

Question Number	Answer	Additional guidance	Mark																																																																		
8(c)(i)	<ul style="list-style-type: none"> • correct D2 values (1) • correct calculation of ΣD^2 (1) 	<table border="1"> <thead> <tr> <th>Age (weeks)</th> <th>Rank</th> <th>Mass of egg (g)</th> <th>Rank</th> <th>D</th> <th>D²</th> </tr> </thead> <tbody> <tr> <td>36</td> <td>1</td> <td>2.27</td> <td>8</td> <td>-7</td> <td>49</td> </tr> <tr> <td>39</td> <td>2</td> <td>1.91</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>42</td> <td>3</td> <td>2.18</td> <td>5.5</td> <td>-2.5</td> <td>6.25</td> </tr> <tr> <td>45</td> <td>4</td> <td>2.28</td> <td>9</td> <td>-5</td> <td>25</td> </tr> <tr> <td>48</td> <td>5</td> <td>2.12</td> <td>4</td> <td>1</td> <td>1</td> </tr> <tr> <td>51</td> <td>6</td> <td>2.19</td> <td>7</td> <td>-1</td> <td>1</td> </tr> <tr> <td>54</td> <td>7</td> <td>2.18</td> <td>5.5</td> <td>1.5</td> <td>2.25</td> </tr> <tr> <td>57</td> <td>8</td> <td>2.09</td> <td>3</td> <td>5</td> <td>25</td> </tr> <tr> <td>60</td> <td>9</td> <td>2.03</td> <td>2</td> <td>7</td> <td>49</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>159.5</td> </tr> </tbody> </table> <p> $\Sigma D^2 = 159.5$ Correct answer with no working shown scores full marks 1 mark awarded for correct Σ using incorrect D² values calculated in table </p>	Age (weeks)	Rank	Mass of egg (g)	Rank	D	D ²	36	1	2.27	8	-7	49	39	2	1.91	1	1	1	42	3	2.18	5.5	-2.5	6.25	45	4	2.28	9	-5	25	48	5	2.12	4	1	1	51	6	2.19	7	-1	1	54	7	2.18	5.5	1.5	2.25	57	8	2.09	3	5	25	60	9	2.03	2	7	49						159.5	(2)
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8(c)(ii)	<ul style="list-style-type: none"> • correct values substituted into formula (1) • correct r_s value (1) 	<p>Example of calculation: $957 \div 720$</p> <p>$= -0.329 / -0.33 / -0.3$</p> <p>Allow ECF from answer calculated in (c)(i) Correct answer with no working shown scores full marks</p>	(2)

Question Number	Answer	Additional guidance	Mark
8(c)(iii)	<p>An explanation that includes the following points:</p> <ul style="list-style-type: none"> • (the null hypothesis) should be accepted (1) • (because) 0.38 is lower than 0.683 (1) 	mark points independently	(2)