

Question Number	Answer	Additional guidance	Mark
8(a)	idea of found in only one specific geographical location ;	ACCEPT reference to {one / the} area / place IGNORE habitat or environment	(1)

Question Number	Answer	Additional guidance	Mark
8(b)	<p>1. idea that genetic diversity {will be low / decreases / stays the same } OR idea of smaller gene pool ;</p> <p>2. closely related wolves mating / inbreeding / eq ;</p> <p>3. risk of inbreeding depression / more chance of homozygous recessive genotypes / eq ;</p> <p>4. risk of genetic drift / eq ;</p>	<p>2. NOT inTERbreeding Do not give this mark for "inbreeding depression"</p> <p>3. ACCEPT greater risk of genetic disorders</p> <p>4. ACCEPT reference to loss of alleles</p>	(2)

Question Number	Answer	Additional guidance	Mark
8(c)	1. idea that this increases the gene pool ;  2. idea that this increases potential for the species to { adapt / survive } ;  3. description of how this will increase survival e.g. better hunters, disease resistance ;	1. ACCEPT introduction of genetically different individuals, { new / different } alleles introduced into population  2. ACCEPT population but not individuals	(2)

Question Number	Answer	Additional guidance	Mark																
8(d)(i)	<table border="1"> <thead> <tr> <th>Adaptation for the Ethiopian wolf</th> <th>Behavioural</th> <th>Anatomical</th> <th>Physiological</th> </tr> </thead> <tbody> <tr> <td>Small sharp teeth widely spaced to cope with small prey</td> <td></td> <td><b>X</b></td> <td></td> </tr> <tr> <td>Narrow snout to fit into small gaps when hunting small prey</td> <td></td> <td><b>X</b></td> <td></td> </tr> <tr> <td>Hunting alone, as prey too small to share with other wolves</td> <td><b>X</b></td> <td></td> <td></td> </tr> </tbody> </table>	Adaptation for the Ethiopian wolf	Behavioural	Anatomical	Physiological	Small sharp teeth widely spaced to cope with small prey		<b>X</b>		Narrow snout to fit into small gaps when hunting small prey		<b>X</b>		Hunting alone, as prey too small to share with other wolves	<b>X</b>			ACCEPT in the cells indicated a cross or tick	(3)
Adaptation for the Ethiopian wolf	Behavioural	Anatomical	Physiological																
Small sharp teeth widely spaced to cope with small prey		<b>X</b>																	
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8(d)(ii)	<p><b>(QWC– Spelling of technical terms must be correct and the answer must be organised in a logical sequence)</b></p> <ol style="list-style-type: none"> <li>1. genetic variation in population / variation due to mutation / eq ;</li> <li>2. description of selection pressure ;</li> <li>3. idea that some individuals possessed { advantageous / beneficial / eq } characteristics ;</li> <li>4. (therefore) survived to adulthood / survived to breed ;</li> <li>5. passing on {advantageous alleles / eq} (to offspring) / eq ;</li> <li>6. change in allele frequency (over generations) / eq ;</li> <li>7. idea of {geographical / reproductive} isolation ;</li> </ol>	<p><b>QWC emphasis is clarity of expression</b></p> <ol style="list-style-type: none"> <li>2. ACCEPT small prey</li> <li>5. NOT just passing on a characteristic or genes</li> </ol>	<p><b>(4)</b></p>