

Environmental Science

MOCK-8

Subjective (Part-II)

Q NO 5-

(a) Highlight the developments of COP-28-

Outline

- 1- Global attention-
- 2- Creation of loss and damage Funds- 700 million USD-
- 3- Tripling the renewable energy resources-
- 4- Reduction of Carbon emissions- by Oil Companies-
- 5- Net Zero emissions by 2050-
- 6- Robust and timely disbursement of funds-
- 7- Special initiatives for the climate-vulnerable countries-
- 8- Public awareness of climate change take paradigm shift.
- 9- Beginning of the end of fossil fuel era-
- 10- Pakistan pavilion gains attention-

11- Limit Global warming to 1.5°C by 2030 and 43% reduction in green house gases -

1- Global attention:-

COP 28 was in limelight and headlines of world till its last day. More than 85,000 professionals, ethnicities, doctors, engineers, farmers, CEOs of oil companies, presidents, Royals gathered in Dubai. It was quite different from the previous conference of parties. Because in this climate conference different pavilions were made by different countries to present their case, culture was shown by different ethnicities, different types of artifacts and modules were represented at different pavilions to reduce the climate change effects. First time

Use of modern technology, Artificial Intelligence was implemented to cope climate change. It was not just like Climate Conference but rather a Global event.

2- Loss and damage fund:-

Creation of loss and damage Fund was the major and important achievement of COP 28. Different pledges were made by various carbon emitters in order to support the climate vulnerable countries. Approximately 700 million USD was collected. Pakistan received \$66 million from Green Climate Fund (GCF) and \$5 million from USAID.

3- Tripling renewable energy sources.

It was given the primary focus to triple the Renewable energy sources by 2030. 154 countries

agreed on introducing various green technologies, electric vehicles and sustainable methods by 2030.

4- Pledges of oil giants:-

Chief executives of different oil companies like Saudi Aramco were aiming to introduce methods, strategies to reduce the carbon emissions and to shift oil economy into green economy.

5- Net Zero emission by 2050:-

All participating 154 countries showed determined faith in the Revival of Paris Agreement. To make earth a suitable place of living Net Zero emissions by 2050 was given priority.

6- Robust disbursement of funds :-

In order to make the efficient transfer of funds

robust disbursement of funds through efficient banking channels was made sure. - Because in these previous climate events pledges had been made but transfer of funds delayed to several years -

7- Special initiatives:-

Oil Giants and the big oil producers announce special initiatives for the climate vulnerable countries and also countries which contribute very low in carbon emissions - like Pakistan is the country which makes less than 1% in carbon emission but is affected by climate change with severe. Different green projects were given to these countries. World Wild Life fund, Green climate fund makes pledges to give dollars to Pakistan.

8- Public awareness :-

Different environment activists, professionals, engineers and people from different ethnic background like

Africa participated in the COP 28 to spread public awareness among masses.

This showcasing of the climate change effects of these countries was part of public awareness campaign among people about climate change.

9- Beginning of end of fossil fuel

It was first time all the participating members of the states were determined to reduce dependency on fossils. Few oil economies like KSA, Russia, Gulf were reluctant in transition of fossils towards Green economy. Because the economies of these countries are

heavily dependent on the fossils. But COP 28 proved the beginning of the end of fossil fuel era.

10- Pakistan pavilion:-

In this climate conference Pakistan presented its case in very efficient and strongly manner. Pakistan showcases the climate effects it has faced by extreme weather events like 2022 floods, extreme monsoon season and its destruction.

Pakistan pavilion was gaining attention in the COP28.

(b) Explain Eutrophication?

Definition

Types

Causes

Effects

1. Definition:-

Eutrophication is the increase in the supply of organic matter. It is the excessive plant growth resulting from nutrient enrichment. When the too much nutrients added to the water bodies the excessive plant growth occurs like weeds, herbs, Shrubs, Algae and macrophytes.

Causes:-

- Fertilizers
- Untreated Sewage
- Detergents containing phosphorus
- Industrial discharge of waste

The industrial waste directly becomes part of water reservoirs, polluting it.

Excessive use of fertilizers results in the accumulation of the nutrients in the water bodies resulting in the

eutrophication

Types of water bodies affected by eutrophication:-

Oligotrophic → low in nutrients

Mesotrophic → Intermediate level of nutrients

Eutrophic → Rich in nutrients

Types

- Anthropogenic eutrophication-

- Natural eutrophication-

Effects:-

- Growth of phytoplankton

- Gelatinous zooplankton

- Algal blooms

- Fish death

- Aquatic life death

Depletion of dissolved oxygen in water body

QNO4: End of Global warming
has ended this is an
era of global warming.
Justify boiling

Outline

• Introduction

• Definition

- Causes

- Effects

- Effective measures

1- Introduction :-

This is the reality the end
of Global warming because
now the major threat -
the world is facing - is the
threat of Global boiling.

The average increase in
the temperature of Earth,
Oceans is termed as
Global boiling.

July 2023 was the

hottest month ever recorded.

This Statement "The era of global warming has ended now it is the era of Global boiling" was used by UN Secretary General MR. Guterres -

Effects:

- Droughts becomes more intense -
- Large forest fires -
- Glaciers Melting -

66% Chances Global temperature might hit 1.5°C threshold above pre-industrial levels -

* But is still in the hands of humans to limit 1.5°C and reduce carbon by 2050 -

Causes

- * Massive Industrialization -
- * Heavy dependence on fossil fuels -

★ Diminishing biodiversity - at