

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

**Mid Semester Examination**

**Course No:** Hum 4147

**Course Title:** Technology, Environment and Society

**Summer Semester (2018-2019)**

**Time** : 1hr 30 min.

**Full Marks** : 75

**There are 4 (four) questions. Answer any 3 (three).**

Figures in the right margin indicate marks of the questions.

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|-------|---|----|
| 1. a) | What is an ecosystem? Draw and explain the flow of energy in an ecosystem.  | 05 |
| b)    | Define Carrying Capacity of an ecosystem. How can the idea of sustainable resource use contribute to the ecological balance?  | 10 |
| c)    | Write a short note on Earth System and global Atmospheric Change.   | 10 |
| 2. a) | Do you think that uncontrolled population growth is an environmental concern? Explain from your understanding with logical reasoning.                                   | 10 |
| b)    | What is "Biodiversity Loss"? What are the general Ecosystem Services, we get from mother nature? Explain with example.  | 10 |
| c)    | Explain the term Environmental Justice with example.  | 05 |
| 3. a) | Define carbon sequestration? What are the benefits of carbon sequestration?   | 05 |
| b)    | What is Environmental Stewardship? Mention and describe the core principles of environmental stewardship.   | 10 |
| c)    | Differentiate between weather and climate. How acid rain forms and mention it's consequences to the environment from your understanding.                                | 10 |
| 4. a) | What is air pollution? Describe the categories of air pollutants with appropriate example.  | 05 |
| b)    | What is ozone hole? Explain the process of ozone layer depletion with the chemical reactions. Mention the impacts of ozone layer depletion on human health and ecology. | 15 |
| c)    | Explain Hydrological cycle with necessary illustration.   | 05 |