

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

Semester Final Examination

Course No: HUM 4147

Course Title: Technology, Environment and Society

Winter Semester (2016-2017)

Time : 3.00 hours

Full Marks : 150

There are 8 (Eight) questions. Answer any 6 (Six).
Figures in the right margin indicate marks of the questions.

1. a) Define environment and describe components of environment? Write with example. 5
b) How do you define the term 'Biodiversity'? What are the necessary elements of a rich biodiversity in an ecosystem? Explain with example. 10
c) Describe the structure and functions of an ecosystem with examples and illustration. 10
- ✓ 2. a) Do you agree with the statement that human activities are contributing to the Global Atmospheric Change? Give your logical explanation with example. 15
b) Explain the term "environmental justice" with example. 5
c) Why is 'Environmental Stewardship' important for environmental protection? 5
- ✓ 3. a) What do you understand by Global Warming? Explain the process of Global Warming with necessary drawing and examples. 10
b) List out the consequences of Global Warming on Earth. What are the actions which can be taken to reduce the adverse impact of Global Warming? 10
c) Write a short note on 'Acid Precipitation'. 5
- ✓ 4. a) What is air pollution? Describe the categories of air pollutants with examples. 5
b) Various researches revealed that, concentration of carbon dioxide in atmosphere in the last 50 years (1960-2010) increased from 310 ppm to 390 ppm. Mention the reasons behind this increase. 10
c) Describe the impacts of air pollution on livelihood and environment. 10
- ✓ 5. a) Describe Hydrological/Water cycle with necessary illustration. 10
b) Write the reasons of ground water contamination. Mention the consequences of over withdrawal of ground water. 10
c) Define point water pollution and non-point water pollution with appropriate examples. 5
- X 6. a) Define the term Municipal Solid Waste. What do you understand by the 3"R" of solid waste management system? Write the benefits of recycling. 10
b) Write the merits and demerits of following solid waste disposal methods: 15
 i) Open dumping ii) Incineration iii) Sanitary Land filling.
- ✓ 7. a) Define Renewable and Non-renewable energy with relevant example. Why are Renewable Energy sources good alternatives for environmental sustainability? 10
b) How can a person ensure green living? Explain in the perspective of behavioural change for: i) Energy consumption ii) Waste generation 10
c) Mention different sources of Environmental Health Hazards. 5
- ✓ 8. Write short notes of the following: 5x5
 i) Green House Gas (GHG) iv) Impacts of Climate Change
 ii) Land Degradation v) Benefits of Biodiversity Conservation
 iii) Sources of Hazardous and Toxic waste