

Please also give marks out of 20.

Name:

Aktia Altaf.

Subject:

Environmental Science.

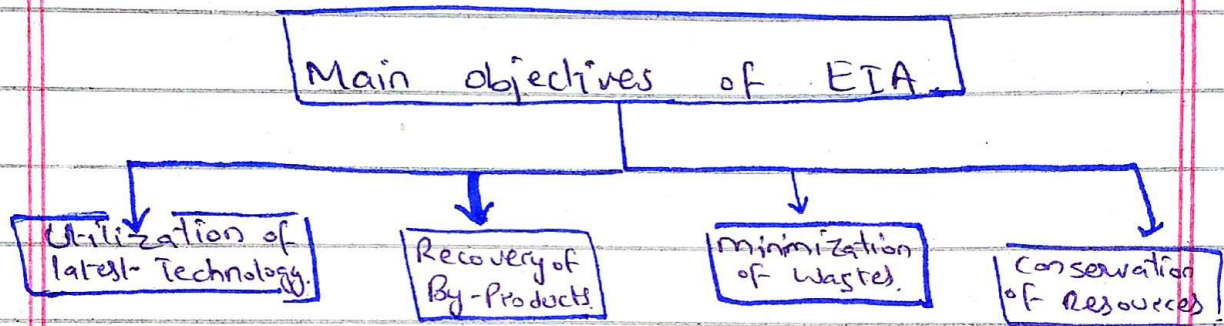
⇒ Q.No.1:- Give a brief about environmental Impact Assessment (EIA) Procedural stages? In the context of EIA, what type of Information is gathered when established a baseline?

→ 1. Introduction:-

Environmental Impact Assessment (EIA) is defined as, "Study of Potable alterations in biophysical and socio-economic characteristics of the environment that may occur due to a proposed action." e.g. an industrial Project. It is also study of effects of a proposed Project, plan, program on the environment. The Environmental Impact Assessment (EIA) is an interdisciplinary and multistep Procedure to ensure that environmental considerations are included in decisions regarding Projects that may impact the environment.

⇒ (2) History of EIA :-

The legal, methodological and procedural foundations of EIA were established in 1970 by the enactment of the National Environmental Policy Act (NEPA) in the USA. At the international level, lending banks and bilateral aid agencies have EIA Procedures that apply to borrowing and recipient countries.



⇒ (3) Responsibility of EIA :-

Responsibility for Producing an EIA will be assigned to one of two Parties

1. The government agency, or ministry.
2. The Project-Proponent.

⇒ (4) Purpose of EIA :-

EIA is a planning tool with a purpose of evaluation of quality of environment of project site and controlling and devising alternative processes to

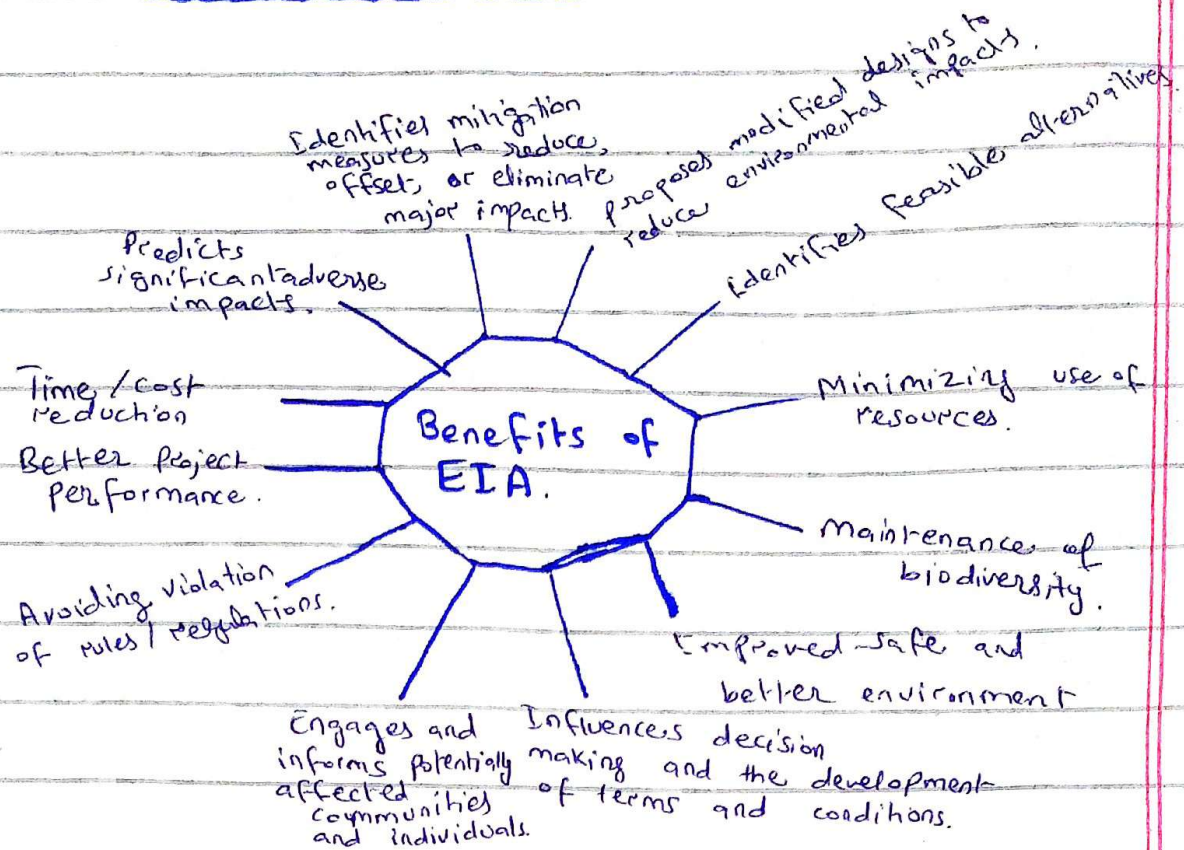
maintain quality of environment. The purpose of EIA process is to inform decision makers and the public of the environmental consequences of implementing a proposed project. The EIA document itself is a technical tool that identifies, predicts and analyses impacts. Principle 17 of Rio Declaration on Environment and Development calls for use of EIA as a national decision making instrument to be used in assessing whether proposed activities are likely to have significant adverse impact on the environment.

