

AQA, OCR, Edexcel

A Level

A Level Biology

**Stimuli and Response in Plants
Answers**

Name:

M M E

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Total Marks: /16

Stimuli and Responses in Plants

Plants like animals are sensitive to changes in their environment and have specific adaptations to aid their response to stimuli.

1. a) i) What is meant by the term tropism? (1 marks)

ii) Using the diagram below, identify the tropisms occurring at the arrows marked A and B. (3 marks)



iii) What is the name given to the collective set of chemicals that coordinate plant responses to help them grow? (1 mark)

b) Auxin is involved in plant growth and helps to instil apical dominance.

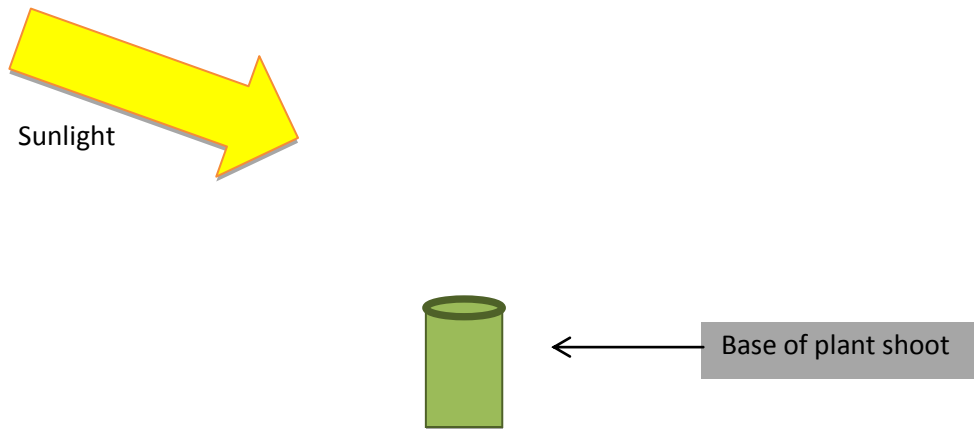
i) What is meant by the term 'apical dominance'? (1 mark)

ii) Explain how Indol Acetic Acid promotes positive phototropism. (4 marks)

c)

i) How is IAA transported over long distance in the plant? (1 mark)

- ii) The diagram below shows the direction of sunlight and the base of a plant shoot. Draw the rest of the shoot and indicate where the highest concentration of IAA is found. (2 marks)



- iii) Explain why the shoot is this shape. (2 marks)