

Question Number	Answer	Mark
<b>8 (a)</b>	<ol style="list-style-type: none"> <li>1. ref. to agar / eq ;</li> <li>2. idea that bacteria need to be distributed ;</li> <li>3. idea of {single / named} bacterial strain / eq ;</li> <li>4. appropriate microbiological technique employed e.g. aseptic / sterile plates ;</li> </ol>	<b>maximum (2)</b>

Question Number	Answer	Mark
<b>8 (b)(i)</b>	to allow a comparison with the other discs / to show that any difference between the discs is due to the treatment given to those discs / eq ;	<b>(1)</b>

Question Number	Answer	Mark
<b>8 (b)(ii)</b>	<ol style="list-style-type: none"> <li>1. (tea tree oil) { diffused / eq } (out of disc) ;</li> <li>2. killed the bacteria / inhibits bacterial growth / eq ;</li> </ol>	<b>(2)</b>

Question Number	Answer	Mark
<b>8 (b)(iii)</b>	<ol style="list-style-type: none"> <li>1. record several measurements / eq ;</li> <li>2. divide by number of measurements (to obtain mean) ;</li> </ol>	<b>(2)</b>

Question Number	Answer	Mark
8 (c)	<ol style="list-style-type: none"> <li>1. 3 (or more) dilutions of tea tree oil / eq ;</li> <li>2. from 50% downwards / eq ;</li> <li>3. looking for minimum strength when diameter is same as original strength / eq ;</li> <li>4. one other named variable kept constant ;</li> </ol>	<p><b>maximum (3)</b></p>

Question Number	Answer	Mark
8 (d)	<ol style="list-style-type: none"> <li>1. 37°C is (human) body temperature ;</li> <li>2. (this temp) allows growth of {pathogenic / eq} bacteria / encourages more rapid {growth /reproduction/ eq} ;</li> </ol>	<p><b>(2)</b></p>