BANGLADESH UNIVERSITY OF PROFESSIONALS
Military Institute of Science and Technology
B.Sc. in Environmental, Water Resources, and Coastal Engineering, Term Final (Spring)
Examination 2025: Oct - Nov 2025

Student Group: Earned Credit Hours > 108

Subject: EWCE 431, Environment and Social Impact Assessment

Time: 3.00 hours **Full Marks: 180**

INSTRUCTIONS:

a. Use **SEPARATE** answer scripts for each section.
b. **Question-1** in **Section-A** and **Question-5** in **Section-B** are compulsory.
c. Answer any other **TWO** out of the remaining **THREE** questions from each section.
d. Figures in the margin indicate full **marks**.
e. Assume reasonable data if necessary.
f. **Symbols** and **abbreviations** used have their usual meanings.

SECTION-A

Question 1 **(Compulsory)**

a. Schematically show the main activities of ESIA. **08**

b. State the goals of Environmental management. Explain the framework for environmental management. **09**

c. Explain the major environmental issues in Bangladesh. **05**

d. List the factors need to be considered in declaring an ecologically critical area. State the sorts of activities that are restrained in such areas. **08**

Question 2

a. Write down the guiding principles and objectives of Bangladesh Environment Policies 1992. **10**

b. State the reasons for non-enforcement of environment laws in Bangladesh. **05**

c. Describe the alternative ways of resolving disputes about resource exploitation and environmental management. **05**

d. Explain the process of obtaining environmental clearance certificate (ECC) for green, yellow, orange and red category projects. **10**

Question 3

a. Explain how to decide whether to conduct an EIA or IEE. Describe the best policy in this regard. **04**

b. Describe how the different environmental standards are related to the environmental impact chain approach. **10**

c. Mention the purposes of setting standards for different environmental parameters. **06**

d. Explain with diagram how environmental consideration now-a-days are incorporated into the traditional project cycle. **10**

Question 4

a. Explain the desirable characteristics of ESIA method. Name different types of ESIA methods. **08**

b. Describe the roles of an Environmental Management Plan (EMP). Write the typical content of an EMP. **08**

c. Explain how EMD is integrated into project design. Illustrate with the help of a flow chart. **05**

d. Describe the purposes of environmental monitoring. Construct a typical format for an environmental monitoring table. **09**

SECTION-B

Question 5 **(Compulsory)**

a. Define Environmental and Social Impact Assessment (ESIA). Explain the important considerations and fundamental objectives of ESIA. **10**

b. Explain how a development project is described in an EIA report. Give examples. **10**

c. Bangladesh Economic Zone Authority (BEZA) wants to establish an economic zone in Bhuapur, Tangail. There will be environmental effects due to the project including impacts on air and water quality, wild life and habitats, noise levels and the visual landscape. **10**

(i) Discuss the public participation needed to lessen the proposed project's impacts from the viewpoint of sustainability.

(ii) Explain how you determine the necessity of ESIA. Describe the approaches for conducting that process.

(iii) Identify the types of people you would choose for performing EIA.

Question 6

a. Discuss the importance of social impacts in ESIA, specifically for developing countries. **07**

b. List the major and minor socio-economic impacts of a development project. Explain from the context of EIA. **08**

c. Sonadia Island is a part of Cox's Bazar. Poor planning for tourism developments has resulted to social degradation in that area. The SIA need to be done for this project focusing on the social problems that need to upgrade to improve the quality of life, health, economy. **15**

(i) Define SIA. Identify the factors to be addressed for finding out appropriate stakeholders from Cox's Bazar.

(ii) Identify the types of social impacts to be addressed while conducting SIA.

(iii) Write down different methods of data acquisition in SIA.

Question 7

a. Explain the methods of economical evaluation of environmental impacts conducted in EIA. **10**

b. List the typical impacts and mitigation measures of road development projects on (i) air environment, (ii) water environment and (iii) socio-economic condition. **10**

c. Explain how gender issues can become a challenge for sustainability of a development project and how it can be addressed in ESIA. **10**

Question 8

a. Briefly discuss the importance of public participation and different methods that are applied in ESIA. **10**

b. In a development project a group of people is to be resettled and rehabilitated in a new place. Explain how the resettlement planning will be done. **10**

c. A fabric industry has been working in an industrial area for 15 years already. In the last 5 years, the production of this fabric has been doubled. An urban area near the industry has been complaining about the bad smell coming from this fabric. For this reason the community asked the Municipality to perform an environmental evaluation for this industry since never before has any evaluation been executed. As an environmental consultant- **10**

(i) What type of environmental evaluation you will need to perform for this case? Explain your answer.

(ii) Identify the types of experts to be considered to work in your evaluation team and explain the reasons.

(iii) Do you need to undertake any survey or discussion to verify the complain of the local community and why?