OCR GCSE 21ST CENTURY BIOLOGY B · J257

BIOLOGY



MARK SCHEME

B6.3 HOW DOES OUR UNDERSTANDING OF BIOLOGY HELP US CLASSIFY THE DIVERSITY OF ORGANISMS ON EARTH? (HIGHER)

SCORE	PERCENTAGE
/12	%

STEMUP

These questions belong to OCR, not to us.

The examination questions, mark schemes and examiner comments in this pack were written and published by OCR. They are past assessment materials, reproduced here so that students can revise from them.

What we do not own

STEMUP is not affiliated with OCR and does not own, and makes no claim to own, any of the question, mark scheme or examiner report material in this pack. OCR has not endorsed, approved or been involved in the production of it. OCR and the qualification titles used here belong to their respective owners and appear for identification only.

Where to find the originals

OCR publishes its past papers, mark schemes and examiner reports. Always check the current specification at ocr.org.uk before you revise, because content and wording can change between series.

If you hold the rights to any material in this pack and would like it amended or removed, contact admin@stemup.co.uk and we will act on it.

Question			Answer/Indicative content	Marks	Guidance
1			Whales ✓ As they are closer to them on the tree ✓	2	
			Total	**2**	
2	a		**Any three from** B most similar to humans ✓ D most different to humans ✓ Idea of showing how closely related different organisms are ✓ Reference to different proteins ✓	3	
	b		Longer sequence ✓ Repeat ✓	2	
	c		✓Can identify species from small parts of the organism ✓Can distinguish between species that look very similar	2	
			Total	**7**	
3		i	D and F C and E	1	D and F **in either order**, linked to A C and E **in either order**, linked to B **Examiner's Comments** This was a well answered question. Candidates displayed good data handling skills in working out the evolutionary relationships.
		ii	their DNA / genetic material is very similar to their ancestor / species A (1) (so) there has been less time / fewer generations for mutations / changes / variation in the DNA (1)	2	**do not credit** genes **accept less** time to evolve **Examiner's Comments** This was a challenging question, with very few candidates explaining the link between DNA similarity and time taken to evolve correctly.
			Total	**3**	

© OCR 2019.

STEMUP.CO.UK