

3.	<ul style="list-style-type: none"> <li>Each pixel represented as a binary number</li> <li>As a (2D) <u>array/grid</u> of pixels</li> <li>Colour (of pixel) represented by (unique) binary value/notion of bit depth (1 mark for each of two valid points)</li> </ul>	2 KU
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5.	<ul style="list-style-type: none"> <li>(1) Registers</li> <li>(3) RAM/ROM/Main Memory (1 mark each)</li> </ul>	2 PS
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10.	<ul style="list-style-type: none"> <li>Structure chart/diagram</li> <li>Flowchart</li> <li>Semantic net</li> <li>Any other valid (1 mark for 1 point)</li> </ul>	1 KU
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13.	(a)	A variable which can have only 2 values - true/false (OR yes/no OR on/off) (1 mark)	1 KU
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(d)	(i)	Any valid, ie AND, OR, NOT, =, <, <=, >, >=, <>, etc (1 mark) Note: accept descriptions of above ("comparison of values") or actual machine code instructions (BNE - Branch if not equal)	1 PS
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	(ii)	<ul style="list-style-type: none"> <li>Synchronise processor instructions/operations</li> <li>Control the flow of data/instructions within CPU</li> <li>Activate and/or respond to control lines</li> <li>Control fetch execute cycle</li> <li>Decode and execute instructions. (1 mark for any valid point)</li> </ul>	1 KU
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20.	(a)	(i)	<ul style="list-style-type: none"> <li>(Interview client management) to establish <u>precisely</u> what is needed/elicit details</li> <li>(Interview current users of the system) to establish good/bad points of current system</li> <li>Any other valid explanation (1 mark for 1 point)</li> </ul>	1 KU
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21.	(a)	(1-D) Array (1 mark) of real (accept single/double/float) (1 mark)	2 PS
	(b)	<p>tallest = height[1] (see below for assignments)</p> <p>name_of_winner = name[1]</p> <p>loop to end of list (1 mark for loop with termination)</p> <p>    if height[position]&gt;tallest then (1 mark for IF and termination 1 mark for correct condition)</p> <p>        tallest = height[position] (see below for assignments)</p> <p>        name_of_winner = name[position]</p> <p>    end if</p> <p>end loop</p> <p>display name_of_winner (1 mark)</p> <p>Note: There are 4 assignments for a total of 2 marks – 1 mark for any two assignments</p> <p><b>OR</b></p> <p>max = 1 (1 mark)</p> <p>for position = 1 to end of list do (1 mark for loop with termination)</p> <p>    if height[position]&gt; height[max] then (1 mark for IF and termination, 1 mark for correct condition)</p> <p>        max = position (1 mark)</p> <p>    end if</p> <p>end loop</p> <p>display name[max] (1 mark)</p> <p>Note: Other correct expressions are possible. Exam paper shows four entrants so accept loop four times</p>	6 PS
	(c)	<p>(i)</p> <ul style="list-style-type: none"> <li>• Change initial condition to smallest = height[1]</li> <li>• Change &gt; to &lt; OR 'change greater than to less than'</li> <li>• Change variable names to eg tallest to smallest / max to min (as appropriate to candidate answer in (b))</li> <li>• Change output line</li> </ul> <p>(1 mark for 1 point as shown)</p>	1 PS
	(c)	By value (1 mark) since the value is not being changed in the procedure (1 mark). Note "double jeopardy"	2 PS
	(e)	A (self-contained/discrete/named) module/unit/block/section of code (1 mark) which has a value/returns a single value to the calling program (1 mark)	2 KU
	(c)	<p>&lt;title&gt; White Tooth &lt;/title&gt;</p> <p>(1 mark for opening and closing of title tag)</p> <p>(1 mark for White Tooth (Note: Do not accept The White Tooth Dental Company))</p>	2 PS

<b>(e)</b>	<b>(i)</b>	<i>Metatag (with keywords) (1 mark)</i>	<b>1 PS</b>
	<b>(ii)</b>	<i>Header/head (1 mark)</i>	<b>1 KU</b>
<b>(c)</b>		<i>No moving parts/motor (1 mark) so less power is required (1 mark)</i>	<b>2 PS</b>