Environmental Systems and Societies

COMMAND TERMS

What each exam verb means — and what your answer should actually include

Keep these slides as your command-term notes.

BEFORE WE START

What are command terms?

The command term is the verb in the exam question.
It tells you exactly what kind of answer the examiner wants.

DESCRIBE
What is happening?

EXPLAIN
Why / how?

DISCUSS
Different sides / factors

EVALUATE
Weigh + judge

What about the IA?
Command terms are not an IA checklist. The IA is an investigation; you do not need to use every command term.

COMMAND TERMS

Short, precise answers

These usually need short, precise answers. Do not add a long explanation when it has not been asked for.

DEFINE

Give the precise meaning of a word, phrase, concept or physical quantity.

In your answer: Write a clear definition. Use ESS terminology rather than a vague everyday description.

Example: Define biodiversity.

STATE

Give a specific name, value or other brief answer without explanation or calculation.

In your answer: Give the answer directly. A sentence may be enough.

Example: State the crop under the greatest water stress.

LIST

Give a sequence of brief answers with no explanation.

In your answer: Write the required number of items. Do not turn each one into a paragraph.

Example: List two renewable energy resources.

What to remember

These questions usually need short, accurate answers. If the question asks for two examples, give two clear examples. Extra unrelated information does not replace a correct answer.

COMMAND TERMS

Diagrams & measurement

Some AO1 terms ask you to communicate information visually or obtain a value.

DRAW

Represent by means of a labelled, accurate diagram or graph, using a pencil.

In your answer: Make the diagram large enough to read and label the important parts clearly.

Example: Draw a systems diagram showing stores and flows.

LABEL

Add labels to a diagram.

In your answer: Put the correct term next to the relevant feature. Keep labels clear and unambiguous.

Example: Label the two lowest layers of the atmosphere.

MEASURE

Obtain a value for a quantity.

In your answer: Read the scale carefully and include units when appropriate.

Example: Measure the decrease in ice thickness using the scale.

Common mistake

A diagram is not just decoration: labels, scale and accuracy may be part of what earns the mark.

COMMAND TERMS

Using knowledge

Some command terms ask you to use your knowledge, not simply recall it.

ANNOTATE

Add brief notes to a diagram or graph.

In your answer: Add short notes that explain the relevant features.

Example: Annotate a systems diagram with water inputs and outputs.

APPLY

Use an idea, equation, principle, theory or law in relation to a given problem.

In your answer: Use the concept in the situation provided in the question.

Example: Apply Simpson's reciprocal index to the data.

CALCULATE

Obtain a numerical answer showing the relevant stages of working.

In your answer: Show your working and give the final value with suitable units.

Example: Calculate the doubling time for a population.

DESCRIBE

Give a detailed account.

In your answer: Say what the pattern, process or feature is like. Focus on relevant characteristics.

Example: Describe the role of primary producers in ecosystems.

COMMAND TERMS

Reading information & drawing meaning

Read the information in the question carefully: these terms often depend on a graph, table, image or case study.

DISTINGUISH

Make clear the differences between two or more concepts or items.

In your answer: Focus on the differences and make the contrast explicit.

Example: Distinguish between a flagship and a keystone species.

ESTIMATE

Obtain an approximate value.

In your answer: Use the available information to give a sensible approximate value.

Example: Estimate the average annual increase shown on the graph.

IDENTIFY

Provide an answer from a number of possibilities.

In your answer: Select the correct feature, option or example from the information provided.

Example: Identify four ways solar energy may be lost.

INTERPRET

Use knowledge and understanding to recognize trends and draw conclusions from given information.

In your answer: Go beyond reading values: say what the pattern means.

Example: Interpret the likely impact of rising CO_2 on sea level.

OUTLINE

Give a brief account or summary.

In your answer: Include the main points, but not the full detail expected in a long explanation.

Example: Outline four factors affecting ecosystem resilience.

IMPORTANT DISTINCTION

Describe ≠ Explain

These two are frequently confused, but they ask for different things.

DESCRIBE — What is happening?

Give a detailed account of relevant characteristics, features, patterns or changes.

Example answer:
“Forest cover decreased from 70% to 45%.”

EXPLAIN — Why / how?

Give a detailed account that includes reasons, causes or mechanisms.

Example answer:
“Deforestation increases atmospheric CO_2 because fewer trees remove CO_2 and burning releases stored carbon.”

If the question says Describe, reasons are not the main task. If it says Explain, the reasons are essential.

COMMAND TERMS

Analysis & reasoning

These questions need you to organize information, find relationships and reach conclusions.

ANALYSE

Break down in order to bring out the essential elements or structure.

In your answer: Organize the information and show the important relationships.

Example: Analyse the global ecological value of Mongolia.

COMPARE & CONTRAST

Give an account of similarities and differences, referring to both throughout.

In your answer: Do not write about A and then B separately; connect them as you answer.

Example: Compare and contrast human impacts on the carbon and nitrogen cycles.

CONSTRUCT

Display information in a diagrammatic or logical form.

In your answer: Build the requested diagram, model or logical representation from the information.

Example: Construct a positive-feedback diagram involving methane.

DEDUCE

Reach a conclusion from the information given.

In your answer: Use the evidence provided to work out a conclusion that is not stated directly.

Example: Deduce whether the figure could show terrestrial energy transfer.

