

Question Number	Answer	Additional guidance	Mark
<b>6(a)(i)</b>	<p>An answer that makes reference to the following:</p> <ul style="list-style-type: none"> <li>• (step A) mitosis (1)</li> <li>• (step B) meiosis (1)</li> </ul>	<p>accept meiosis I</p> <p>do not accept meiosis II</p> <p>ignore II</p>	<b>(2)</b>

Question Number	Answer	Mark
<b>6(a)(ii)</b>	<p>The only correct answer is A W</p> <p><i>B is not correct because the acrosome contains digestive enzymes</i></p> <p><i>C is not correct because the acrosome contains digestive enzymes</i></p> <p><i>D is not correct because the acrosome contains digestive enzymes</i></p>	<b>(1)</b>

Question Number	Answer	Additional guidance	Mark
<b>6(b)</b>	<p>An explanation that includes the following points:</p> <ul style="list-style-type: none"> <li>• (because) differential gene expression occurs (1)</li> <li>• (due to) epigenetic modification / DNA methylation / histone modification (1)</li> <li>• {transcription of / (active) mRNA made from} active genes (1)</li> <li>• (therefore) translation occurs to form a {polypeptide / protein} (1)</li> <li>• (proteins cause) {structural/functional} change to cells to change them into (specialised) sperm cell (1)</li> </ul>	<p>Accept some genes become {switched on / expressed / switched off}</p> <p>Accept description of a {structural/functional} change into a sperm cell</p>	<b>(5)</b>