

Part - II

QNO:2

Ans:-

① Introduction

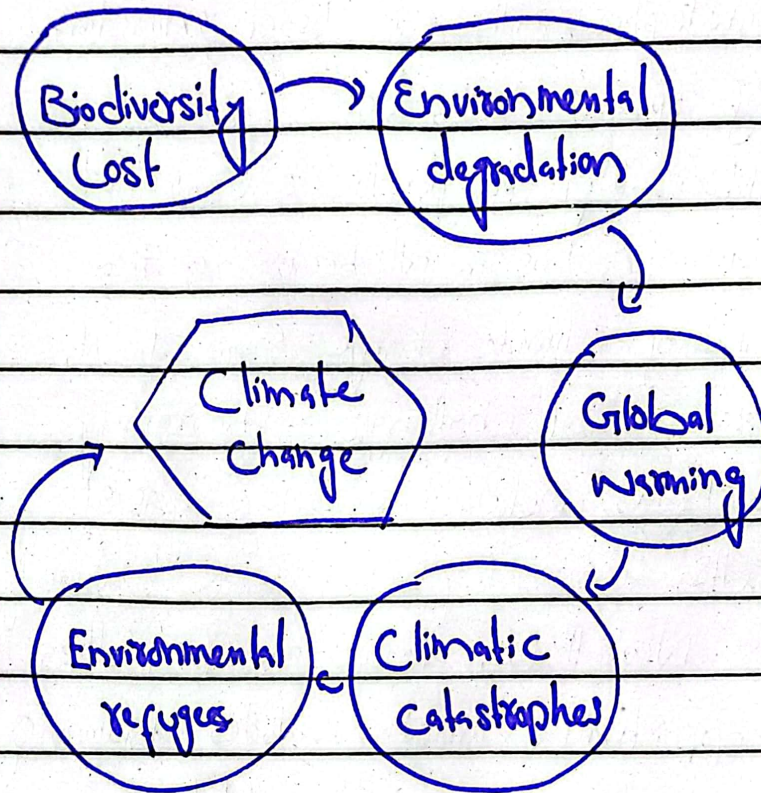
Unprecedented climate catastrophes with mass level extinction of species have become common in 21st century. As per the Environmental Scientists, this is all because of the bone of climate change. Owing to it, there several challenges to humanity. Such as, extreme weathers; glacial melts; unusual floods; and biodiversity loss. Nevertheless, there are also plethora of opportunities, which includes; biomimicry in developmental projects; stabilizing Green House Gas Emissions (GHGs) and many more.

② Understanding Climate change

According to UNFCCC, it is the change in weather patterns over a period of time in a specific area. More specifically, weather is

a phenomena that changes over due to axis motion of the Earth. Thus, change in it over a period of time causing climate change.

③ How Climate change has become a menace?



Through this flowchart, it can be analyzed that the biodiversity lost, environmental degradation and exacerbating global warming along with

Rising issue of environmental refugees is a manifestation - climate change as a menace

Challenges posed by climate change

4.1- Extremely harsh weather - patterns

The excessively hot waves and cold waves are turning the weather extremely unbearable for living organisms. For example, as per WMO, 2022 winters and summers were unusual for Europe and the world. That is due to the climate change.

4.2- Ice sheet loss - Glacial melting

The melting of ice sheets and glaciers have also become a major challenge for humanity. According to NASA, almost 25% of Russia's, 35% of Americas and

about 20-30% of Himalayas ice have been melted.

4.3- Unprecedented Floods - Damaging the infrastructure

Connecting dots, the impact of such ice melts are more disastrous. As they are passing the damage of floods. As per NDMA, the 2022's floods in Pakistan were unusual that damaged 40 billion worth of material along with thousands of lives.

4.4- Rising sea level - Issue of Climate Refugees

According to UNEP, every year the sea level is rising in 8 inches. By 2050 more than 30 million environmental refugees will be present at only Africa.

4.5- Biodiversity loss — A existential crisis for humanity

According to IUCN, the world is at existential crisis as $\frac{1}{3}$ coral reefs, $\frac{1}{4}$ birds, $\frac{1}{7}$ mammals and $\frac{1}{5}$ species of plants at the risk of extinction. If the temperature of world exceeds by $\pm 4^\circ$ by preindustrial level 470% of biodiversity will be lost.

5) Opportunities to cure the menace of Climate change

5.1- Stabilizing Green House Gas Emission — Transition to the Renewable Energy Resources

As the world is transitioning to the renewable energy source, it will help to get-rid of emissions created for the energy. According to 5th assessment of IPCC, 35% emissions are caused by one

S.2: Reforestation - Reviving the natural habitats

Humans have already deforested 400 million acres of land till today, according to some estimates. However, the process of reforestation undoubtedly give some relief to the world. As it will revive the natural habitats.