Demonstrate

DEMONSTRATE

Make clear by reasoning or evidence, illustrating with examples or practical application.

In your answer: Use evidence, examples or reasoning to make the point clear.

Example: Demonstrate an environmental relationship using evidence.

Think: SHOW that it is true — do not simply state it.

COMMAND TERMS

Maths, planning & problem solving

These terms ask for a specific outcome: a relationship, a plan/model, or the only possible answer.

DERIVE

Manipulate a mathematical relationship to give a new equation or relationship.

In your answer: Show the mathematical steps that lead to the new relationship.

Example: Derive natural increase from birth and death rates.

DESIGN

Produce a plan, simulation or model.

In your answer: Make the plan workable and relevant to the stated aim or problem.

Example: Design a conservation area for a named species.

DETERMINE

Obtain the only possible answer.

In your answer: Use the data or information given to arrive at the required answer.

Example: Determine cereal yield from the graph.

For mathematical or data-based questions, do not hide your reasoning. Clear working can show how you reached the answer.

COMMAND TERMS

Judgement & balanced answers

Longer answers should be structured, relevant and supported with evidence.

COMMENT

Give a judgement based on a statement or result of a calculation.

In your answer: Use the result as evidence and say what it suggests.

Example: Comment on the relationship between population growth and food supply.

DISCUSS

Offer a considered and balanced review that includes a range of arguments, factors or hypotheses.

In your answer: Present more than one relevant perspective or factor and reach a reasoned conclusion.

Example: Discuss how environmental value systems affect tropical-biome protection.

EVALUATE

Make an appraisal by weighing up the strengths and limitations.

In your answer: Consider both advantages and limitations, then make an overall judgement.

Example: Evaluate two approaches to pollution management.

EXAMINE

Consider an argument or concept in a way that uncovers assumptions and interrelationships.

In your answer: Look closely at how the parts connect and what assumptions may be present.

Example: Examine the relationship between energy consumption and air quality.

COMMAND TERMS

Explanation, evidence & judgement

These terms ask you to develop reasoning rather than simply state a fact.

EXPLAIN

Give a detailed account including reasons or causes.

In your answer: Use a clear chain of reasoning: cause → process → result.

Example: Explain how historical influences shaped the environmental movement.

JUSTIFY

Give valid reasons or evidence to support an answer or conclusion.

In your answer: Make your choice or conclusion clear, then support it with relevant evidence.

Example: Justify your choice of an animal for a conservation campaign.

PREDICT

Give an expected result.

In your answer: Use the pattern, mechanism or evidence to state what is likely to happen.

Example: Predict the effect of increased precipitation on nutrient cycling.

SUGGEST

Propose a solution, hypothesis or other possible answer.

In your answer: Give a plausible answer that fits the information and ESS context.

Example: Suggest procedures to estimate net primary productivity.

TO WHAT EXTENT

Consider the merits or otherwise of an argument or concept.

In your answer: Consider supporting and opposing evidence, then state clearly how far you agree.

Example: To what extent can environmental value systems help resolve water scarcity?

Sketch

SKETCH

Represent by means of a diagram or graph, labelled as appropriate. Show the general shape or relationship and relevant features.

In your answer: Show the general shape or relationship clearly and label the important features.

Example: Sketch a diagram to show the main features of the water cycle.

Think: GENERAL SHAPE + the important labels — not a detailed drawing.

KEEP THIS SLIDE

Four terms to learn really well

Use this as a quick check when you practise exam questions.

DESCRIBE	**WHAT?**	Relevant characteristics, features, patterns or changes.	No causal explanation is required unless the question asks for it.
EXPLAIN	**WHY / HOW?**	Reasons, causes or mechanisms.	Make the causal link clear.
DISCUSS	**DIFFERENT SIDES / FACTORS?**	A considered and balanced review.	Include a range of arguments or factors and reach a conclusion.
EVALUATE	**WEIGH + JUDGE**	Strengths and limitations.	Finish with an overall judgement supported by evidence.

EXAM TECHNIQUE

Before you start writing

Good ESS knowledge is not enough if the response does not match the question.

1. Read the whole question	Underline or circle the command term and identify exactly what topic or data the question refers to.
2. Look at the marks	Use the mark allocation to judge how much depth and detail is expected.
3. Plan longer answers	For discuss, evaluate and to what extent, decide your main points before you start writing.
4. Use ESS terminology	Prefer precise subject vocabulary over vague everyday wording.
5. Use evidence	Support longer answers with relevant examples, data or case-study evidence where appropriate.
6. Stay focused	Do not pad the answer with everything you know. Answer the question that was actually asked.

PRACTICE

Same ESS topic — different command terms

Topic: deforestation. Notice how the verb changes what a good answer needs.

DESCRIBE	Describe the change in forest cover shown in the graph.	Your task: Report the relevant pattern or change.
EXPLAIN	Explain why deforestation may increase atmospheric CO_2.	Your task: Give the causal mechanism.
DISCUSS	Discuss different perspectives on restricting forest use.	Your task: Present a balanced range of relevant views/factors.
EVALUATE	Evaluate the effectiveness of a reforestation strategy.	Your task: Weigh strengths and limitations, then judge overall.
TO WHAT EXTENT	To what extent can reforestation compensate for deforestation?	Your task: Consider evidence on both sides and state how far you agree.