

Program: BSc CSE & SWE 1st Semester
Semester: Winter

Date: 23rd December 2023(Saturday)
Time: 01:30pm – 04:30pm

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION (TVE)

Examination: Final Semester Examination
Course Number: HUM 4147
Course Title: Technology, Environment and Society
Academic Year: 2022 - 2023
Full Marks: 150
Duration: 3 Hours

Answer all questions. The symbols have their usual meaning.

1. a) Explain the term Environmental Stewardship. Describe the principles of environmental stewardship. (10) CO3 PO7
- b) Differentiate between weather and Climate. Explain the seven theories of climate change. (10) CO2
- c) How industrialized countries are maintaining environmental quality? (05) CO2
2. a) Explain the process of ozone layer depletion with chemical reactions and mention the impacts of ozone layer depletion on human health and ecology. (05) CO2 PO7
- b) How will you analyze impact of technology on environment? Describe the approaches you have to follow to perform this analysis. (10) CO3
- c) Describe Hydrological cycle and name five major pollutants of air. (10) CO3
3. a) What are the conditions that green technology must fulfill? (10) CO2 PO7
- b) List the consequences of Global warming on Earth. What are the actions that can be taken to reduce its impact? (05) CO3
- c) Municipal waste management is generally accepted as one of the ways of fighting pollution. Which approach would you suggest to Board Bazar authorities to deal with their solid wastes? Point out the pros and cons of the suggested approach. (10) CO1
4. a) Define carrying Capacity of an ecosystem and describe the functions of an ecosystem with examples. (10) CO1 PO7
- b) Define the Earth system. Name the component of the earth system. (05)
- c) What do you understand by Environment? Explain the relationship among environment, society and technology. (10)
5. a) These days a popular slogan in Dhaka is "SAVE THE BURIGANGA" After describing different environmental protection methods, select the method most suitable to solve this complicated problem. Show a reason behind selecting the suggested method. (10) CO3 PO7
- b) Mention the ecologically critical areas under subsection (I) of section 5 of Bangladesh environmental conservation Act of 1995. (10)
- c) Describe the environmental hazards, morbidity and the quality of life. (05)
6. a) What is the most viable renewable energy source for your country to invest in? Explain why you pick that energy source? How it is better than the other energy choices in the following areas: (15) CO2 PO7
 - i) Long term energy supply, and
 - ii) Costs.
- b) Mention some of the ecological diseases. (05) CO3
- c) Differentiate between CFCs and Traditional refrigerants. (05) CO2