

Question Number	Answer	Mark
<b>5 (a)</b>	<ol style="list-style-type: none"> <li>1. idea of half the number of chromosomes found in a {normal body cell/somatic cell / eq} ;</li> <li>2. idea of containing one chromosome from each homologous pair;</li> <li>3. the type of nucleus found in {gametes / sex cells / eq} ;</li> <li>4. a nucleus is (an organelle / (double) membrane-bound structure / eq) ;</li> </ol>	<b>(2)</b>

Question Number	Answer	Mark
<b>5 (b)</b>	<ol style="list-style-type: none"> <li>1. idea that pH increases then decreases;</li> <li>2. correct manipulation of figures in an appropriate context e.g. overall 0.2 change / eq ;</li> </ol>	<b>(2)</b>

Question Number	Answer	Mark
<b>* 5 (c) QWC</b>	<p><b>Take into account quality of written communication when awarding the following points.</b></p> <ol style="list-style-type: none"> <li>1. idea of amino acids transported to rER e.g. tRNA {binding to/ transporting} amino acids (in cytoplasm) ;</li> <li>2. reference to involvement of ribosomes ;</li> <li>3. amino acids {being joined by peptide bonds / forming polypeptide chains / forming primary structure of protein / eq} ;</li> <li>4. {folded into 3-D shape / secondary or tertiary structure} in rER ;</li> <li>5. packaged into vesicles at the end of the rER / eq ;</li> <li>6. vesicles {move to / transported to / fuse with / eq} the Golgi apparatus ;</li> <li>7. idea that protein modified in Golgi apparatus ;</li> <li>8. (modified protein / enzyme / eq) packaged into (secretory) vesicles (by Golgi apparatus) eq ;</li> <li>9. vesicles {move towards / fuse with} cell surface membrane / correct reference to exocytosis / eq ;</li> </ol>	<b>(5)</b>

Question Number	Answer	Mark
<b>5 (d)</b>	<ol style="list-style-type: none"> <li>1. one (nucleus) fuses with the {egg nucleus / female gamete } / eq ;</li> <li>2. one (nucleus) fuses with the (two) polar nuclei / eq ;</li> </ol>	<b>(2)</b>