



# Mark Scheme (Results)

October 2022

Pearson Edexcel International  
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Paper 01

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

**Section A**

Question number	Answer	Mark
1a	<p><b>The only correct answer is B</b></p> <p><i>A is not correct because a binary digit is either 0 or 1</i></p> <p><i>C is not correct because a binary digit is either 0 or 1</i></p> <p><i>D is not correct because a binary digit is either 0 or 1</i></p>	(1)

Question number	Answer	Mark
1b	1024	(1)

Question number	Answer	Mark
1c	<p>Award one mark for each correct line up to a maximum of three marks.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>Type of data</p> <div style="border: 1px solid black; padding: 2px; width: 150px; margin-bottom: 5px;">Text</div> <div style="border: 1px solid black; padding: 2px; width: 150px; margin-bottom: 5px;">Images</div> <div style="border: 1px solid black; padding: 2px; width: 150px;">Sound</div> </div> <div style="text-align: center;"> <p>What binary represents</p> <div style="border: 1px solid black; padding: 2px; width: 150px; margin-bottom: 5px;">Bandwidth</div> <div style="border: 1px solid black; padding: 2px; width: 150px; margin-bottom: 5px;">Amplitude</div> <div style="border: 1px solid black; padding: 2px; width: 150px; margin-bottom: 5px;">Pixels</div> <div style="border: 1px solid black; padding: 2px; width: 150px; margin-bottom: 5px;">Spelling</div> <div style="border: 1px solid black; padding: 2px; width: 150px;">Characters</div> </div> </div>	(3)

Question number	Answer	Mark
1di	<p>Any one from:</p> <ul style="list-style-type: none"> <li>• 3 (pixels) x 3 (pixels)</li> <li>• 9</li> </ul>	(1)

Question number	Answer	Mark
1dii	colour depth	(1)

Question number	Answer	Mark
2a	1001	(1)

Question number	Answer	Mark
2b	<p><b>The only correct answer is C</b></p> <p><i>A is not correct because 0010 1000 represents the denary number 40</i></p> <p><i>B is not correct because 0000 0000 represents the denary number 0</i></p> <p><i>D is not correct because 1111 1111 represents the denary number 255</i></p>	(1)

Question number	Answer	Mark
3	67	(1)

Question number	Answer	Mark
4	<p><b>The only correct answer is A</b></p> <p><i>B is not correct because GPS is used for location</i></p> <p><i>C is not correct because a WAN is not used for pairing devices</i></p> <p><i>D is not correct because Wi-Fi is not used for pairing devices</i></p>	(1)

Question number	Answer	Mark
5	<p><b>The only correct answer is B</b></p> <p><i>A is not correct because a hub does not convert analogue signals</i></p> <p><i>C is not correct because a server does not convert analogue signals</i></p> <p><i>D is not correct because a switch does not convert analogue signals</i></p>	(1)

Question number	Answer	Mark
6	<p><b>The only correct answer is C</b></p> <p><i>A is not correct because devices in wired networks can only connect at fixed points</i></p> <p><i>B is not correct because noise is not increased</i></p> <p><i>D is not correct because bandwidth is increased not reduced</i></p>	(1)

Question number	Answer	Mark
7	Satellite	(1)

Question number	Answer	Mark
8	<p>Any <b>one</b> from:</p> <ul style="list-style-type: none"> <li>• Credit card transactions</li> <li>• ID cards</li> <li>• Social media posts</li> <li>• GPS (location data)</li> </ul>	(1)

Question number	Answer	Mark
9	<p>Any two from:</p> <ul style="list-style-type: none"> <li>• Wi-Fi</li> <li>• GPS</li> <li>• GSM, 3G, 4G (etc)</li> <li>• NFC</li> </ul>	(2)

Question number	Answer	Mark
10a	Router	(1)

Question number	Answer	Mark
10b	<p>Any one from:</p> <ul style="list-style-type: none"> <li>• So the receiver knows where to return the data</li> <li>• So firewalls can protect systems / check for blocked addresses</li> <li>• Requesting dropped packets (so that a request can be sent to the sender for the packet to be resent if it gets lost/corrupted)</li> </ul>	(1)

Question number	Answer	Mark
11	<p><b>The only correct answer is C</b></p> <p><i>A is not correct because a LAN covers a wider area, with more devices and does not use direct-connection communication</i></p> <p><i>B is not correct because NFC is usually used for contactless payments.</i></p> <p><i>D is not correct because a WAN covers a wider area, with more devices and does not use direct-connection communication</i></p>	(1)

