Hajee Mohammad Danesh Science and Technology University

B.Sc.Ag. (Hon's), Level-1, Semester-I, Final Examination-2024 (January-June)

Course Title: Fundamentals of Environmental Science (Theoretical)

Course Code: AGF 101 | Full marks: 30 | Time: 2 hours

Answer any 5 (Five) from each section. Split answering of a question is not acceptable.

Section-A

1. Differentiate clearly between "environment," "environmental science," "environmental management," "ecosystem," and "ecology." Provide a specific example for each term to illustrate its meaning. 3.0

2. Explain the fundamental reasons why environmental science is a crucial field of study for undergraduate students in agricultural disciplines. 3.0

3. Briefly analyze the primary human actions and activities contributing to Bangladesh's environmental degradation. 3.0

4. Define the following terms: climate, climate change, resilience, adaptation, and mitigation. 3.0

5. Briefly describe the climate profile of Bangladesh. 3.0

6. What is Climate-smart agriculture (CSA)? Mention the key principle of CSA. 3.0

7. Briefly describe two CSA technologies for climate change adaptation. 3.0

Section-B

1. Write about how energy use pollutes our environment, focusing on burning fossil fuels. 3.0

2. Graphically show the top five countries contributing to global CO2 emissions. Discuss the consequences of the greenhouse effect. 3.0

3. What are the drivers of global warming? Write about the pessimistic impacts of global warming on Bangladesh. 3.0

4. What is meant by "Ozone, Ozone layer, and Ozone hole"? Why is the ozone hole prominent over the Antarctic region? 3.0

5. What is meant by pollutant and pollution? Briefly discuss the different types of pollutants. 3.0

6. Write the reasons and remedies for water pollution. 3.0

7. What is the role of biodiversity in agroforestry systems, and how does it impact the environment? 3.0