

Oxford Revise | OCR Computer Science | Answers

Chapter 4 The processor

Question	Answer	Extra information	Marks	AO / Specification reference
1	The arithmetic/logic unit is a CPU component that takes digital input and gives a digital output after processing. It can perform arithmetic such as addition or binary shifts. It can also perform logic, which means it can compare two items and output true or false.	<p>1 mark for each correct statement to a maximum of 3 marks, for example:</p> <p>A statement to give the overall role of the ALU, followed by a specific example of the roles it performs, in this case arithmetic and logic.</p> <p>It is always advisable to not use the name of a component to explain its role. For example, to explain the role of the arithmetic/logic unit, do not simply say it performs arithmetic. Give a specific example such as performs addition.</p>	<p>1</p> <p>1</p> <p>1</p>	AO1/AO2 1.1.1
2	<p>One from:</p> <p>CU (Control Unit)</p> <p>Cache</p> <p>Registers</p>	Only one response is required, so only give one answer, as your first answer is the one that will be marked.	1	AO1 1.2.1

Question	Answer	Extra information	Marks	AO / Specification reference
3	RAM Control unit Binary number Instruction signal ALU	1 mark for each correct answer. The answers used must match exactly the words in the given list.	1 1 1 1 1	AO1 1.2.1
4	Replacing a dual-core processor to a quad-core processor will increase the number of processes that the computer can execute at the same time from two to four.	1 mark for stating that the number of processes that can be executed at the same time will increase. 1 mark for specifically stating that the number of processes that the computer can simultaneously execute doubles (or increases from two to four).	1 1	AO2 1.1.2