

APOLLO

Adaptation to environment

HL

Biology

First assessment 2025

4 questions | mark schemes

Mark-scheme answers

Biology HL | Paper 1A | May 2025 TZ2 | Q35 | 1 marks

35. D

Biology HL | Paper 1A | Nov 2025 TZ1 | Q1 | 1 marks

1. A

Biology HL | Paper 1A | Nov 2025 TZ3 | Q39 | 1 marks

39. A

6.	a	a. groups/types of ecosystems / ecosystems with similar communities; b. with similar/characteristic abiotic/climatic conditions/rainfall/temperatures; c. convergent evolution (produces similarities between ecosystems in a biome);		2 max
6.	b	a. extensive roots (to collect water from a wide area/to collect water after rainfall); b. deep roots to collect water from underground sources; c. (thick) waxy cuticle to reduce transpiration/water loss/evaporation; d. water storage tissue/thick stems/thick leaves/succulent (to survive droughts); e. no leaves/narrow leaves/rolled leaves/spines instead of leaves to reduce the surface area for transpiration/evaporation; f. fewer stomata/sunken/pitted stomata to reduce transpiration/water loss; g. vertical stems to reduce exposure to sun at midday/heating when the sun is overhead/hottest OR pleated stems to allow shrinkage and reswelling/to store water; h. stomata open at night/CAM metabolism;	Mark first three adaptations only.	3 max
6.	c	spines/thorns/stings/spikes OR production of toxins/unpalatable substances OR mimicry/camouflage (to resemble rocks) OR mutualism with an ant/animal which defends the acacia/plant against herbivores;		1 max