Competition and Adaptation 2 MS

QUESTION 1

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	increased water uptake	ignore nutrients / food	1
		allow quicker water uptake	
	(after) rain	allow collects water over larger	1
		area	
		accept ideas in terms of more	
		successful competitor	
a)ii)	water storage or stability or	ignore absorption of water from	1
	safety from predators	soil	
b)	reduces water loss / evaporation	accept reduces transpiration	1
	wax protects plant or reflects	allow stops water loss	1
	heat	ignore reflects light	
	or keeps plant cool or	accept enclosed stomata or less	
	unpalatable	exposure of stomata or increased	
	folding reduces surface area or	humidity or less water	1
	folding reduces warming	concentration gradient	
		allow prevents burning	
		ignore less likely to be damaged	
Total marks			6

QUESTION 2

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	brown (colour)		1
b)	(long) ears		1
c)	(long) horns		1
d)	(white) ring		1
Total marks			4

QUESTION 3

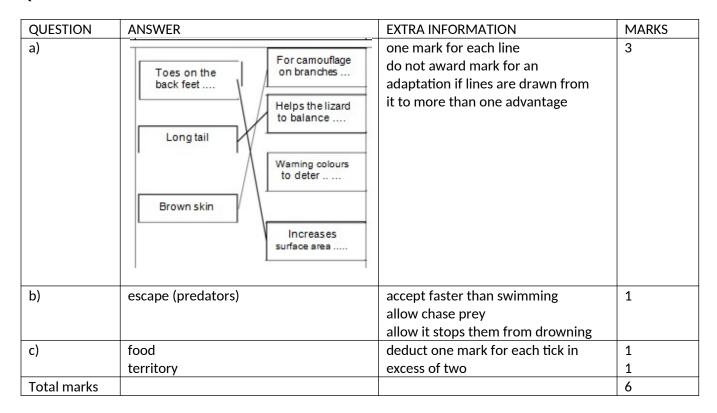
QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	(reduced) competition	ignore fighting	1
	for any one from:		1
	light water	ignore Sun	
	nutrients / ions / salts / minerals	ignore food	
	space colonise new areas	allow less overcrowding	
b)	hooks	allow spines	1
	attach to animals / human	ignore wind dispersal	1

	clothing / animals carry fruits long distances	
Total marks		4

QUESTION 4

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	С		1
b)	В		1
c)	D		1
d)	E		1
e)	F		1
Total marks			5

QUESTION 5



QUESTION 6

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	extremophile(s)		1
b)i)	common (periwinkle) and flat	either order, both required	1
b)ii)	common and flat) both live in the	allow habitats overlap the most	1
	same habitat / area / named area		
b)iii)	any two from:	allow cannot tolerate temperature	2

	would have wrong food	/ dehydration	
	• would otherwise be exposed to		
	(specific) predators	allow low salt concentration (in	
	cannot tolerate extended	rock pools)	
	exposure to air or reduced		
	submersion in seawater		
	• cannot tolerate high salt		
	concentration (in rock pools)		
	cannot compete with small		
	periwinkle		
Total marks			5

QUESTION 7

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	any two from:	ignore oxygen / food / sun /	2
	• light	carbon dioxide	
	• water		
	• space		
	• nutrients / ions / minerals /		
	named	accept two named minerals / ions	
		for 2 marks	
a)ii)	less competition for water	ignore space / light / food	1
	or		
	more water / nutrients / minerals		
	available		
b)	camouflage / same shape as leaf	allow 'blends in'	1
	/ looks like a leaf	ignore colour	
Total marks			4