



# UNIVERSITY OF RUHUNA

## Faculty of Engineering

End-Semester 7 Examination in Engineering: March 2021

Module Number: IS7101

Module Name: Engineering Ethics

[Three hours]

[Answer all questions, each question carries twelve marks]

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- Q1. Explain the following; (about 200 words per each)
- Engineering Ethics are the moral standards of human beings, being the principles accepted by society. [4 Marks]
  - The study of engineering ethics is necessary for the good of society. [4 Marks]
  - Morality commands moral integrity, respect for persons and tolerance of diversity. [4 Marks]
- Q2. Discuss the following; (about 200 words per each)
- Morality, ethics and legality are about right and wrong, and they exist in a realm of virtues. [4 Marks]
  - Engineering code of ethics spells out responsibilities to society, environment, employer, client and fellow engineers. [4 Marks]
  - The Golden Rule "Do unto to others as you would have them do unto you" is one of the best guides to ethical decision-making. [4 Marks]
- Q3. Describe the following; (about 200 words per each)
- Graduate attributes are qualities that prepare graduates as agents of social good for the future. [4 Marks]
  - Engineers have an unprecedented opportunity to create technology for a better world. [4 Marks]
  - Engineering professionals possess high standards in education, creativity and accept moral responsibilities. [4 Marks]
- Q4. Comment on the following; (about 200 words per each)
- Sustainability is about our moral obligation to future generations. [4 Marks]
  - There is a dual connection between sustainability issues and environmental issues. [4 Marks]
  - Involvement of Engineers as creative problem solvers is our best hope for addressing environmental and poverty issues. [4 Marks]

Q5. Write notes on the following; (about 200 words per each)

- a) Civilizations sprouted with the coming of agriculture and developed with trade and the spread of ideas. [4 Marks]
- b) Engineering Students need to construct, discover, transform, and extend their own knowledge. [4 Marks]
- c) The explosion of the space shuttle Challenger deals with many ethical issues faced by engineers. [4 Marks]