S.3: Afforestation - Compensating the environment for Anthropogenic mishaps

Owing to anthropogenic mishaps, the ecological restoration is not a simple task. The process of afforestation would be as essential as reforestation.

S.4 - Implementation of Environmental pledges

From the 1992 Earth Summit to the COP-27 not a

single pledge has been achieved due to national interests. The implementation is as necessary as other suggestions.

55- Social Marketing — Awareness in mass about harm of climate change

Social marketing through governments and INGOs — international non-governmental organization about the preventing of climate change.

Conclusion

To reiterate, climate change is no doubt is a menace that has caused the environment of wrath in the world. However, there are opportunities to cure it through national means. That includes the awareness programmes and implementation of pledges.

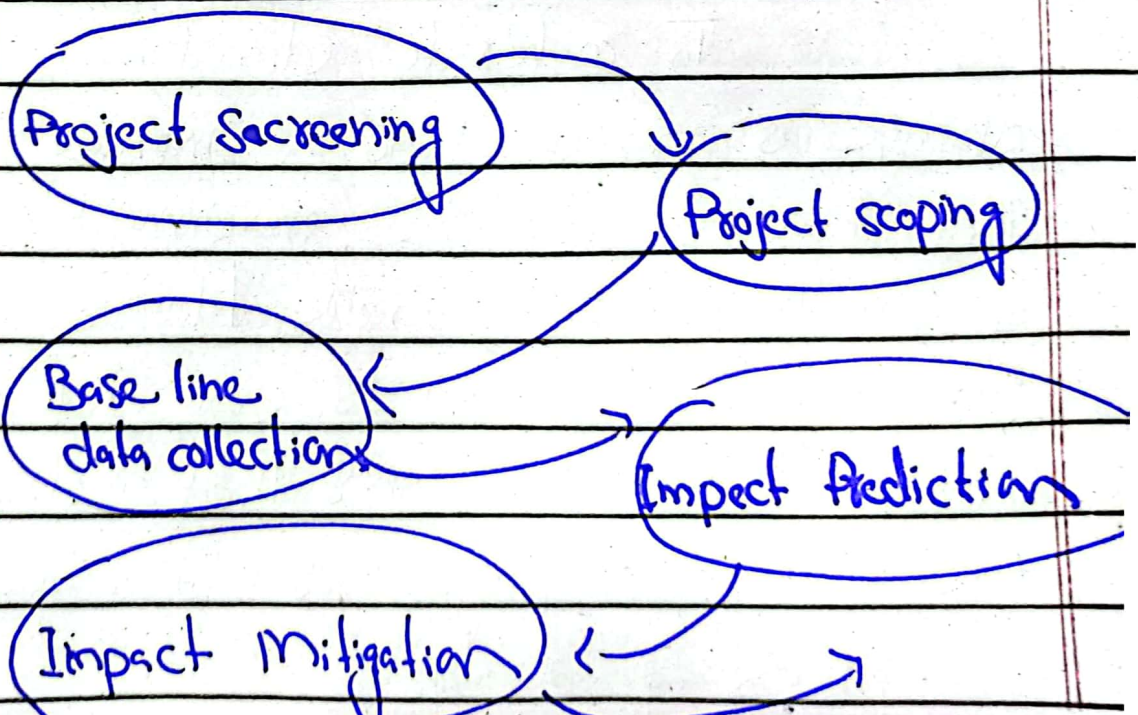
Q NO 31-

ANS:-

① Introduction

In the journey against environmental degradation, the Environmental Impact Assessment (EIA) has played pivotal role. As the mandate of EIA revolves around the prediction of problems and mitigation of environmental issues caused by developmental projects. More-over, there is a huge difference between Strategic Environmental Assessment (SEA) and EIA, that is discussed below.

