0381

The Open University of Sri Lanka
Faculty of Engineering Technology
Department of Mathematics and Philosophy of Engineering

Study Programme	:	Bachelor of Science Honours in Engineering Bachelor of Industrial Studies Honours Bachelor of Software Engineering Honours
Name of the Examination	:	Final Examination
Course Code and Title	:	**MHJ5342/5372: Technology, Society & Environment**
Academic Year	:	2024/25
Date	:	25th February 2026
Time	:	1330-1730h
Duration	:	4 hours

General instructions

1. This is an Essay type, Open Book Examination.
2. This question paper consists of **Seven (7)** questions in **Two (2)** pages.
3. Answer only **Five (5)** questions.
4. Please remember to write your index number clearly on the Answer book.
5. Answers for each question should commence from a new page.
6. Do not copy directly from a text. If you must quote, please do so within inverted commas.

1. Cyclone Ditwah has challenged traditional engineering practices from multiple perspectives, ranging from preparedness and data availability to the decision-making processes of relevant engineering institutions. Write a 750-word essay examining these challenges, drawing upon your knowledge of the interconnectedness between technology, society, and the environment. *(100 marks)*

2. Apply the 'Icarus Paradigm' to analyze current global affairs and discuss the underlying reasons for the world's current state of disorder. *(100 marks)*

3. Answer parts (a) and (b).

   (a) Compare the 'Women in Development' (WID) and 'Gender and Development' (GAD) approaches. *(30 marks)*

(b) Analyze why the 'Gender and Development' approach is considered superior, illustrating your argument with a relevant example from daily life. *(70 marks)*

4. Answer parts (a) and (b).

   (a) Provide a brief history of how the concept of sustainable development has evolved over time. *(40 marks)*

   (b) Argue that the concept of sustainable development often remains rhetorical and is frequently misused in practice. *(60 marks)*

5. Construct an argument proposing that research outcomes are not always neutral, using global research on the health impacts of mobile phones as a case study. *(100 marks)*

6. Explain each step of the scoping process under Environmental Impact Assessment (EIA) procedures. *(100 marks)*

7. Answer parts (a) and (b).

   (a) Describe the main steps involved in conducting a Strategic Environmental Assessment (SEA). *(60 marks)*

   (b) Compare Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). *(40 marks)*

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