

Question Number	Answer	Additional Guidance	Mark
8(a)(i)	<ol style="list-style-type: none"> 1. closely-related lions mated with each other / a small gene pool / eq ; 2. reference to inbreeding depression ; 3. idea of increased chance of homozygous recessive genotypes for genetic defects ; 	<ol style="list-style-type: none"> 2. NOT interbreeding 3. NOT homologous ACCEPT recessive alleles more likely to be expressed 	(2)

Question Number	Answer	Additional Guidance	Mark
8(a)(ii)	<ol style="list-style-type: none"> 1. selection of { unrelated / genetically different } mates / eq ; 2. use of stud books / records of mating / DNA profiling / eq ; 3. exchange of animals between zoos / eq ; 4. exchange of gametes between zoos / eq ; 5. IVF / AI / eq ; 		(4)

Question Number	Answer	Additional Guidance	Mark
8(b)	<ol style="list-style-type: none"> 1. idea of { genetic cause / genetic mutations } ; 2. idea that a change in diet had no effect ; 3. reference to { monoamine oxidase (A) / MAOA } ; 4. idea of behaviour learnt from mother ; 		(2)