

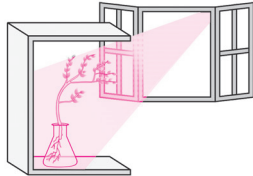


PRACTICAL QUESTIONS

Multiple Choice Questions

1. What does the given experimental set up demonstrate ?

- (a) Hydrotropism
- (b) Negative phototropism
- (c) Photoperiodism
- (d) Positive phototropism



Ans. (d) : The given setup demonstrates the positive phototropism of stem towards light source.

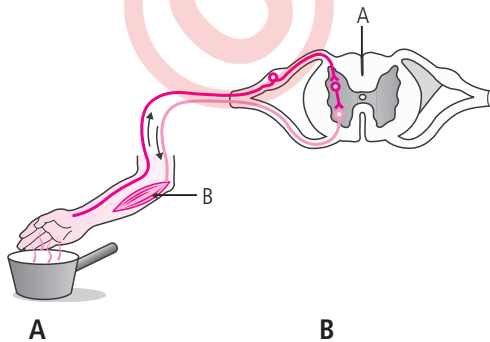
2. The given experimental set up tests the response of different parts of plant towards gravity. The scientific terms for the conclusions is



- (a) geotropism
- (b) phototropism
- (c) seismonasty
- (d) thigmotropism.

Ans. (a) : Geotropism involves the orientation of plant body parts in relation to gravitational pull of earth *i.e.*, gravity. The stem is negatively geotropic while roots are positively geotropic.

3. Refer to the given figure and identify A and B.

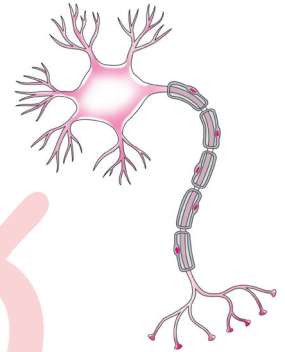


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|--|---|
| <ul style="list-style-type: none"> (a) Brain (b) Spinal cord (c) Spinal cord (d) Brain | <ul style="list-style-type: none"> (a) Tendons (b) Ligament (c) Hand muscles (d) Hand muscles |
|--|---|

Ans. (c)

4. Priya observed nerve cell under microscope and made the given figure. The mistake in her figure is that cyton is shown to have no

- (a) dendrite
- (b) cytoplasm
- (c) nucleus
- (d) all of these.



Ans. (c)

5. When we touch a hot plate unknowingly, then heat is sensed by a receptor present in our finger. What is the name of the mentioned receptor ?

- (a) Thermoreceptor
- (b) Gustatoreceptor
- (c) Olfactoreceptor
- (d) Phonoreceptor

Ans. (a)

Subjective Questions

1. Name the apparatus used to demonstrate geotropism in the laboratory.

Ans. Klinostat

2. How can you demonstrate phototropism?

Ans. Phototropism can be easily demonstrated by keeping a potted plant in a phototropic chamber. A phototropic chamber is a box painted black and provided with a glass window on one side through which light can pass.

3. Which type of movement is considered more powerful—Hydrotropism or geotropism?

Ans. Hydrotropic movements are considered more powerful than geotropic movements.

4. What will happen to stem if during an experiment demonstrating geotropism, klinostat is made to stop for some time at a particular place?

Ans. During rotation, if the klinostat is made to stop for some time at a particular place at regular intervals, the stem may show negative geotropism. This is because that particular side of the stem gets greater stimulus of gravity than the other side.

