

Question Number	Answer	Mark
<b>6(a)</b>	<p><b>Niche:</b></p> <ol style="list-style-type: none"> <li>1. the {role / function / eq} (of a species / organism) ;</li> <li>2. {within the community / ecosystem / habitat / environment / eq} ;</li> </ol> <p><b>Species richness:</b></p> <ol style="list-style-type: none"> <li>3. number of (different) species ;</li> <li>4. in a {habitat / eq} / at any one time ;</li> </ol>	<b>max (3)</b>

Question Number	Answer	Mark
<b>*6 (b)(i)QWC</b>	<p>(QWC - Spelling of technical terms must be correct and the answer must be organised in a logical sequence)</p> <ol style="list-style-type: none"> <li>1. (cheetah has) {lowest genetic diversity / least genetic variation} (of the listed cats) ;</li> <li>2. correct reference to lack of adaptation / example / no selective advantage (when environment changes) ;</li> <li>3. (therefore) less likely to survive / eq ;</li> <li>4. (therefore) more at risk of {extinction / eq} ;</li> </ol>	<b>max (3)</b>

Question Number	Answer	Mark
<b>6 (b)(ii)</b>	<ol style="list-style-type: none"> <li>1. {greater / eq} genetic diversity (amongst the litter) / eq ;</li> <li>2. greater chance that will {survive / eq} ;</li> <li>3. increased chance of fertilisation / pregnancy / eq ;</li> <li>4. increase in population size / eq ;</li> </ol>	<b>max (2)</b>

Question Number	Answer	Mark
<b>6 (c)</b>	<ol style="list-style-type: none"> <li>1. increases genetic diversity /eq ;</li> <li>2. (because it) allows {outbreeding / mating / eq} with (genetically) different individuals / eq ;</li> <li>3. stop/reduces {inbreeding / mating with parents / siblings} ;</li> <li>4. (which) reduces genetic diversity / eq ;</li> </ol>	<b>max (2)</b>

Question Number	Answer	Mark
<b>6 (d)</b>	cheetahs that are exclusive to one continent ;	<b>(1)</b>