



EXAM PAPERS PRACTICE

Boost your performance and confidence with these topic-based exam questions

Practice questions created by actual examiners and assessment experts

Detailed mark scheme

Suitable for all boards

Designed to test your ability and

9.1 Transport in the Xylem of Plants

Easy



BIOLOGY

IB HL



EXAM PAPERS PRACTICE

9.1 Transport in the Xylem of Plants

Question Paper

Course	DP IB Biology
Section	9. Plant Biology (HL Only)
Topic	9.1 Transport in the Xylem of Plants
Difficulty	Easy

EXAM PAPERS PRACTICE

Time allowed: 10
Score: /5
Percentage: /100

Question 1

Which of the following is **not** a water-saving adaptation found in xerophytic plants?

- A. Sunken stomata
- B. High density of chloroplasts
- C. Rolled leaves
- D. Widespread root network

[1 mark]

Question 2

Which row of the table gives the best summary of the conditions in which mineral ions are taken up by plant roots?

	Osmolarity in soil	Osmolarity in root hair cell cytoplasm	Transport mechanism
A.	Low	High	Water channels across membrane
B.	High	Low	Transporter proteins
C.	High	High	Via membrane bilayer
D.	Low	High	Transporter proteins

[1 mark]

Question 3

Which of the following is **not** a consequence of the transpiration stream in plants?

- A. An increased rate of photosynthesis
- B. Plants remaining upright
- C. The plant retaining heat
- D. Supply of mineral ions to plant tissues

[1 mark]

Question 4

Which row of the table best summarises the interaction of water molecules during water uptake by a plant?

	Water molecules pulling each other up	Water molecules sticking to the xylem walls	Capillary action
A.	cohesion	adhesion	adhesion
B.	cohesion	cohesion	adhesion
C.	adhesion	adhesion	cohesion
D.	cohesion	cohesion	cohesion

[1 mark]

Question 5

In plants, which two substances does the xylem carry primarily?

- A. Water and sugars
- B. Sugars and mineral ions
- C. Water and mineral ions
- D. Starch and mineral ions

[1 mark]