.6 The translocation of organic solutes in sieve tube members is supported by [AIPMT 2006]

- (1) cytoplasmic streaming
- (2) root pressure and transpiration pull
- (3) P-proteins
- (4) mass flow involving a carrier and ATP.

Scan or tap for the full solution



Q.7 Loading of phloem is related to [AIPMT 2001]

- (1) increase of sugar in phloem cell
- (2) elongation of phloem cell
- (3) separation of phloem parenchyma
- (4) strengthening of phloem fiber

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7				
Ans.	2	2	2	4	2	3	1				