



# UNIVERSITY OF RUHUNA

## Faculty of Engineering

End-Semester 3 Examination in Engineering: March 2021

**Module Number: IS3307**

**Module Name: Society and the Engineers (C - 18)**

**[Three Hours]**

**[Answer all questions, each question carries twelve marks]**

---

- Q1. Write short notes on the following : [200 words each] [4 Marksx3=12 Marks]
- The history of engineering in the context of the way we live and interact with nature and each other in society is very much the history of humanity.
  - Many past civilizations collapsed because they misused the environment.
  - The Industrial revolution (1750 to 1900) was a pivotal period in human history.
- Q2. Discuss the following : [200 words each] [4 Marksx3=12 Marks]
- Advances in engineering have been central to human progress since the invention of the wheel.
  - Engineering transforms the real world and sometimes produce irreversible and unknown consequences.
  - Engineers have to be aware of the social and environmental impact of technology.
- Q3. Comment on the following : [200 words each] [4 Marksx3=12 Marks]
- Engineers need to be aware of codes of professional conduct and codes of ethics.
  - Self-regulating status is a privilege granted to engineers to serve public interest.
  - Protecting the safety, health and welfare of the public is the primary obligation of the engineering profession.
- Q4. Explain the following : [200 words each] [4 Marksx3=12 Marks]
- Professional societies play a key role in continued professional development activities and in engineering programme accreditation.
  - Engineers have a duty to improve the environment and enhance the quality of life.
  - Engineers play a vital role in developing infrastructure and alleviating poverty.
- Q5. Describe the following : [200 words each] [4 Marksx3=12 Marks]
- Prosperity and economic development are not equally distributed over the world.
  - Good communication skills are vital for success in an Engineering career.
  - To achieve sustainable development goals, over population and excessive consumption, must be simultaneously addressed.