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Environmental systems and societies
Standard level
Paper 1

12 November 2025

Zone A afternoon | **Zone B** afternoon | **Zone C** afternoon

Candidate session number

1 hour

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Instructions to candidates

- Write your session number in the boxes above.
- Do not open this examination paper until instructed to do so.
- Answer all questions. Refer to the resource booklet which accompanies this question paper.
- Answers must be written within the answer boxes provided.
- A calculator is required for this paper.
- The maximum mark for this examination paper is **[35 marks]**.



Answer **all** questions. Answers must be written within the answer boxes provided.

1. Using **Figure 2**, identify the ecosystem of Mindo. [1]

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2. (a) Using **Figure 4**, calculate the difference between the ecological footprint and the biocapacity per person for 1985. [1]

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- (b) Suggest how Ecuador could meet the needs of its population if the ecological footprint exceeds biocapacity in the future. [2]

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3. (a) Using the data in **Figure 5**, calculate the percentage of plants that are endemic to Ecuador.

[1]

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(b) Explain why Ecuador supports a high level of biodiversity.

[3]

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4. (a) With reference to **Figure 6(a)**, suggest **one** advantage of using the proposed southern route compared to the northern route for the OCP pipeline. [1]

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- (b) With reference to **Figure 6(a)**, suggest a possible reason as to why the southern route was rejected in favour of the northern route for the OCP pipeline. [1]

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- (c) With reference to **Figure 6(b)**, identify **one** conflict associated with the building of the OCP pipeline and sustainability. [1]

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- (d) With reference to **one** specific event in **Figure 6(b)**, outline a strategy which could be used to reduce incidents of oil pollution. [1]

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5. With reference to **Figure 7(b)**, outline **two** reasons for the change in use of hydropower between 1965 and 2022.

[2]

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6. Using **Figure 8**, identify which product makes up the greatest proportion of Ecuador's exports.

[1]

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7. (a) With reference to **Figure 9(a)**, outline the general relationship between altitude and cloud frequency. [1]

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- (b) Identify **one** transfer and **one** transformation in the hydrological cycle shown in **Figures 9(b)** and **9(c)**. [2]

Transfer:

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Transformation:

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- (c) With reference to **Figures 9(b)** and **9(c)**, describe a feedback loop that could be triggered by deforestation in the cloud forest. [2]

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- (d) Outline how the cloud forest may provide a **named** example of natural income. [1]

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- (e) Describe **two** ways in which climate change could affect the cloud forest ecosystem. [2]

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8. (a) Outline **one** impact that a reduction in the Mindo harlequin toad population may have on the food web in **Figure 10(b)**. [1]

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- (b) Explain how the disease in the Mindo harlequin toad could contribute to the evolution of resistance to this disease in the species for future generations. [2]

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9. With reference to **Figure 11**, evaluate the potential effectiveness of the proposed southern corridor for wildlife conservation. [3]

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