

AS Level Biology A
H020/02 Depth in biology

Question Set 2

1. (a) A group of students wanted to observe the position of xylem vessels in the leaf stalks (petioles) of celery.

Describe a procedure they could use to do this.

[2]

- (b) Water Starwort is a hydrophyte belonging to the genus *Callitriche*. It is an aquatic plant which has its stems fully submerged in water.

Cholla is a cactus belonging to the genus *Cylindropuntia*. It can grow over 4 metres tall.

In the space provided below, give **one** way in which you would expect the walls of the xylem vessels in the stems of Water Starwort and the walls of xylem vessels in the stems of Cholla, to differ from those of a herbaceous dicotyledonous plant growing in a deciduous woodland.

Water Starwort.....

Cholla.....

[2]

- (c) Xylem and phloem are two vascular tissues found in plants.

State **one** similarity and **two** differences between the structure of xylem and phloem.

Similarity 1.....

Difference 1.....

Difference 2.....

[3]

Total Marks for Question Set 2: 7

OCR

Oxford Cambridge and RSA

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge