



How to Answer "Explain" Questions

This guide by **FutureLogic Education** helps students understand how to structure high-scoring explain answers in IGCSE Computer Science exams. Explain questions are the most common source of lost marks — and the easiest to fix once you know the formula.

The BIG Mistake

Most students **describe** when the question asks them to **explain**. Describing tells the examiner *what* happens. Explaining tells the examiner *what* happens *and why*. That difference is where the marks are.

DESCRIBE — not enough for an Explain question	EXPLAIN — what examiners are looking for
"Packets travel across the network."	"Packets travel across the network because packet switching allows data to take different routes, reducing congestion ."

Teacher note: Show both answers on the board and ask students to spot the difference. The word "because" is the turning point — once students see it, they rarely forget it.

The FutureLogic Explain Formula



Example: "Cache improves CPU performance **because** frequently used data can be accessed faster, **therefore** the CPU spends less time waiting for data."

EXAM TIP: Point → Because → Effect. Use this formula on every single Explain question.

Teacher note: Get students to underline their "because" and "therefore" in practice answers. If they cannot find one, the answer is incomplete. This single habit dramatically improves scores.



Power Words Students Must Use

because	therefore	as a result	consequently
this means	so that	which means	

EXAM TIP: If your answer has no power word, it is probably a Describe — not an Explain.

Teacher note: Display these words on screen during timed writing tasks. Making them visible removes the excuse of forgetting.





Example Exam Questions

Apply the Point → Because → Effect formula to each question below. Notice how every strong answer contains a power word and a clear effect.

Explain why SSDs are faster than HDDs. [3]

✗ Weak answer
"SSDs are faster."

✓ Strong answer
"SSDs are faster because they have no moving parts, therefore data can be accessed instantly and read speeds are significantly quicker."

Explain why encryption is used. [2]

✗ Weak answer
"Encryption protects data."

✓ Strong answer
"Encryption scrambles data into ciphertext so that unauthorised users cannot read the information even if they intercept it."

Explain why RAM is volatile. [2]

✗ Weak answer
"RAM loses data."

✓ Strong answer
"RAM is volatile because it requires a constant power supply to store data, therefore all stored data is lost when the computer is switched off."

Explain why cache memory improves CPU performance. [3]

✗ Weak answer
"Cache is fast memory."

✓ Strong answer
"Cache stores frequently used instructions close to the CPU. Because cache can be accessed faster than RAM, the CPU spends less time waiting, therefore overall processing speed increases."





Explain why larger colour depth increases image file size. [2]

X Weak answer

"More colours means bigger files."

✓ Strong answer

"A larger colour depth uses more bits to represent each pixel, therefore more data is stored per pixel and the overall file size increases."

The 3-Mark Secret

A strong 3-mark explain answer contains three connected elements — think of it as a chain where each part leads to the next.

Element	What it does	Example
1. Point	State the fact clearly.	<i>"SSDs are faster than HDDs..."</i>
2. Development	Explain why, using a power word.	<i>"...because they have no moving parts..."</i>
3. Consequence	State the effect or result.	<i>"...therefore data is accessed instantly."</i>

EXAM TIP: 3-mark question = Point + Development + Consequence. Three elements, three marks.

Teacher note: Use P, D, C as annotation codes when marking student work — it shows exactly which elements are present and which are missing.

Common Explain Mistakes

X Repeating the question.

Restating the question earns nothing. Use a power word and get straight to the reason.





X Giving definitions only.

Defining a term tells the examiner what something is — not how or why it works. Always develop further.

X Missing technical terms.

Cambridge mark schemes are keyword-driven. Precise terms like "volatile" and "bandwidth" earn marks. Vague words do not.

X Writing vague statements.

"It is faster" or "it is better" score zero without qualification. Always say faster than what, and why.

X Not developing the answer.

Stopping after one sentence on a 3-mark question loses marks every time. Always add the consequence.

FutureLogic Examiner Tips

✓ Never stop after one sentence.

One sentence almost never earns full marks on an Explain question. Always develop.

✓ Always explain WHY.

The reason is where the mark is. The fact alone is rarely enough.

✓ Use technical vocabulary.

Replace vague words with precise terms. "Volatile" beats "loses data". "Bandwidth" beats "speed".

✓ Link ideas together.

Use power words to chain your point to its reason and then to its effect.

✓ Explain the effect clearly.

End by stating the consequence for the user, system, or performance.





Explain Question Checklist

Before moving on to the next question, ask yourself:

<input type="checkbox"/>	Did I say WHY — not just what?
<input type="checkbox"/>	Did I use a power word (because / therefore / which means)?
<input type="checkbox"/>	Did I explain the effect or consequence?
<input type="checkbox"/>	Did I use technical vocabulary?
<input type="checkbox"/>	Did I develop the point fully — not just one sentence?

