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: GEEM 445, Engineering Ethics and Professional Practices

Time: 3.00 hours **Full Marks: 120**

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. Define professional practices. Explain the term professional. Enumerate how you will be able to maintain professionalism in your work place. **04**

b. Briefly describe the characteristics of civil and environmental/water resources engineers. Explain the attributes of civil and environmental/water resources engineering professionals. **04**

c. Discuss ethics, laws and morals with examples. Differentiate between ethics and laws. **04**

d. Define professional/business communication. Write down the importance of professional communication. Briefly describe the broad categories of professional communication. **04**

e. Write down your understanding about the financial proposal of a project. Write down the importance of financial proposal in a project. Explain why you are required to summarize everything at the end of your financial proposal. **04**

Question 2

a. Define meeting in profession/business. Write down the tasks, you are likely to be responsible to perform while planning for a professional meeting. Briefly describe the meeting room arrangements for professional meetings. **10**

b. Explain the meanings of engineering ethics. Write down the objectives of engineering ethics. Briefly describe the different types of ethics mentioned in the ethical triangle with examples. **10**

Question 3

a. Write down your understanding about the barriers of professional/business communication. Describe the human factors leading to the barriers to professional communication. Enumerate the strategies to overcome the barriers to professional communication. **10**

b. Define the code of ethics for the professionals. Briefly describe the functions of code of ethics. Write down the fundamental principles of ASCE code of ethics. **10**

Question 4

a. Define the technical proposal in project management/professional practices. Describe the different types of technical proposals. Explain the different steps to be followed in writing the technical proposal of a product for procurement. **10**

b. Write down the meanings of IFCE/FIDIC. Briefly describe the characteristics of consulting engineers. Write down the five code of ethics of the Institution of Engineers Bangladesh (IEB) **10**

SECTION-B

Question 5 **(Compulsory)**

a. As a professional, how you are going to define professional engagement. Explain the requirements of professional engagements. Differentiate between statement of the work and scope of the work in project management. **05**

b. Define contract in procurement. What is admeasurement contract? Briefly describe the two forms of admeasurement contracts. **05**

c. Explain in brief PPA 2006 and PPR 2008. Enumerate to whom PPR 2008 to be applied in procurement. Write down the formation and functions of Tender Opening Committee (TOC) in tendering process. **05**

d. As a job seeker, what should you do before responding to job advertisement. Identify the employers perspective points from a job seeker. Explain why your CV is likely to be rejected. **05**

Question 6

a. Write down the fundamental criteria of a project. Briefly describe the types of projects, based on the fundamental criteria of a project with examples. Write down the importance of project cost estimate specially in the time bound projects. **10**

b. Define cost reimbursable contract in procurement. Briefly describe the different types of cost reimbursable contract. Explain how the cost plus profit of PPP projects are recovered after completion of the project. Give examples. **10**

Question 7

a. Write down your understanding on Open Tendering Method (OTM). Enumerate the criteria/reasons, based on which procuring entity (PE) goes for two stages tendering method in procurement. **10**

b. Define specification in tender document. As a procuring entity (PE) what should you consider and how you are going to prepare the technical specifications of goods and etc., during preparation of tender documents. **10**

Question 8

a. Differentiate between goods/works and services in public procurement method. Write down the different methods of procurement of intellectual/professional services. Describe in brief the quality and cost based selection (QCBS) method for the procurement of intellectual services. **10**

b. Define notification of award (NOA) in tendering process. Write down the documents forming contract for the implementation of projects. When the tender evaluation committee (TEC) will not continue to evaluate the tender in evaluation process. Mention the actions TEC will take if the tender's offered price is significantly below the official estimates of tender. **10**