

# Excretion in humans

## Mark Scheme

<b>Level</b>	IGCSE
<b>Subject</b>	Biology
<b>Exam Board</b>	CIE
<b>Topic</b>	Excretion in Humans
<b>Sub-Topic</b>	
<b>Paper Type</b>	Alternative to Practical
<b>Booklet</b>	Mark Scheme

**Time Allowed:** 20 minutes

**Score:** /16

**Percentage:** /100

1 (a) (i)	five digits / toes / fingers;	[1]	<p><b>A</b> jointed legs / joints / legs have joins / legs are joined  <b>I</b> skin / muscular legs / large legs / same sized legs  <b>A</b> folded skin  <b>A</b> similar proportions / shape</p>												
(ii)	<table border="1"> <thead> <tr> <th><i>feature</i></th> <th><i>animal A</i></th> <th><i>animal B</i></th> </tr> </thead> <tbody> <tr> <td>skin or scales</td> <td>scales  present</td> <td>smooth  absent</td> </tr> <tr> <td>nails / claws / talons</td> <td>yes or present</td> <td>no or absent</td> </tr> <tr> <td>feet / digits or digits or webbing</td> <td>claws / talons / nails no webbing  absent</td> <td>no claws / talons / nails webbed  present</td> </tr> </tbody> </table> <p><i>Both features = 1 mark</i>                      <i>2 comparisons = 2</i></p>	<i>feature</i>	<i>animal A</i>	<i>animal B</i>	skin or scales	scales  present	smooth  absent	nails / claws / talons	yes or present	no or absent	feet / digits or digits or webbing	claws / talons / nails no webbing  absent	no claws / talons / nails webbed  present	[3]	<p>completion of Table 2.1 for two differences based on:  naming one feature from any 2 of the 3 rows;  correct comparison for each ;;</p> <p><b>A</b> description of webbing / claws if correct</p>
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(b)	<p><b>O:</b> outline clear, unbroken lines;</p> <p><b>S:</b> larger than original Fig. 2.1 and digits in proportion to rest of limb;</p> <p><b>D1:</b> presence of 5 digits ;  <b>D2:</b> minimum 4 claws;</p> <p><b>L:</b> digit / toes / fingers / scales / join(t) / skin / claws / nails / talons;</p>	[5]	<p>Please indicate each marking point using a tick or a cross, in order in a vertical line next to the drawing.  <b>I</b> shading / representation of scales  <b>R</b> majority of sketched / artistic lines but  <b>I</b> minor / isolated overlaps or breaks.</p> <p>Drawing to cover more than half vertical space (&gt;60mm) but should not extend into the printing of the following question</p> <p>Label line must make contact with feature.  Please indicate correct label with tick next to it.  If animal B drawn allow O, S and L [Max 3]</p>												

<b>(c)</b>	<p><i>measurement</i> : length of line PQ on drawing ( ±1 mm);</p> <p><i>formula</i> : measurement ÷ 36;</p> <p><i>calculation</i> : correct magnification;</p>		<p>Check drawing size given using measuring tool If not drawn, no mark</p> <p><b>A</b> ecf for 1 or 2 marks for formula and calculation.</p> <p>If correct answer then award formula and calculation mark irrespective of working. If units in answer mark is lost. Incorrect rounding up or down loses mark <b>A</b> answer if many correct decimal points given</p>
<b>(d) (i)</b>	(260 × 2 = ) 520;	[1]	No mark for correct working with incorrect answer.
<b>(ii)</b>	<p>Up to three from:</p> <p>general increase from 1992 to 1995;</p> <p>peak / maximum at 1995 / 680 animals; general decrease from 1995 to 2001;</p> <p>idea that increases or decreases are not smooth;</p> <p>any correct reference to figures with years;</p>	[Max 3]	<p><b>A</b> rise in population from 1992 to early 1993 / rise in population from early 1993 to 1994 / rise in population from 1994 to 1995 /</p> <p><b>A</b> drop from 1995 to 1997 / drop between 1997 to half way through 1998 / drop from half way through 1998 to 1999 / drop from 1999 to 2001</p> <p><b>A</b> appropriate use of figures with a minimum of two population numbers for any two year references or a calculated difference.</p> <p><b>A</b> if numbers are doubled as males and females may be considered</p>
		<b>[Total: 16]</b>	