



United International University

Department of Computer Science and Engineering

SOC 2101: Soc., Tech. and Engg. Ethics Final Exam. : Fall 2020

Total Marks: 25 Time: 1 hour 15 minutes

Any examinee found adopting unfair means will be expelled
from the trimester / program as per UIU disciplinary rules.

Answer all the 3 questions. Numbers to the right of the questions denote their marks.

1. (a) Compare the advantages and disadvantages of house-to-house waste collection and public bins. [3]
(b) A study was conducted in Thailand about the problems in the management of medical wastes in the country's hospitals. Doctors, nurses, ward workers and dustmen were interviewed during the study, and their practices were observed. It was observed that around 16% doctors and nurses were unaware about the waste management policies in their hospitals. They are the ones responsible for segregating the wastes at source, but their knowledge about waste categories was not up to the mark. Besides, knowledge about wastes was only around two-thirds among the ward workers. They had the responsibility of handling wastes in wards and transport them to the storage sites. Due to their lack in knowledge, household wastes were regularly found in medical waste bags and vice versa.
From the above context, discuss the importance of a well-defined medical waste management policy for a hospital. Also, mention which information should be included in a waste management policy. [2+2]
(c) Identify the appropriate waste disposal method (sanitary landfill, composting or incineration) for each of the following wastes: [0.5 × 6 = 3]
 - i. Cow dung
 - ii. Dead crow
 - iii. Non-toxic pharmaceutical wastes
 - iv. Dried leaves
 - v. Cut-off organs of human
 - vi. Pathological wastes
2. (a) "We can consume pre-loved and recycled products ethically" - please explain the statement. [3]
(b) You are an investigator from an *Ethical Consumer Research Agency*. Mr. Rahman has a company which manufactures Shopping Bags from Fine Jute materials and also makes other cotton-based products such as Bespoke Cotton Tote Bags. Jute Shopping Bags are vegan-friendly and also food safe which are made of 100% Organic and Eco-Friendly Jute canvas. Mr. Rahman needs a clearance with an ethical certificate from your agency. Why and what are the main issues you will check to give a good ethical index/score to the company? [5]
3. (a) From the beginning of the 21st Century, scientists have been doing intensive research on developing renewable energy technology. With the rapid growth of technologies of renewable energy, people are showing more interest in using renewable energy sources than non-renewable sources. Though in most of the countries, various schemes are adapting such as solar power scheme offering "Cheapest electricity in history", to enhance the usage of renewable energy, many developing countries are still finding it difficult to switch from non-renewable energy like using coal to renewable energy such solar power.
Can you explain what could be the possible reasons behind the extensive use of non-renewable energy in developing countries? [4]
(b) Among renewable energy sources like solar, wind, hydro, and geothermal energy, which energy source(s) should be more utilized in Bangladesh and why? [3]