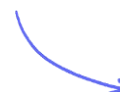


Practice Paper 2 (SL)

Instructions to Candidates:

- Answer all questions.
- Refer to the resource booklet which accompanies this question paper.
- A calculator is required for this paper.

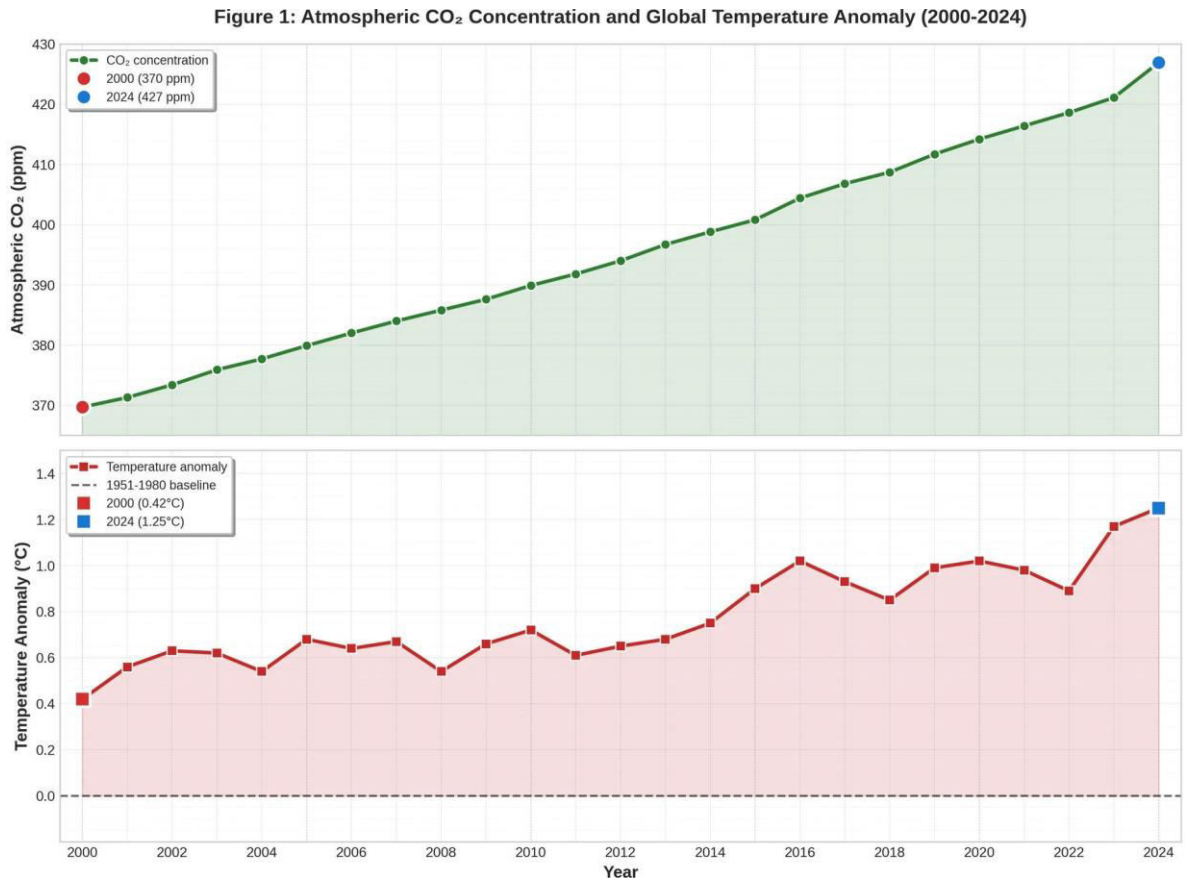
Scan here to return to the course
or visit savemyexams.com



Total Marks /60

1 (a)

Section A



Identify the atmospheric CO₂ concentration in 2024, as shown in **Figure 1**.

.....(1 mark)

(b) Calculate the percentage increase in atmospheric CO₂ concentration from 2000 to 2024.

.....(1 mark)

(c) Describe the relationship between atmospheric CO₂ concentration and global temperature anomaly shown in **Figure 1**.

.....(3 marks)

(d) Outline **three** ways in which rising atmospheric CO₂ concentrations affect marine ecosystems.

.....

.....

..... (3 marks)

(e) Outline **three** challenges of reducing global CO₂ emissions to mitigate climate change.