Question number	Answer	Mark
12	<p>Any two from:</p> <ul style="list-style-type: none"> <li>• Hard (disk) drive</li> <li>• Optical (disk) drive</li> <li>• Solid state drive</li> <li>• Pen drive</li> </ul>	(2)

Question number	Answer	Mark
13	<p><b>The only correct answer is A</b></p> <p><i>B is not correct because a network is used to transfer data</i></p> <p><i>C is not correct because an operating system is software</i></p> <p><i>D is not correct because a packet header is not used for storage of data and instructions</i></p>	(1)

Question number	Answer	Mark
14	<p><b>The only correct answer is C</b></p> <p><i>A is not correct because both RAM and ROM can have various storage sizes</i></p> <p><i>B is not correct because RAM and ROM can both store complicated instructions</i></p> <p><i>D is not correct because RAM and ROM can store instructions</i></p>	(1)

Question number	Answer	Mark
15	<p><b>The only correct answer is B</b></p> <p><i>A is not correct because a modulus operator is an arithmetic operator</i></p> <p><i>C is not correct because an output device is not used for input</i></p> <p><i>D is not correct because utility software is not required to communicate with input devices</i></p>	(1)

Question number	Answer	Mark
16a	<p>Input device</p> <p>Accept: any example of an input device</p>	(1)

Question number	Answer	Mark
16b	CPU	(1)

Question number	Answer	Mark
17	<p>Type of utility: Compression (1)</p> <p>Reason: Transfer to the server takes less time / each file has its size reduced (1)</p>	(2)



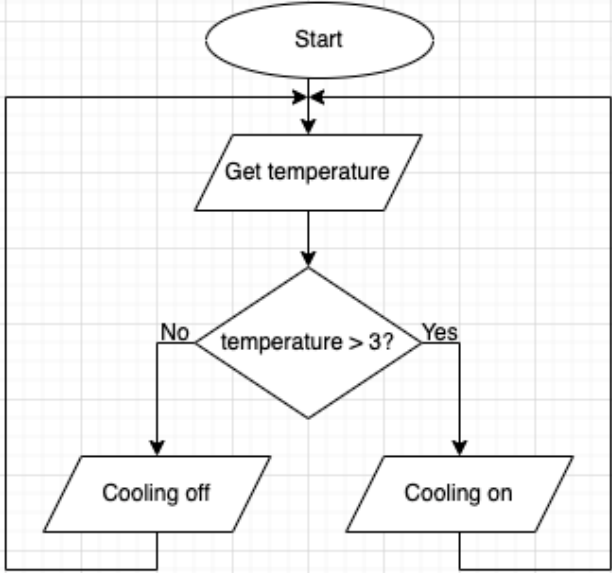
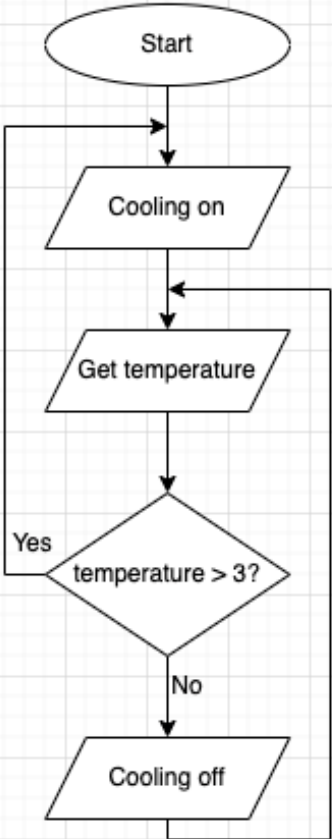
Question number	Answer	Mark
18	A comparison such as:  1st expression requires both the sensor and switch to be activated (1) whereas the 2nd requires either to be activated (1) (in order for the alarm to be triggered)	(2)

Question number	Answer	Mark
19	Division (/) Multiplication (*) (1) Addition (+) Subtraction (-) (1)	(2)

Question number	Answer	Mark
20	It creates/prolongs inequality (1) because some people cannot afford/access (etc) (1)  Examples of answers that use the above structure are: <ul style="list-style-type: none"> <li>• Some people may be unable to find employment (1) because they don't have the technology/infrastructure to work remotely (1)</li> <li>• Some people may be economically disadvantaged (1) because they are unable to shop around for the best prices online (1)</li> <li>• Some people will have less social interaction/feel lonely (1) because they can't socialise with others online (1)</li> </ul>	(2)