② Environmental Impact Assessment - An overview

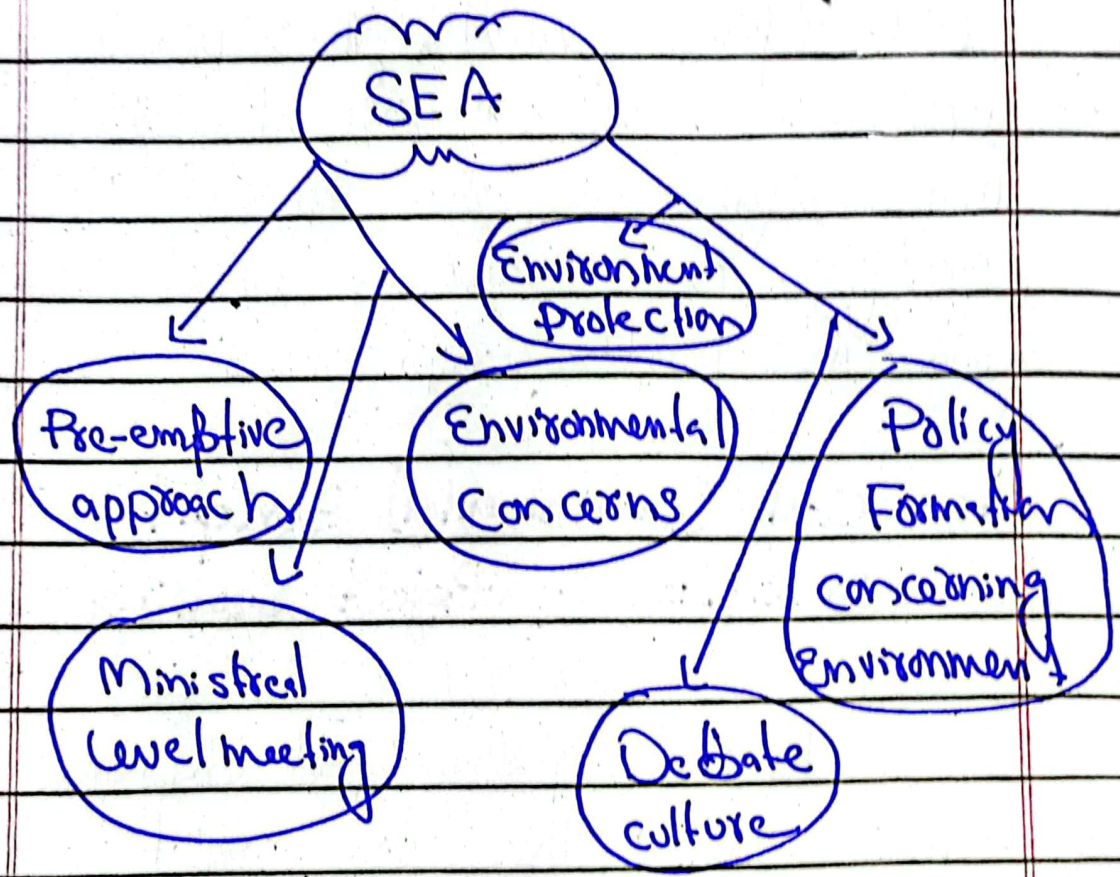


Social meeting

Environmental Audit

It was a short overview of EIA. The steps or comparing with itself for the sake of environmental protection.

① Strategic Environmental Assessment - An overview



The flow-chart represents

-the way through which the SEA works and fulfils its mandate.

④ How Environmental Impact Assessment reduce environmental cost ?

4.1- Analyzing the nature of project — Project screening — with environmental lens

This is the very first first step, in which the primary information is collected through that information the officer analyze the nature of project and its possible implications

4.2- Cost (Environmental) Benefit Analysis — Project Scoping

After doing the first step, the officer ensures the cost benefit analysis. The cost involves the

-the environmental cost. In which he checks the maximum to minimum environmental damage.

4.3- Navigating Possible outcomes by Base line Data collection

For the sake of transparency the officer, by himself, goes to the field, where the project is supposed to be started. In which the officer collects the data about geography; topography; temperature; domesticated agriculture; number of trees and etc etc

4.4- Impact Prediction — Concerns to solve the impact

Through all that analysis, the officer predicts the impacts.

As per the nature of impact the officer suggest measures for mitigation or change the nature of project.

Through that, the environment

protection is assured.

4.5 - Social Meeting - Hearing the concerns of Locals

Moreover, in order to hear the concerns of the locals, the most important step is social meeting. In which, the locals are engaged about their concerns for the project.

4.6 - Approval After deep analysing

After all the minute detail collection and their analysis through the lens of environmental protection the officer permit the license for the opening of the project. In a case of any mis-calculation the authority has a power to reject the license.

