

1) Explain the major environmental issues faced by the world

Sol: The world faces several pressing environmental issues, each impacting both the planet & human life. Here are the major ones

a) Climate change

→ Cause: The burning of fossil fuels, deforestation & industrial activities increase greenhouse gases like (CO₂) in the atmosphere

→ Impact: Rising global temp, more extreme weather events, rising sea levels & change in ecosystems & wildlife migration pat

b) Deforestation

→ Cause: Logging, agricultural expansion & urbanization

→ Impact: loss of biodiversity, disruption of the water cycle, soil erosion. forests are also critical for regulating climate

c) Biodiversity loss

→ Cause: Habitat destruction, pollution, overfishing, climate change and the illegal wildlife trade

→ Impact: The extinction of species, disruption

d) Overpopulation

→ Cause: High birth rate and lower mortality rates, especially in developing countries

→ Impact: Increased demand for resources like water, food, energy and land, which leads to overexploitation, waste generation

e) Ocean Acidification

→ Cause: The absorption of excess CO₂ from the atmosphere by the oceans, leading to a decrease in pH level

→ Impact: Damage to marine life, particularly organisms that rely on calcium carbonate for their shell & skeletons,

a) Depletion of Natural Resource

→ Cause: Over consumption of water, fossil fuels, minerals, forests & fish stocks driven by industrialization, population growth

→ Impact: Resources become scarcer, leading to higher costs, conflicts over resource allocation

b) Desertification

→ Cause: Overgrazing, deforestation, poor land management & climate change

→ Impact: Loss of arable land in dry regions, reduced agricultural productivity

2) Discuss in detail about moral & ethical issues involved in the use of computers & Internet with examples

Sol: a) Privacy and Data protection

- The collection, storage and sharing of personal information without proper consent is a critical ethical issue. Many online services gather extensive data about users, including their personal preferences, location, and browsing habits, often without clear disclosure or consent.

Eg: The Facebook - Cambridge Analytica Scandal revealed how personal data of millions of users were harvested & used for political purpose without consent

b) Cybersecurity

- As cybercrime grows, securing online data becomes a key moral issue. Hackers can steal personal information, disrupt services and cause widespread damage.

Eg: The 2017 Equifax breach exposed sensitive data of 147 million individuals, including Social Security numbers

c) Digital Divide

- The digital divide refers to the gap between those who have access to technology & those who do not - this disparity limits access to opportunities, education, and services

e.g.: During the covid-19 pandemic, students in underserved areas struggled with online learning due to lack of devices or Internet connectivity

d) Intellectual Property and Copyright

- The Internet makes it easy to share & distribute digital content, raising ethical concerns about the theft of intellectual property. Piracy & unauthorized distribution of digital content can harm creators & business.

e.g.: illegal torrenting of movies or software piracy deprives content creators & developers of their income