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Program: B.Sc. (Eng.) MPE 4th Semester
Semester: Summer Semester

Date: 7th March 2024(Thursday)
Time: 10:00am – 11:30am

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

Exam: Mid-Semester Examination

Course Number: HUM 4417

Course Title: Sustainability in Technology, Environment, and Society.

Academic Year: 2022 - 202

Full Marks: 75

Duration: 90 minutes

Answer ALL questions. The symbols have their usual meaning.

1. a) Explain the functions of an ecosystem and what are the components of an earth system? (10) CO1 PO7
b) Define the term sustainable development and describe its measures. (15)
2. a) What are Green House Gases? How are they responsible for trapping heat in the atmosphere of Earth? Explain with the necessary diagrams. (10) CO2 PO7
b) What are the benefits of Carbon Sequestration? explain the Seven (7) theories of Climate Change. (15)
3. a) What is an ozone hole? Explain the process of ozone layer depletion with chemical reactions. Mention the impact of ozone layer depletion on Human Health and Ecology. (15) CO2 PO7
b) Explain the process of sewage treatment and mention the process involved in Hydrological cycle. (10)