# 300 - Company -

## **UNIVERSITY OF RUHUNA**

### Faculty of Engineering

End-Semester 4 Examination in Engineering: January 2022

Module Number: IS4307

Module Name: Technology and Society

[Three hours]

### [Answer all questions]

### Q1. Explain any three of the following; 200 words, 4 marks each

- a. After the gift of life, technology is the greatest of God's gifts. It is the mother of civilizations, of arts and of sciences.
- b. Since the beginning of civilization each society has contributed some form of technology to help improve living.
- c. Early technological advancements influenced trade and growth through interaction between people and their environment.
- d. The development of agriculture allowed a surplus of food which ultimately led to occupations and social hierarchy.

# Q2. Discuss any three of the following; 200 words, 4 marks each.

- a. Today the Engineers and Technocrats have an unprecedented opportunity to create technology for a better world.
- b. Technology is changing our lives and the future looks much brighter, thanks to technology advancements.
- c. The industrial revolution, fossil fuels and man's conquest of nature has created many complex problems.
- d. Engineers need to show more responsibility towards protecting the environment and sustainable living.

# Q3. Describe any three of the following; 200 words, 4 marks each.

- a. Engineering education needs to focus more on professionalism and ethics.
- b. The six pillars; trustworthiness, respect, responsibility, fairness, caring and citizenship direct us to ethical living.
- Technology is always borne of the desire to create bigger, better and more productive things.
- d. Modern technology grew out of scientific and industrial research & development in the twentieth century.

- Q4. Comment on any three of the following; 200 words, 4 marks each.
  - a. Morality, ethics and legality are about right & wrong, commands respect for persons, and tolerance of diversity.
  - b. Sustainability is about our moral obligation to future generations.
  - c. Engineers as creative problem solvers are better equipped to address environmental and poverty issues.
  - d. The world has become smaller, better and more responsive thanks to technology.
- Q5. Write notes on any three of the following; 200 words, 4 marks each.
  - a. Engineering students need to discover and extend their knowledge through lifelong self-learning.
  - b. Graduate attributes are capabilities and characteristics of graduates as agents of social good for future.
  - c. Online learning which gives flexibility to learn while managing other tasks is a blessing for the spread of education.
  - d. Success and failure are intertwined. How we react to failure can teach us many lessons in 4565 facing life.