TUTOR MARKED ASSIGNMENT
MED-008: Globalisation and Environment

Course Code: MED-008
Assignment Code: MED-008/TMA/2026
Maximum Marks: 100

Note: * **This assignment is based on the entire course.**
* **All questions are compulsory. Marks for the questions are shown within brackets on the right-hand side.**
* **Please answer in your own words; do not copy from the course material.**

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1. Briefly discuss the Greenhouse effect on the earth. Explain how globalization is responsible for large scale disruption of ecosystems. (5*2=10)

2. Write short notes on: (2.5x4=10)
   a) Tsunami
   b) Cyclone
   c) Toxic Wastes
   d) Direct and indirect wartime impacts.

3. What is meant by North-South divide? Discuss the role of MNCs, TNCs and IFIs in economic globalisation. (10)

4. Write short notes on the following: (3.5+3.5+3= 10)
   i. Rio +5 and Rio +10
   ii. Biodiversity Convention
   iii. UNEP

5. Mention any five multilateral agreements related to transnational air pollution. Discuss the world Bank's environmental agenda. (5+5= 10)

6. Discuss briefly the environmental concerns of South Asia with special reference to Pakistan. (10)

7. Define NGOs. Explain its origin and briefly discuss the different perspectives of NGOs. (10)

8. Write short notes on the following: (5x6=30)
   i. Chipko and Swadhyaya Movement
   ii. Seed suicides in India
   iii. Indicators of sustainability of food security
   iv. Environmentally Sound Technologies
   v. Environmental Accounting
   vi. Role of judiciary regarding Taj Mahal case

1. Briefly discuss the Greenhouse effect on the earth. Explain how globalization is responsible for large scale disruption of ecosystems. (5*2=10)

Answer

How the greenhouse effect works

The greenhouse effect is a natural warming process of the atmosphere. Solar radiation reaches the earth mainly as short-wave energy. A part of it is reflected back by clouds, ice and the earth's surface, while the remaining energy is absorbed by land and oceans. The warmed surface then emits long-wave infrared radiation. Gases such as carbon dioxide, methane, nitrous oxide, water vapour and ozone absorb a part of this outgoing heat and re-radiate it in different directions. This keeps the lower atmosphere and the earth's surface warm enough for life.

The natural greenhouse effect is essential, but human activities have increased the concentration of several greenhouse gases. Burning coal, petroleum and natural gas, deforestation, cement production, intensive agriculture, waste disposal and some industrial processes add carbon dioxide, methane and nitrous oxide to the atmosphere. The strengthened or enhanced greenhouse effect disturbs the earth's energy balance and contributes to global warming. Its effects include rising average temperature, changes in rainfall, more frequent heat stress, melting of glaciers and ice, sea-level rise, changes in the distribution of species and growing pressure on agriculture and water resources.

The effect is strengthened further by feedback processes. Loss of snow and ice lowers the earth's reflectivity, so more solar energy is absorbed. Warmer air can hold more water vapour, itself a greenhouse gas, and warming can alter the ability of forests and oceans to absorb carbon. The seriousness of the enhanced greenhouse effect is therefore not only a rise in temperature but a chain of changes in the climate system that affect ecosystems and human settlements.

Pathways from globalisation to ecosystem disruption

Globalisation links distant markets through trade, investment, technology, transport and global production networks. These links can spread cleaner technologies as well, but the rapid expansion of production and consumption can place heavy pressure on ecosystems when environmental costs are ignored. Export demand for timber, minerals, fish, cash crops and energy encourages more intensive extraction of natural resources. Forests may be cleared for plantations, mines, roads and industrial zones, while coastal and marine ecosystems can be stressed by large-scale fishing, ports and tourism.

Global supply chains also increase transport by road, ship and air. This raises fossil-fuel use and emissions and can fragment habitats through highways,