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Q.1 what are plant hormones.

Ans In plants, certain chemical substances are necessary for proper growth & development. These chemical substances are called plant hormones or phytohormones. Different plant hormones help to coordinate growth, development and responses to the environment. For example auxins, gibberellins, cytokinins, ethylene and abscisic acid are plant hormones.

Q.2 How is the movement of a leaves of the sensitive plant different from the movement of shoot towards light?

Ans	movement of leaf in sensitive plant	movement of shoot towards light
(i)	It is independent of direction of stimulus	It is depend on the direction of stimulus
(ii)	Independent of growth	It is a growth movement

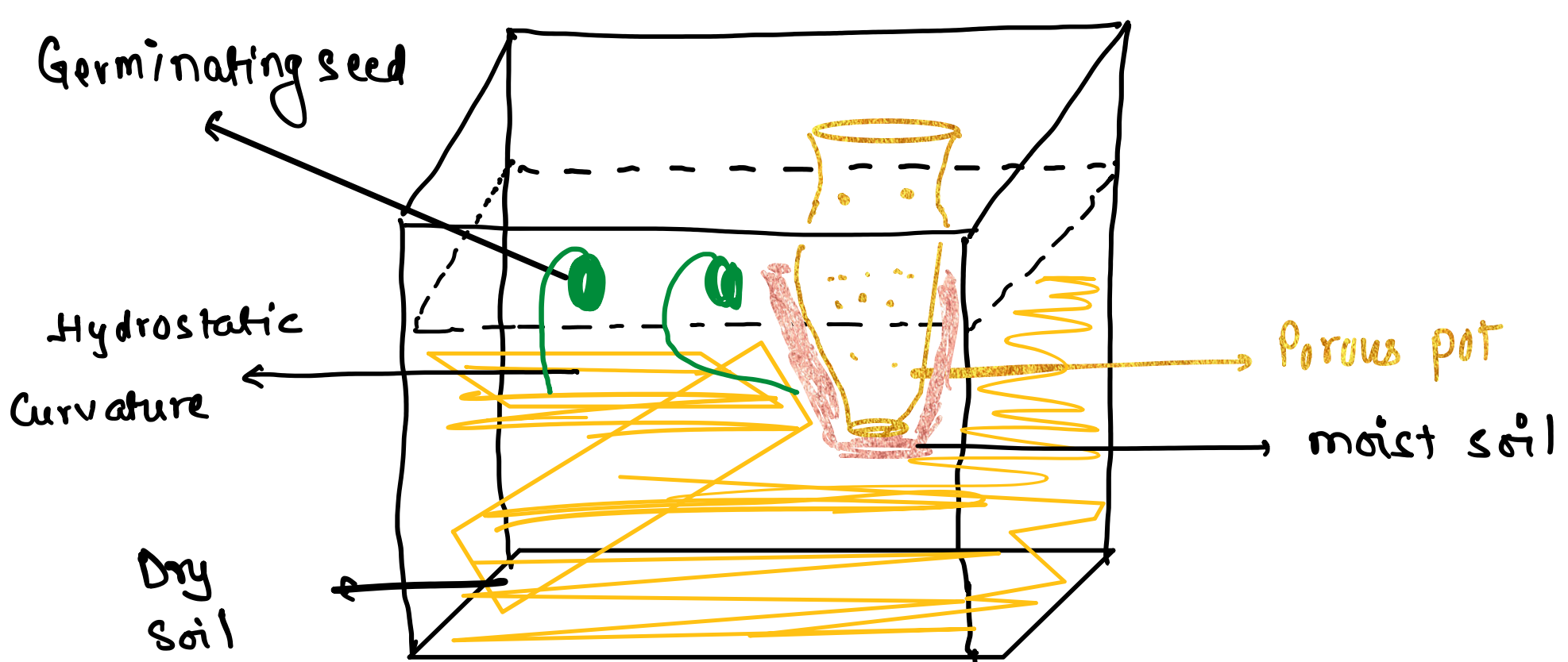
Q.3 Give an example of a plant hormone that promotes growth

Ans Auxin is the plant hormone that helps in cell elongation and growth.

Q.4 How do auxins promote the growth of tendril around a support?

Ans Less auxin occurs on the side of contact as compared to the free side. Auxin promotes the growth on the free side. As a result part of tendril grow rapidly which is away from support as compare to part in contact with support. This causes the tendril to circle around the support and thus clinging to it.

Q.5 Design an experiment to demonstrate hydrotropism



Experiment to demonstrate hydrotropism:-

- (i) Take a wire mesh and cover it with moist saw dust
- (ii) Place some germinating seedling (Pea or gram) on the moist saw dust
- (iii) Keep the saw dust moist by sprinkling water at regular interval. observe after 2-3 days.
- (iv) As the radicals come out of seeds, they are seen to move towards the perforations. After some growth they bend back and enter the perforation to reach the moist saw dust in complete disregard of gravity (+ve hydrotropism)

conclusion:- Bending of radicals back into moist soil saw dust is hydrotrophic movement. It occur despite being against the force of gravity.