

CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International Advanced Subsidiary and Advanced Level

MARK SCHEME for the May/June 2015 series

9700 BIOLOGY

9700/33

Paper 3 (Advanced Practical Skills 1),
maximum raw mark 40

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	Mark Scheme	Syllabus	Paper
	Cambridge International AS/A Level – May/June 2015	9700	33

- 1 (a) (i) starch test + iodine solution ; [1]
- (ii) reducing sugar test + add Benedict's solution + heat (80 °C – 100 °C) ; [1]
- (iii) table with heading + solutions + (any column/row headed) + observations ;
records results for reducing sugar test and starch test for **S1**, **S2** and **S3** ;
for starch test on **S3** records colour change to blue-black
+ for reducing sugar test on **S2** records colour change from blue to yellow, green, red ; [3]
- (iv) completed table identifying mixture of sucrose and glucose as **S2**
+ sodium chloride as **S1** + starch as **S3** ; [1]
- (v) (level of risk) medium or high ; [1]
- (b) (i) completed sentence, inserting leaves + plasmolysed ; [1]
- (ii) table with heading + solutions + (any column/row headed) + number + cells ;
records repeats ;
for **W** records number as 0 or 1 + for **S1** records number as 6 or above ; [3]
- (iii) *idea of* difficulty judging which cells are plasmolysed ; [1]
- (iv) 1 thin and continuous lines + size at least 70 mm for at least one cell ;
2 draws one cell for **W** and one cell for **S1** + cell walls drawn as double lines ;
3 for **S1**, draws cell membrane coming away from cell wall ;
4 correct label with label line to cytoplasm for **W** and **S1** ; [4]
- (v) for **S1** or **S3**, osmosis + correct direction of water movement ;
for **S1**, water moving out of cell + correct reference to water potential ;
for **S3**, *idea of* no net movement of water **or** correct ref. to water potential ; [3]

[Total: 19]