

Oxford Revise | OCR Computer Science | Answers

Chapter 5 Electronic memory

Question	Answer	Extra information	Marks	AO / Specification reference
1 (a)	One from: RAM is volatile; ROM is permanent (not volatile) RAM can be read from and written to; ROM can only be read from RAM is high capacity; ROM is low capacity	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)	RAM holds data and instructions currently in use ROM holds start-up instructions	1 mark for a use of RAM and 1 mark for a use of ROM.	1 1	AO1 1.2.1

Question	Answer	Extra information	Marks	AO / Specification reference											
2		1 mark for each correct answer. The shaded parts of the table contain the text given in the question.	1	AO1 1.1.1											
	<table><tr><th>Register</th><th>Role</th></tr><tr><td>Accumulator</td><td>Saves the results of each calculation carried out by the ALU.</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></table>				Register	Role	Accumulator	Saves the results of each calculation carried out by the ALU.	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.	
	Register				Role										
	Accumulator				Saves the results of each calculation carried out by the ALU.										
	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.														