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Program: BScTE 2 Years 2nd Semester
Semester: Summer

Date: 05 May, 2023 (Friday)
Time: 10:00 am – 01:00 pm

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

Exam: Final Semester Examination
Course Number: Hum 4249
Course Title: Technology, Environment and Society

Academic Year: 2021 - 2022
Full Marks: 150
Duration: 3 Hours

There are 8 (eight) questions. Answer 6 (six) questions. Question 5 (five) and 7 (seven) are compulsory. The symbols have their usual meaning.

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|----|----|---|----|-------------|
| 1. | a) | Define the following terminologies in relation with environment. | 10 | |
| | | i. Environment, | | |
| | | ii. Technology, | | |
| | | iii. Society, and | | |
| | | iv. Development. | | CO1,
CO2 |
| | b) | “Society uses environment to develop technology”. How would you explain that statement with reference to the relationship of the above terminologies? | 15 | |
| 2. | a) | While the biosphere is the most dominant component in the earth system, it heavily depends on and affects the remaining parts of the earth system. Illustrate the interaction between the biosphere and the other spheres of the earth system both positively and negatively. | 18 | |
| | b) | With the help of a diagram, explain how energy flows among living beings of an ecosystem through the 4 (four) trophic levels. | 07 | CO2 |
| 3. | a) | What is pollution? Name four types of pollution. | 05 | |
| | b) | A number of small islands have disappeared in the Pacific Ocean in recent years. Do you believe that this phenomenon is linked to air pollution? Justify your answer. | 10 | |
| | c) | As the advisor of the minister of environment in your country, what measures would you recommend to him/her in order to reduce air pollution in the country? | 10 | CO3 |
| 4. | a) | What is water pollution? Is it a major environmental issue? Why? | 10 | |
| | b) | Mention a body of water in your country that has been polluted? Describe how that pollution came about. | 15 | CO3 |
| 5. | a) | “Water can be the source of life but it can also be the cause for death”. What is your understanding of this statement? | 05 | |
| | b) | Ordinary people believe that the water of the Turag River (near Tongi-Abdullahpur) is beyond treatment for any purpose. However, experts think that it can be treated for various use. What would you recommend government in order to make that body of water useful again? | 20 | CO3 |
| 6. | a) | Differentiate between municipal solid waste and garbage. Give relevant examples to support your answer. | 05 | |
| | b) | Define waste disposal methods. | 05 | CO4 |
| | c) | Explain three (3) waste disposal methods. List the advantages and disadvantages of each one of them. | 15 | |

7. Having been inspired by cities such as Gulshan for their nice and clean environment, the Gazipur City Corporation Authority (GCCA) has decided to clean their city regularly to ensure a healthy and friendly environment for the residents. With that brief description in mind, answer the following questions.

4. a) Do you think it is realistically possible for the Gazipur City Corporation Authority to achieve the abovementioned goal? Why? 10 CO4

b) Which waste disposal method or methods would you recommend to the Gazipur City Corporation Authority? Justify your answer. 15

8. a) What is **Green Technology**? Name five (5) examples of green technology. 07

b) Many environmental experts believe that one of the main reasons why the **Kyoto protocol** failed to meet its expected results was the pulling out of the USA from the agreement. Considering the danger of excessive industrial emission, do you think the USA's decision to pull out of the agreement was justified? Why? 18 CO4

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