

Oxford Revise | OCR Computer Science | Answers

Chapter 5 Electronic memory

Question	Answer	Extra information	Marks	AO / Specification reference
1 (a)	<p>One from:</p> <p>RAM is volatile; ROM is permanent (not volatile)</p> <p>RAM can be read from and written to; ROM can only be read from</p> <p>RAM is high capacity; ROM is low capacity</p>	This question asks for one difference between RAM and ROM, so don't give more than one difference, but include both RAM and ROM in your answer.	1	AO1 1.2.1
1 (b)	<p>RAM holds data and instructions (currently in use)</p> <p>ROM holds start-up instructions</p>	1 mark for a use of RAM and 1 mark for a use of ROM.	1 1	AO1 1.2.1

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2	<table border="1"> <thead> <tr> <th>Register</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>Accumulator</td> <td>To store intermediate logical or arithmetic data in multistep calculations.</td> </tr> <tr> <td>Memory address register</td> <td>Holds the memory address of where data will be fetched from, or stored to.</td> </tr> <tr> <td>Memory data register</td> <td>Holds the data that has been fetched from memory or will be stored to RAM after being processed.</td> </tr> <tr> <td>Program Counter</td> <td>Holds the memory address of the next instruction to be executed.</td> </tr> </tbody> </table>	Register	Role	Accumulator	To store intermediate logical or arithmetic data in multistep calculations.	Memory address register	Holds the memory address of where data will be fetched from, or stored to.	Memory data register	Holds the data that has been fetched from memory or will be stored to RAM after being processed.	Program Counter	Holds the memory address of the next instruction to be executed.	<p>1 mark for each correct answer.</p> <p>The shaded parts of the table contain the text given in the question.</p>	1	AO1 1.1.1
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