

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

Mid Semester Examination

Winter Semester (2016-2017)

Course No: HUM 4147

Time: 90 minutes.

Course Title: Technology, Environment and Society

Full Marks: 75

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

Figures in the right margin indicate marks of the questions.

1. a) What is an ecosystem? What are the biotic and abiotic factors of an ecosystem? 5
b) Define carrying capacity of an ecosystem. Do you think carrying capacity can be enhanced with the help of science and technology? Clarify your statement with the appropriate example. 15
c) Draw and explain the energy flow of an ecosystem. 5
2. a) Do you think that uncontrolled population growth is an environmental concern? Explain with logical reasoning. 5
b) Describe the causes and impacts of "Soil Degradation". 10
c) What is "Biodiversity Loss"? What are the general Ecosystem Services, we get from Mother Nature? Explain with example. 10
3. a) Explain the term "Sustainable Development" and relate how the economic, social and environmental interests are involved with the term. 10
b) What is 'Environmental Stewardship'? Mention and describe the core principles of environmental stewardship. 10
c) Differentiate between weather and climate. Define acid precipitation and mention causes from your understanding. 5
4. a) Name five major pollutants of air. Write the examples of Green House Gas (GHG). 5
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) Describe Hydrological Cycle. 5