

25 JUN 2023

KATHMANDU UNIVERSITY
End Semester Examination
June/July, 2023

Marks Scored:

Level : B.Arch.

Year : IV

Course : ENVS 402

Semester: II

Exam Roll No.:

Time: 30 mins.

F.M. : 10

Registration No.:

Date :

SECTION "A"

[20 Q. × 0.5 = 10 marks]

Encircle the most appropriate option.

1. EIA is defined as:
 - a. Process of identifying, predicting, and evaluating the likely impacts of a proposed project or development to define mitigation actions to reduce negative impacts and to provide positive contributions to the natural environment and well-being.
 - b. Report written by government representatives on the planned development impacts of environment, socio-economic issues and culture.
 - c. Project life-cycle assessment.
 - d. None of the above
2. Which one among the following is the **CORRECT** order of steps taken during the process of Environmental Impact Assessment (EIA)?
 - a. Scoping, Screening, Public Hearing, EIA, Issue of Environmental Clearance
 - b. Screening, Scoping, EIA, Public Hearing, Issue of Environmental Clearance
 - c. Screening, Public Hearing, Scoping, EIA, Issue of Environmental Clearance
 - d. Screening, Issue of Environmental Clearance, Scoping, EIA, Public Hearing
3. Screening criteria is based on:
 - a. Difficult and control attribute
 - b. Type and difficulties of development
 - c. Partial Development
 - d. Type and location of development
4. The baseline studies in EIA pertain to
 - a. Prediction of significant residual environmental impact.
 - b. Collection of demographic data only.
 - c. Existing environmental settling of proposed development area.
 - d. Selection of best project option available
5. Which environmental principle best reflects the intent of EIA?
 - a. Polluters Pay
 - b. Reduce, Reuse, Recycle
 - c. Prevention is better than cure
 - d. None of these
6. Which type of project usually requires EIA?
 - a. Small house development
 - b. Reclamation, resettlement and new land development
 - c. Community garden development
 - d. Outdoor recreation

7. Which one of the steps below is **NOT** included in the scoping process?
- Set up the team of experts that will conduct the EIA.
 - Define a set of criteria to assess the project.
 - Describe the project area and the area of the project influence.
 - Identify and describe the environmental impacts and create a contingency plan.
8. Select the one item from the list below that is **NOT** an example of an approach to impact assessment:
- Expert judgement
 - Quantitative physical and mathematical models
 - One-off impact assessment
 - Social impact assessment
9. is evident that order to identify, assess and predict the environmental impacts.
- Environmental attributes
 - Environmental impacts
 - Variable parameters
 - Complex system
10. Prediction of impact is:
- Quantitative
 - Qualitative
 - Economic
 - Beneficial
11. A core part of Impact Management is developing an EMP – Environmental Management Plan.
- Mitigation
 - Monitoring
 - Capacity Development
 - Evaluation
12. An impact threshold is best described as:
- A point at which a small dose increase causes a relatively large response.
 - A point of no change in the dose-response relationship.
 - A point of maximum and minimum impact.
 - A point where permanent environmental damage is caused.
13. Which of the following statement is **TRUE**?
- Predicting significance is objective.
 - Predicting significance involves value judgements about importance.
 - Magnitude is primarily subjective.
 - Magnitude is not relevant in impact assessment.
14. EIA is including mechanisms for monitoring, and evaluation.
- Specification
 - Reporting
 - Auditing
 - Concluding
15. Impact prediction include determination of and magnitude of impact.
- Action
 - Predict
 - Nature
 - Extend
16. Which of the following require mitigations?
- Significant adverse impacts
 - Significant positive impacts
 - Any impacts which are negative
 - Any impacts for which mitigation is possible

17. of monitoring will be determined by the nature of the project.
a. Frequency b. Phase c. Impact d. Time
18. Who carries out the data collection for monitoring indicators?
a. National Government b. Dependent agencies
c. Independent agencies d. The project implementer's
19. Project monitoring is required:
a. Before commencement of the project.
b. After completion of the project.
c. At any stage of the project deemed necessary.
d. During implementation of the project.
20. EIA is intrinsic link between and economic growth.
a. Ecological b. Beneficial c. Environmental d. Polluted

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SECTION "B"
[5Q × 5 = 25 marks]

Attempt *ANY FIVE* questions.

1. Explain Environmental Impact Assessment (EIA), Initial Environmental Examination (IEE) and Scoping. Explain scoping approach and methods used in scoping.
2. Explain the framework for conduction baseline study with examples.
3. What are the objectives of preparing "Terms of References" (ToR). Explain in terms of the issues regarding physical, biological and social environment for any one of the projects like hydropower, road or landfill site.
4. Explain different types of Environmental monitoring. Prepare a framework of Environmental monitoring plan.
5. List out five major features of Environment Protection Act, 2076 (EPA) and Environmental Protection Rules, 2077 (EPR).
6. Explain the methods of Impact identification and Prediction with examples.

SECTION "C"
[2Q × 5 = 10 marks]

Attempt *ALL* questions.

7. Design a constructed wetland for dairy industry in Hetauda having influent BOD 450mg/L. The expected effluent BOD is 45 mg/L. The design population is 12000 and per capita waste generation is 80 liters per day. Assume all necessary data.
8. Within 25 m periphery, if source A produces a 50 dB noise level at M on its own and if Source B produces at M a 60 dB noise level on its own, then calculate the resultant noise when both sources are working. What is the sound pressure level that reaches 80 m away from the point M if 25 % of sound is absorbed by the vegetation?

SECTION "D"
[2Q × 2.5 = 5 marks]

9. Write Short notes on *ANY TWO*.
 - a. Environmental Management Plan (EMP)
 - b. Public Consultation
 - c. Screening