

APOLLO

Evolution and speciation

HL

Biology

First assessment 2025

12 questions | mark schemes

Mark-scheme answers

Biology HL | Paper 1A | May 2025 TZ1 | Q33 | 1 marks

33. B

Biology HL | Paper 1A | May 2025 TZ2 | Q21 | 1 marks

21. A

Biology HL | Paper 1A | May 2025 TZ2 | Q33 | 1 marks

33. C

Biology HL | Paper 1A | May 2025 TZ2 | Q34 | 1 marks

34. A

Biology HL | Paper 1A | May 2025 TZ3 | Q21 | 1 marks

21. C

Biology HL | Paper 1A | May 2025 TZ3 | Q33 | 1 marks

33. A

1.	a		3 / three;	Accept Pan, Gorilla, Pongo	1
1.	b		(No) a. the data only shows the two amino acids that differ between <u>humans</u> and <i>P. paniscus</i> or <i>G. gorilla</i> (in the FOXP2 protein); b. the data only shows the comparison of one <u>protein</u> ; c. <i>P. paniscus</i> and <i>G. gorilla</i> protein could have more/fewer/other amino acids that differ (between them) OR the specific amino acid differences are unknown;		2 max
1.	c		a. length / size of chromosome 2 in humans and 12+13 in chimpanzees is approximately equal OR size of the human chromosome 2 is larger than either chromosomes 12 or 13; b. (bands/banding) patterns/(DNA) sequences on chromosomes 12 and 13 match chromosome 2; c. centromere sequences present in chromosome 2 where there is no centromere OR chromosome 2 has an additional centromere sequence (within the chromosome); d. telomere sequence present in chromosome 2 where there is no telomere OR chromosome 2 has an additional telomere sequence (within the chromosome); e. presence of telomere sequences at the predicted fusion point in human chromosome 2; f. chromosome 12 is inverted in the short arm of chromosome 2;		4 max

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Question			Answers	Notes	Total
1.	d	i	small/fixed size; nucleic acid/DNA/RNA; <u>capsid</u> (made from protein); no cytoplasm; few or no enzymes; attachment protein;	Do not accept genetic material.	1 max
1.	d	ii	zoonosis/zoonoses/zoonotic;		1

Question	Answers	Notes	Total
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7.	c		a. loss of habitat/breeding grounds leads to less reproductive success/lower survival/valid example; b. loss of food sources/resources leads to increased hunger/starvation/lower energy/valid example; c. loss of shelter leads to increased predation/lower protection/valid example;		2 max
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Mark-scheme answers

Biology HL | Paper 1A | Nov 2025 TZ1 | Q33 | 1 marks

33. A

Biology HL | Paper 1A | Nov 2025 TZ3 | Q33 | 1 marks

33. A

Biology HL | Paper 1A | Specimen 2025 | Q32 | 1 marks

32. C

Biology HL | Paper 1A | Specimen 2025 | Q33 | 1 marks

33. D