

**ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)****ORGANISATION OF ISLAMIC COOPERATION (OIC)****DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION (TVE)****FINAL SEMESTER EXAMINATION****WINTER SEMESTER, 2020-2021****DURATION: 1 Hour 30 Minutes****FULL MARKS:75****HUM 4147: Technology, Environment and Society**Answer **all** questions.

1. a)	Define risk, hazard, vulnerability and coping capacity in the face of natural disaster. Give example of each terminology from your understanding.	(10) (C02)
b)	Give a list of ecologically critical Areas under the Bangladesh Environmental conservation Rules, 1997.	(05) (C03)
c)	Write short notes on the following:- i. Urban Heat Island ii. Biodiversity Conservation	(10) (C04)
2. a)	Describe different approaches to analyse environmental issues. What is the most complicated but detailed approach among them?	(05) (C02)
b)	Define renewable energy. What are the sources of extracting this energy? Explain the extracting methods from these sources in a generic way.	(12) (C03)
c)	What are the benefits of using renewable energy?	(08) (C03)
3. a)	Suppose an industry in your locality is discharging effluent in the river and at the same time emitting GHG. Demarcate the component of pollution as (1) Local and (2) Global. Show the linkage between them.	(10) (C02)
b)	What are the conditions that a green technology has to full-fill?	(05) (C03)
c)	Assume you are preparing LCA (life cycle Assessment) of an industry. The type of industry is similar to a “new generation industry” Select and describe methods to achieve “minimum or zero waste” that you think is suitable for the industry of your concern.	(10) (C04)