Topic 1 top right Q's

Trophic levels and eating ideas

- We eat lower on the trophic levels on land – and that has implications
  - We either eat the vegetables or the animals that eat the vegetables
  - We eat the very flashy fish exist highly in the trophic levels.
  - 10:1 rule – 10kg soil for 1kg pork
  - For fish--4th trophic level bluefin tuna 10,000kg soil

1.1 evs

Discuss the view that the environment can have its own intrinsic value

- Nature has its own intrinsic value and no need to justify it's existence for us.
- Travelling with a view – we enjoy the intrinsic value of nature

1.1 evs

Evaluate the implications of two contrasting environmental value systems in the context of given environmental issues

(asking for opposing views)

- Ecocentric vs technocentric
  - Because they sit on both sides of the spectrum rather than Anthropocentric in the middle
  - Same for countries: America v China
- 4pt question: opposing views for points
- 9pt question: “Evaluate implications for ___ EVS” need 3 opposing views so use Anthropocentric or something in the middle as well – Definition & apply for POINTS
  - For eg. plastic pollution: PMM model (before during after) + opinion

1.1 evs

Justify the implications using evidence and examples to make the justification clear

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Paper 3 “The WildCard”

- **SHORT ANSWER Q'S**
- Can't test on all
- So they choose from 3 CHAPTERS and question you
- e.g. 5.1 & 8.3 & 3.4

1.2 system and models

Construct a system diagram or a model from a given set of information

- Highly unlikely question
- Drawing wastes time and low points
- But styles:

1.2 system and models

Evaluate the use of models as a tool in a given situation, eg climate change predictions

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- KNOW the +s and -s of models –!

1.3 energy and equlibria

Explain the implications of the laws of thermodynamics to ecological systems

- KNOW THE 2 laws of thermodynamics
  - 1) energy is neither created nor destroyed
  - 2) entropy increases

ENTROPY: the disorder of systems

1.3 energy and equilibria

Discuss resilience in a variety of systems

Resilience – complexity of systems

- More complex systems are more stable
  - eg. Higher biodiversity in ocean = more resilience
  - eg. Tropics more diverse biodiversity = more resilient
  - eg. Green revolution crops → less resilience due to loss of genetic diversity.. CC
  - eg. GMO over species diversity and cultivation by climate

1.3 energy and equilibria

Evaluate the possible consequences of tipping points

- A time lag between the tipping point and the action. In most cases we have come beyond the tipping point before we realise it.
- Hard to predict
- Cause a reset to the system – a long lasting reset
- Implications for humans-we don't stop in time

Tipping Points

- Collapse of Tropical Rainforest
- Death of the Coral Reefs from Ocean Acidification [probably the first tipping point]
- Melting Glaciers
- Eutrophication
- Premafrost melting -positive feedback loop!
- Loss of Keystone Speices -lead to complete collapse of ecosystem → trophic cascade
- Collapse of Ocean Systems [maybe 2050?]

If you have no answer, your go-to's:

- 1. Too many people on planet Earth
  - How does population apply to this?
- 2. Climate change
  - How does CC apply to this?
    - 90% of questions will apply !