3) Difference between EIA and SEA

s.1- Post Policy Approach — the nature of EIA

In the EIA, the process of environmental protection is pre-determined through the existing policy.

s.2- Pre-policy Approach — the nature of SEA

In the SEA, the discussion is initiated before the project. As this approach is pre-emptive approach where the ministers discuss about policies.

s.3- Organizational Level Approach — EIA

In the EIA, only one institution is involved.

that has been assigned task about environment protection

s.4- Ministerial level approach - SEA

In the SEA, all the ministers of all ministries sits together and discuss about the policy by regarding environmental concerns.

s.4- Based on the rules and regulation - EIA

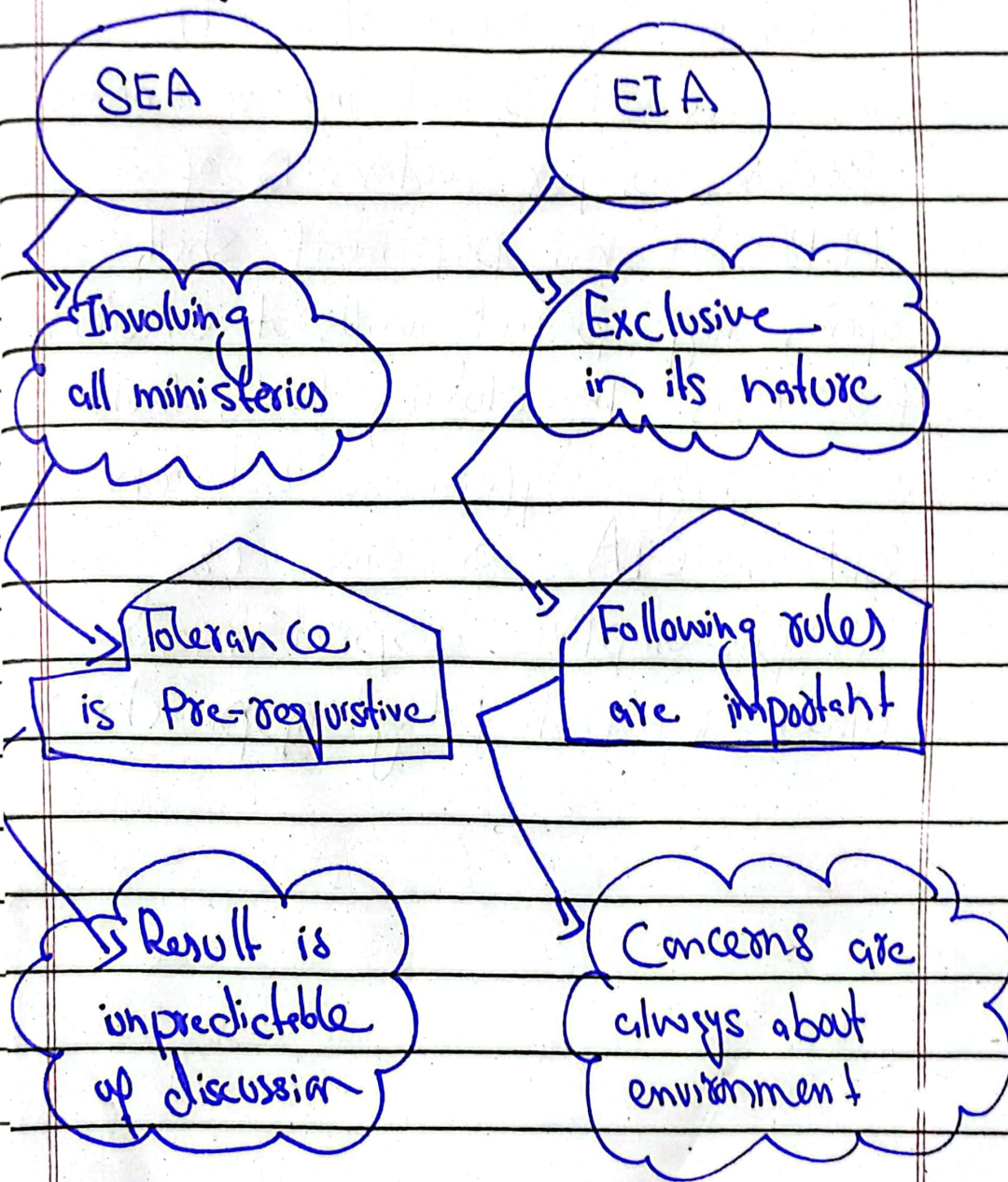
The approach of EIA is completely based on the pre-determined rules and regulations devised by the authority.

s.5- Discussion based method - SEA

Moreover, there are no such specific rules as

In this approach the issues are discussed to be solved

Other Differences are mentioned through flow-chart



This flow-chart represents

other major differences between SEA and EIA.

⑦ Conclusion

To cut story short, through the selected procedure and rules and regulation the EIA is enabled to protect the environment. Because, as per Section-12 of PEPA-Act no proponent shall open any project without concerning the EIA. Including that, there is a huge difference between SEA and EIA as one is a pre-emptive approach and other is post-policy approach.