



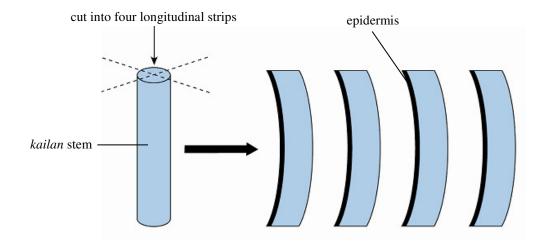


## CHAPTER 3: MOVEMENT OF SUBSTANCES ACROSS THE PLASMA MEMBRANE



## The Effects of Hypotonic, Hypertonic and Isotonic Solutions

1. A fresh *kailan* stem was cut into four longitudinal strips in an experiment. The four strips of *kailan* stem curved immediately after being cut.



Which of the following statements explain the phenomenon shown in the diagram?

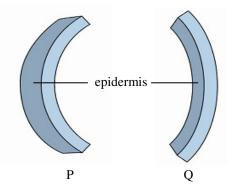
- I The thick epidermal wall does not stretch.
- II The inner layer of the stem is more elastic.
- III The inner layer of the stem stretches easily.
- IV The epidermis has thick cellulose walls which are less elastic.
- A I and II only
- **B** III and IV only
- **C** I, III and IV only
- **D** I, II, III and IV

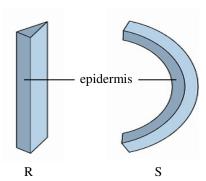
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2. The diagram below shows the results of immersing four strips of *kailan* stem in four solutions, P, Q, R and S, of different concentrations.





Which of the following shows the arrangement of the solutions in ascending order of concentration?

- **A** P, R, Q, S
- **B** Q, O, S, R
- $\mathbf{C}$  R, Q, P, S
- **D** S, Q, R, P