

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)	1. idea that genetic diversity {will be low / decreases / stays the same } OR idea of smaller gene pool ;  2. closely related wolves mating / inbreeding / eq ;  3. risk of inbreeding depression / more chance of homozygous recessive genotypes / eq ;  4. risk of genetic drift / eq ;	2. NOT inTERbreeding Do not give this mark for "inbreeding depression"  3. ACCEPT greater risk of genetic disorders  4. ACCEPT reference to loss of alleles	(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)	Adaptation for the Ethiopian wolf	Behavioural	Anatomical	Physiological	ACCEPT in the cells indicated a cross or tick	(3)
	Small sharp teeth widely spaced to cope with small prey		X			
	Narrow snout to fit into small gaps when hunting small prey		X			
	Hunting alone, as prey too small to share with other wolves	X				

Question Number	Answer	Additional guidance	Mark
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>	(4)