

Question Number	Answer	Mark
<b>8 (a) (i)</b>	(7mm / largest seed size) because has greatest germination success ;	<b>(1)</b>

Question Number	Answer	Mark
<b>8 (a) (ii)</b>	<ol style="list-style-type: none"> <li>1. correct values from graph, i.e. 4 (au) and 20 (au) ;</li> <li>2. correct subtraction e.g. <math>20 - 4 = 16</math> ;</li> <li>3. (change <math>\div</math> original ) X 100 to give correct answer, e.g. <math>(16 / 4) \times 100 = 400\%</math> ;</li> </ol> <p>For correct answer of 400% - 3 marks</p>	<b>(3)</b>

Question Number	Answer	Mark
<b>8 (a) (iii)</b>	<ol style="list-style-type: none"> <li>1. idea of maintaining or increasing {genetic diversity / size of gene pool / genetic variation} ;</li> <li>2. idea of more chance of having beneficial alleles / eq ;</li> <li>3. increases chance of future survival {if environment changes / due to higher adaptability } / eq ;</li> <li>4. less chance of all being susceptible to a disease / eq ;</li> </ol>	<b>(3)</b>

Question Number	Answer	Mark
<b>8 (b)</b>	<ol style="list-style-type: none"> <li>1. details of assessment of seed viability e.g. only select seeds with a living embryo, use of X ray (to detect embryo presence) / eq ;</li> <li>2. idea of {cleaning seeds / surface sterilisation / eq} ;</li> <li>3. idea of drying (of the seed) ;</li> <li>4. idea of storing at low temperatures ;</li> <li>5. idea of regularly testing viability (during storage of seed) ;</li> <li>6. idea of what to do if viability decreases, e.g. if less than 75% germinate collect fresh seed for storage ;</li> </ol>	<b>(4)</b>