What Is Environmental Impact Assessment?

Worksheet

EIA is a structured process - screening, scoping, impact analysis, mitigation, review and monitoring - used to identify and reduce a project's likely environmental effects before construction begins.

$$I = E + W + \frac{CO_2}{\Delta t}$$

Questions

1. What is the primary purpose of an Environmental Impact Assessment?

A) To calculate construction cost
B) To predict and evaluate a project's environmental effects before approval
C) To design the building's structure
D) To select interior finishes

2. In the EIA process, what happens during 'screening'?

A) Measuring exact pollution levels
B) Deciding whether the project needs a full EIA at all
C) Approving the final design
D) Monitoring construction

3. A project scores M=3, P=3, D=2 for its impact significance. What is IS?

A) 8
B) 18
C) 24
D) 36

4. What is 'mitigation' in an EIA?

A) Ignoring negative impacts
B) Measures to avoid, reduce, or offset harmful effects
C) Increasing the project's environmental footprint
D) Skipping monitoring

5. A proposed factory scores Magnitude=4, Probability=4, Duration=3 for air pollution. What is its impact significance score?

6. A small renovation project scores Magnitude=1, Probability=2, Duration=1 for noise. Find IS.

7. A dam project affecting a wetland scores Magnitude=5, Probability=5, Duration=5 for ecological impact. Find IS and its category.

8. Define: What is an EIA?

9. Define: What is 'scoping' in the EIA process?

10. Define: What is mitigation in EIA?

Answer Key

1. B) To predict and evaluate a project's environmental effects before approval - EIA exists to identify likely environmental effects before a project is approved, so they can be avoided or mitigated.

2. B) Deciding whether the project needs a full EIA at all - Screening is the first step: determining if a project's scale/type triggers the need for a full assessment.

3. B) 18 - IS = MPD = 332 = 18.

4. B) Measures to avoid, reduce, or offset harmful effects - Mitigation measures reduce or offset a project's predicted environmental harm.

5. IS = M P D IS = 4 4 3 IS = 48 (high significance - mitigation required)

6. IS = M P D IS = 1 2 1 IS = 2 (very low significance - likely exempt from full EIA)

7. IS = M P D IS = 5 5 5 = 125 Maximum possible score critical significance, extensive mitigation and alternatives required

8. A formal process predicting and evaluating a project's environmental effects before approval.

9. The stage where the most significant potential impacts and study boundaries are identified.

10. Measures designed to avoid, reduce, or offset a project's negative environmental effects.