

KATHMANDU UNIVERSITY  
End Semester Examination  
05 - January 2024

Level : B.Sc.  
Year : IV  
Time : 2 hrs. 30mins.

Course : ENVS 402  
Semester : I  
F. M. : 40

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SECTION "B"

[4Q × 8 = 32 marks]

Attempt *ANY FOUR* questions.

1. Present your agreements and disagreements with the statement "EIA is just an add-on and occurs too late to do any good" with example/s. Show the role of EA in different stages of the project cycle. [3 + 5]
2. List the four major methods used during the scoping exercise within an EIA study of a development project. Prepare a sample example of the Simple Matrix Interaction matrix for prioritizing the impacts of a hypothetical hydroelectric dam project. [2 + 6]
3. A proposed hydroelectric dam project promises significant energy generation but raises concerns about downstream water flow and indigenous communities' displacement. Prepare an example of sample impact evaluation of potential adverse impacts of the project activities during the construction and operation phase of the project. [2 + 6]
4. Analyze the potential beneficial and adverse impacts of the hydroelectric dam project given in question 3, and propose possible mitigation measures for the construction phase. [8]
5. Compare the three major alternatives for the proposed hypothetical hydroelectric dam project to be constructed near the buffer zone of Kanchenjunga National Park. Discuss the statement "Alternative Analysis can save resources significantly." in light of the aims and considerations of the alternative analysis. [6 + 2]

SECTION "C"

6. Write short notes on *ANY TWO*. [2Q. × 4 = 8]
  - a. Public participation in EIA
  - b. Environmental flow assessments
  - c. Models used in impact prediction
  - d. Strategic Environmental Assessment



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Marks Scored:

Level : B.Tech.

Year : IV

Exam Roll No. :

Time: 30 mins.

Course : ENVS 402

Semester : I

F. M. : 10

Registration No.:

Date :

SECTION "A"

[20Q. × 0.5 = 10 marks]

Choose and mark [X] the most appropriate answers from the given choices.

1. Which of the following is **NOT** the immediate objective of EIA?  
 Improve the environmental design of the proposal  
 Engage the stakeholders and ensure the credibility of the project  
 Identify appropriate measures for mitigating the potential impacts of the proposal  
 Justifying the economic benefits of implementing the proposal
2. The scope of an EIA should be determined by:  
 The size and complexity of the proposed project.  
 The environmental sensitivity of the project area.  
 The potential for transboundary impacts.  
 All of the above.
3. During ..... phase of the project cycle, improvement and mitigation measures are incorporated from the EIA.  
 Pre-feasibility     Construction     Project concept     Detailed Design
4. According to the screening criteria mentioned in the schedule of the EPR 2077, a project involving the construction of a bridge of up to a length of 90 m typically requires:  
 BES                     IEE                     EIA                     Supplementary EIA
5. As per the EPR 2077, the project requiring BES has been listed in  
 Schedule 1             Schedule 2             Schedule 3             Schedule 4
6. Mitigation measures in an EIA should aim to:  
 Completely eliminate all potential environmental impacts of the project.  
 Reduce the severity and duration of negative impacts to acceptable levels.  
 Transfer the environmental costs to other communities or future generations.  
 Compensate for environmental damage through financial payments only.
7. A fish ladder is an example of ..... measures for the impacts of a dam in a hydropower project.  
 Compensatory     Preventive             Corrective             All of the mentioned
8. Which of the following types of auditing audits the responses of the stakeholders?  
 Decision point auditing                     Performance auditing  
 Implementation auditing                     EIA procedure auditing

9. Strategic Environmental Assessment (SEA) differs from EIA in that it:
- Assesses the environmental impacts of specific projects in detail.
  - Evaluate the environmental implications of broader policies, plans, and programs.
  - Requires mandatory public consultation for all projects regardless of scale.
  - Focuses solely on predicting and mitigating negative environmental impacts.
10. Which of the following authority approves the Strategic Environmental Analysis report within 3 months of its receipt?
- Council of Ministers
  - Ministry of Forest and Environment
  - National Planning Commission
  - Department of Environment

**Fill in the blanks with appropriate words.**

11. According to the Asian Development Bank's Environmental Screening Criteria for Category B projects, ..... is required for projects that are expected to have less significant adverse environmental impact in comparison to Category A.
12. The cost of the environmental assessment (EA) study will vary considerably and on a very general estimate, the EA cost could be up to 5% of the total ..... costs.
13. During the scoping for a development project requiring EIA, the proponent publishes a ..... days notice in a national daily newspaper for suggestions in writing.
14. The information collected during baseline monitoring is presented in Chapter 5, as "....." in EIA reports.
15. During the identification, prediction, and evaluation of impacts, the "Extent" of the impact is categorized as Site specific (SS), Local (L), ....., and Transboundary (T).
16. According to Forest Rules 1995, Tree volume can be calculated using girth and height as .....
17. Proposed environmental mitigation measures should be able to describe the impact it will ....., mitigate or ..... when implemented.
18. EMP in the EA reports stands for .....
19. During alternative analysis, ..... alternative considers no change in existing environmental conditions.
20. As per the legal review procedure for the EIA report, the concerned authority shall review and provide suggestions (or approval) within .....days upon receipt of the EIA report.