Question number	Answer	Mark
21a	<b>The only correct answer is D</b>  <i>A is not correct because bubble (sort) is a sort algorithm</i>  <i>B is not correct because compare (a comparison) is a (sub)process in a search algorithm</i>  <i>C is not correct because a flowchart is a diagrammatic representation of an algorithm</i>	(1)

Question number	Answer	Mark
21b	<p><b>The only correct answer is D</b></p> <p><i>A is not correct because abstract is not a process in a sort algorithm</i></p> <p><i>B is not correct because decompose is not a process in a sort algorithm</i></p> <p><i>C is not correct because model is not a process in a sort algorithm</i></p>	<b>(1)</b>

Question number	Answer	Mark
21c	<p>1 mark for correct No path (to Cooling off) (1)  1 mark for correct Yes path (to Cooling on) (1)  1 mark for path from both 'Cooling on' and 'Cooling off' to 'Get temperature' (1)</p>  <pre> graph TD     Start([Start]) --&gt; GetTemp[/Get temperature/]     GetTemp --&gt; Decision{temperature &gt; 3?}     Decision -- No --&gt; CoolingOff[/Cooling off/]     Decision -- Yes --&gt; CoolingOn[/Cooling on/]     CoolingOff --&gt; GetTemp     CoolingOn --&gt; GetTemp </pre> <p><i>Alternative:</i></p>  <pre> graph TD     Start([Start]) --&gt; CoolingOn[/Cooling on/]     CoolingOn --&gt; GetTemp[/Get temperature/]     GetTemp --&gt; Decision{temperature &gt; 3?}     Decision -- Yes --&gt; CoolingOn     Decision -- No --&gt; CoolingOff[/Cooling off/]     CoolingOff --&gt; CoolingOn </pre>	(3)

Question number	Answer	Mark
22a	Any one from: <ul style="list-style-type: none"> <li>• round</li> <li>• newplayer</li> </ul> Accept <ul style="list-style-type: none"> <li>• players</li> <li>• points</li> </ul>	(1)

Question number	Answer	Mark
22b	<ul style="list-style-type: none"> <li>• input</li> </ul> Accept methods <ul style="list-style-type: none"> <li>• upper</li> <li>• append</li> </ul>	(1)

Question number	Answer	Mark
22c	List / array	(1)

Question number	Answer	Mark
22di	EZRA	(1)

Question number	Answer	Mark
22dii	“EZRA” entered at the end (1) Comma after “Monica” (1)  ["Gill", "Monica", "EZRA"]  Ignore spaces, use of square brackets, quotes and capitalisation.	(2)

Question number	Answer	Mark
22e	<b>for</b> item in range(len(players)): print(players[item],points[item])	(4)

Question number	Answer	Mark
23a	HTML	(1)

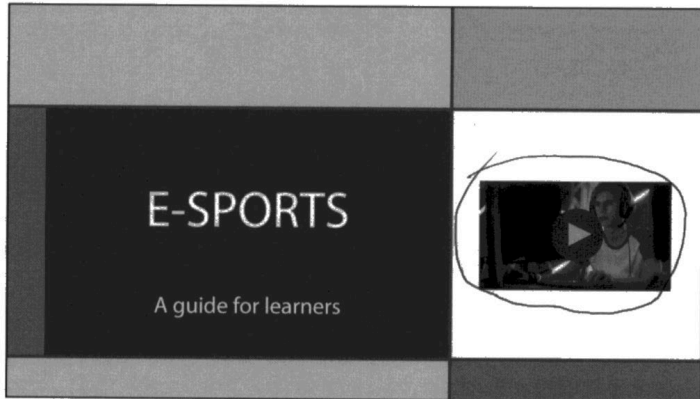
Question number	Answer	Mark
23b	Any one from: <ul style="list-style-type: none"> <li>• &lt;body&gt;</li> <li>• body</li> <li>• &lt;main&gt;</li> <li>• main</li> </ul>	(1)

Question number	Answer	Mark
23c	<b>The only correct answer is B</b>  <i>A is not correct because an animation does not allow navigation</i>  <i>C is not correct because formatting does not allow navigation</i>  <i>D is not correct because multimedia does not allow navigation</i>	(1)

Question number	Answer	Mark
23d	<b>The only correct answer is D</b>  <i>A is not correct because ASCII is a character set</i>  <i>B is not correct because HTTPS is a protocol</i>  <i>C is not correct because a URL is a locator for a web page</i>	(1)