⇒ 5. Parameters of EIA:-

Main Parameters emphasized by EIA are.

1. Alternate use of land site.
2. Alternate routes of development to manufacture same product.
3. Alternate technologies.
4. Ability of ecosystems to sustain projects.
5. Quality of environment before, during and after project.

⇒ 6. Benefits of EIA:-



⇒ 7. Stages of EIA Process:-

The EIA Process, while not uniform from country to country, generally consists of a set of procedural steps culminating in a written impact assessment report that will inform the decision-making whether to approve or reject a proposed project.

1. Project Proposed.
2. Screening.
3. Scoping.
4. Baseline Data Collection.
5. Impact Assessment.
6. Mitigation.
7. Environmental Impact Statement.
8. EIS Review.

9. | EIA Follow-up.

⇒ 1. Identifying and Defining the Project or Activity:-

The goal of this step is to define the project with enough specificity to accurately determine the zone of possible impacts and to include activities that are closely connected with the proposal so that the entire scope of environmental impacts is evaluated.

⇒ 2.

Screening:- The Screening Process determines whether a particular project warrants preparation of an EIA. Screening determines whether an EIA is necessary. EIA vary from country to country.

⇒ 3.

Scoping:- Scoping is a stage, usually involving the public and other interested parties, that identifies the key environmental issues that should be addressed in an EIA.

Scoping identifies whether issues need addressed.

⇒ 4.

Baseline Study:- Following on from Scoping, it is essential to collect

all relevant information on the current status of the environment. This study is referred to as baseline study as it provides a baseline against which a change due to development can be measured.

→ 5.

Impact Prediction:-

Impact Prediction involves forecasting the likely changes in the environment that will occur as a result of the development.

In this step the evaluation of the significance of the identified impacts.

→ 6.

Mitigation:- The assessment of impacts might reveal damaging impacts on the environment. These may be alleviated by mitigation measures.

→ 7.

Producing the Environmental Impact Statement:-

The outcome of an EIA is usually a formal document known as Environmental Impact Statement, which sets out factual information relating to the development, and all the information gathered relating to screening, scoping,

baseline study, impact prediction and assessment.

⇒ 8. EIA Review:-

Once EIA is complete, it is submitted to the competent authority to permit or refuse development applications. The authority then reviews the document. The review process should enable the decision maker to decide whether EIS is adequate, whether information is correct.

⇒ 9. Follow up:-

Follow-up relates to the post-approval phases of EIA and encompasses monitoring of impacts, the continued environmental management of a project and impact auditing. Data generated by ^{monitoring} follow-up process should be compared with original predictions, and the mitigation measures in the EIS to ~~be~~ determine.

- (i) The accuracy of original predictions.
- (ii) The degree of deviations from the predictions.
- (iii) The possible reason for any deviation.
- (iv) Mitigation measures projects.

⇒ 8. Preparing Terms of References:-

The terms of references serve as a roadmap for EIA preparation and should ideally encompass the issues and impacts that have been identified during the scoping process. A draft Terms of References may be made available for public review and comment.

⇒ 9.

Preparing Draft EIA:-

A draft EIA is prepared in accordance with the Terms of Reference and/or the range of issues identified during the scoping process. The draft EIA must also meet the content requirements of the overarching EIA law or regulations.

⇒ 10.

Public Participation:- Best EIA

practice involves and engages the public at numerous points throughout the process with a two-way exchange of information and views. Public participation may consist of informational meetings, public hearings, and opportunities to provide written comments about a proposed project.

⇒ 11. Preparing final EIA:-

This step produces a final impact assessment report that addresses the viewpoints and comments of the parties that reviewed the draft EIA. These comments may prompt revisions to the text of draft EIA.

⇒ 12.

Decision:- A decision to approve or reject a mining project is generally based on the final EIA, But in some instances, an environmental clearance may be just one step in the mine permitting process.

⇒ 13.

Administrative Review:- Depending on the jurisdiction, there may be opportunities for a party to seek administrative or judicial review of the final decision and the EIA process. A country's judicial review or administrative procedure act, or sometimes the EIA law itself, will usually identify the kinds of issues that can be raised in an appeal and the type of relief that may be granted.

→ 14. Project Implementation:-

Proj. Provided all regulatory requirements are met- and Permits are obtained, mine development will proceed following the Project decision and once opportunities for administrative judicial review are exhausted.

→ 15.

Monitoring:- Monitoring is an important part of Project implementation. Monitoring serves three purposes.

1. Ensuring that required mitigation measures are being implemented.
2. Evaluating whether mitigation measures work effectively.
3. Validating the accuracy of models.