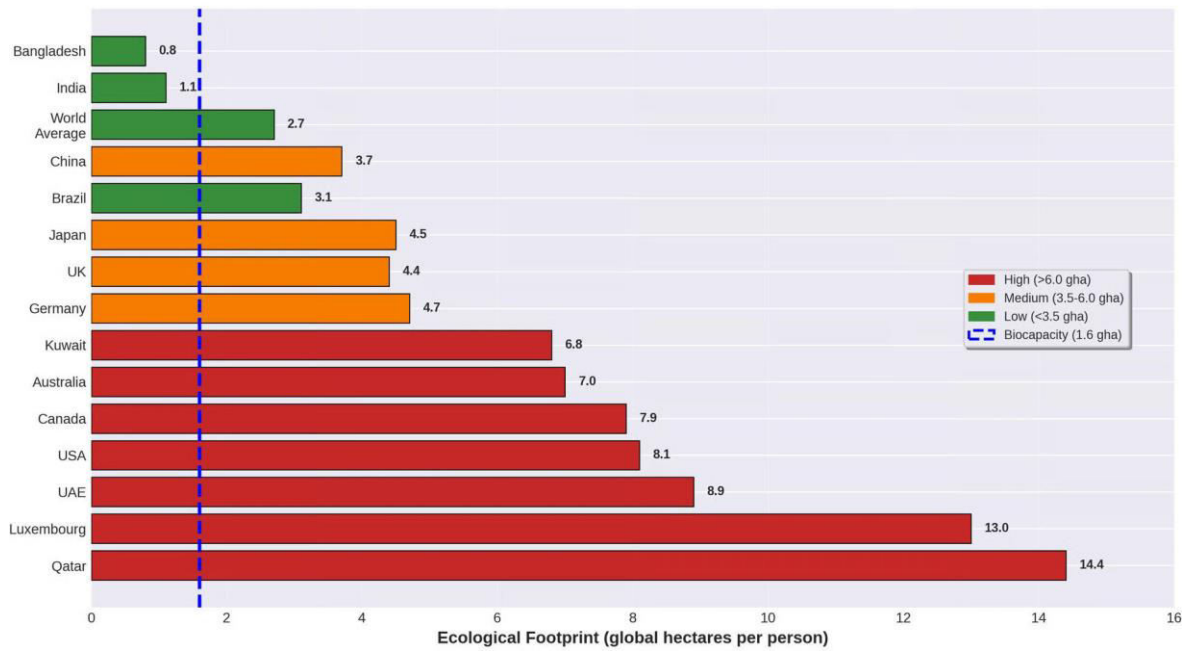
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.....

..... (3 marks)

2 (a)

Figure 2: Ecological Footprint by Country (2023)



State the ecological footprint of India in 2023, as shown in **Figure 2**.

(1 mark)

(b) Calculate how many times larger Qatar's ecological footprint is compared to Bangladesh's footprint.

(1 mark)

(c) Outline **three** reasons why developed countries tend to have larger ecological footprints than developing countries.

(3 marks)

(d) Evaluate the ecological footprint as a sustainability indicator for measuring progress toward sustainable development.

.....
..... (4 marks)

3 (a) Define the term eutrophication.

.....
..... (2 marks)

(b) Outline the process by which oxygen depletion occurs during eutrophication.

.....
.....
..... (3 marks)

(c) Define the term positive feedback.

..... (1 mark)

(d) Explain why eutrophication is described as a positive feedback loop.

.....
.....
..... (3 marks)

(e) Outline **one** preventative management strategy and **one** restorative management strategy that could reduce eutrophication in aquatic systems.

.....
..... (2 marks)

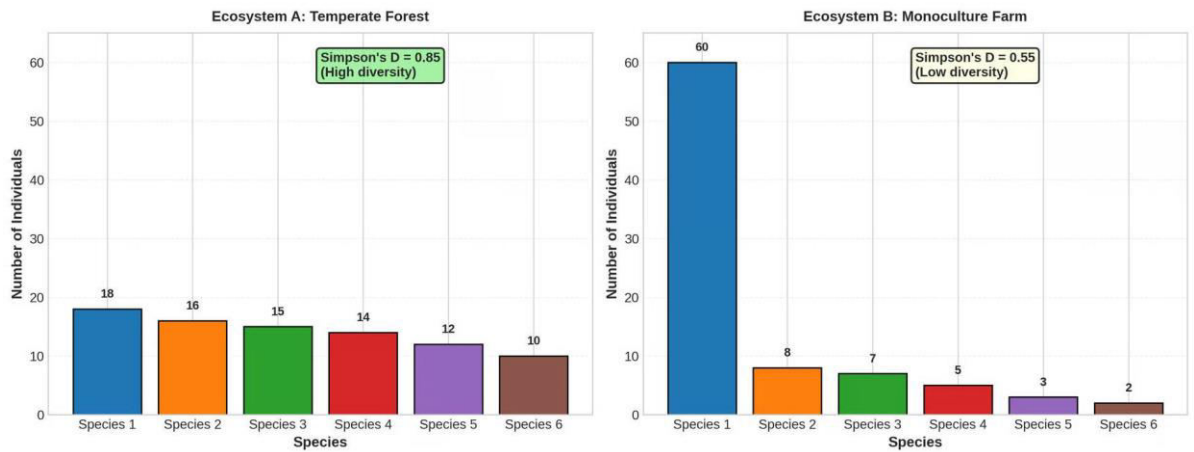
(f) Discuss the view that preventing eutrophication is more effective than treating it after it occurs.

.....
.....
.....

.....(4 marks)

4 (a)

Figure 3: Species Distribution in Two Different Ecosystems



State which ecosystem (A or B) shows greater species evenness.

.....(1 mark)

(b) Define the term species richness.

.....(1 mark)

(c) Explain why Ecosystem A has a higher Simpson's diversity index than Ecosystem B.

.....(3 marks)