Question number	Answer	Mark
24a	buttons	(1)

Question number	Answer	Mark
24b	audience	(1)

Question number	Answer	Mark
24c	<p>Embedded video correctly identified, for example:</p> 	(1)

Question number	Answer	Mark
25a	house style	(1)

Question number	Answer	Mark
25b	<p>Any one from:</p> <ul style="list-style-type: none"> <li>• Template</li> <li>• Headings</li> <li>• Subheadings</li> <li>• Header</li> <li>• Footer</li> <li>• &lt;h1&gt;</li> </ul>	(1)

Question number	Answer	Mark
26	<p>An explanation such as:  The image will appear skewed (1) because it is not in proportion (1)  Or  The image will be distorted (1) because only the width has been changed (1)</p>	(2)

Question number	Answer	Mark
27	<p>An explanation such as:</p> <ul style="list-style-type: none"> <li>• It may not be possible for others you share the file with to open/edit the file (1) because they might not have the same application / some applications software are only able to open certain file types (1)</li> <li>• The file size of the image may need to be as small as possible (1) because it's going to be used on a website (1)</li> </ul>	(2)

Question number	Answer	Mark
28	<p><b>The only correct answer is A</b></p> <p><i>B is not correct because cropping will not help users with slow connections</i></p> <p><i>C is not correct because resizing will not help users with slow connections</i></p> <p><i>D is not correct because painting will not help users with slow connections</i></p>	(1)

Question number	Answer	Mark
29	<p>Any one from:</p> <ul style="list-style-type: none"> <li>• Underline</li> <li>• Colour</li> <li>• Shading / Highlight</li> </ul> <p>Accept</p> <ul style="list-style-type: none"> <li>• Super/subscript</li> <li>• Strikethrough</li> </ul> <p><i>More to be added at STP</i></p>	(1)

Question number	Answer	Mark
30	<p>A description to include two from:</p> <ul style="list-style-type: none"> <li>Select the type of chart required from the Insert menu (1)</li> <li>Edit the data set to include the values required (1)</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>Create the chart in spreadsheet/database software (1)</li> <li>Copy and paste the chart into the document (1)</li> </ul> <p><i>NB for STP: Candidates may give other steps, e.g. 'choose type of chart', 'save chart in picture format', 'insert chart into document'</i></p>	(2)

Question number	Answer	Mark
31a	<p><b>The only correct answer is A</b></p> <p><i>B is not correct because editing a file is the greatest level</i></p> <p><i>C is not correct because editing a file is the greatest level</i></p> <p><i>D is not correct because editing a file is the greatest level</i></p>	(1)

Question number	Answer	Mark
31b	<p><b>The only correct answer is B</b></p> <p><i>A is not correct because some hosted storage plans are costly</i></p> <p><i>C is not correct because it is not true</i></p> <p><i>D is not correct because use of servers impacts the environment</i></p>	(1)

Question number	Answer	Mark
32a	<p>Any cell in the range: D3:D6</p>	(1)



Question number	Answer	Mark
32b	<p><b>The only correct answer is C</b></p> <p><i>A is not correct because A1 is text</i></p> <p><i>B is not correct because B2 is text</i></p> <p><i>D is not correct because E4 is a number referring to an amount.</i></p>	(1)

Question number	Answer	Mark
32c	<p>Use of £ symbol (1)</p> <p>0.80 (1)</p> <p>e.g.</p> <p>£0.80</p> <p>0.80 is 0.798 to 2dp</p> <p>Award the first mark for alternative currency symbols</p>	(2)

Question number	Answer	Mark
32d	<p>SUM (1)</p> <p>E3:E6 (1)</p> <p>Complete function</p> <p>=SUM(E3:E6)</p>	(2)

Question number	Answer	Mark
32e	<p>Any one from:</p> <ul style="list-style-type: none"> <li>• Pie chart</li> <li>• Stacked bar</li> </ul>	(1)

Question number	Answer	Mark
33	<p>Any pair from:</p> <ul style="list-style-type: none"> <li>• Yes No</li> <li>• True False</li> <li>• 1 0</li> </ul>	(1)

Question number	Answer	Mark
34a	3	(1)

Question number	Answer	Mark
34b	<=	(1)

Question number	Answer	Mark
34c	Any one from: <ul style="list-style-type: none"><li>• Tables are related/linked (using keys)</li><li>• Each record in a table is unique</li><li>• Data can be looked up between tables</li><li>• Data does not have to be repeated</li></ul>	(1)



