



The Open University of Sri Lanka
Faculty of Natural Sciences
B.Sc./ B. Ed. Degree Programme

Department	: Botany
Level	: Level 03
Name of the Examination	: Final Examination
Course Title and - Code	: ETHICS IN SCIENCE AND TECHNOLOGY-FNU3200/ PCU1101
Academic Year	: 2021/2022
Date	: 13 th March 2022
Time	: 9.30 a.m-11.30 a.m.
Duration	: Two (02) hours

General Instructions

1. Read all instructions carefully before answering the questions.
2. This question paper consists of **six (06)** questions in **two (02)** pages.
3. Answer any **four (04)** questions only. All questions carry equal marks.
4. Answer for each question should commence from a new page.
5. Draw fully labelled diagrams where necessary.
6. Involvement in any activity that is considered as an examination offense will lead to punishment.
7. Use blue or black ink to answer the questions.
8. Clearly state your index number in your answer script.

1. (a) Define the term 'Socialization'.
 (b) State briefly the factors which highly influence the socialization of newly enrolled students into the university subculture.
 (c) Based on the ethical principles, discuss the influence of "ragging" in the process of socialization of a new student into the university subculture.
2. Write short notes on the followings.
 - (a) Kohlberg (1981) theory of moral development.
 - (b) Importance of self-awareness of values.
 - (c) Copyright law and ethics.

3. "The advancement of modern science and technology causes dramatic changes in the moral and ethical systems of humanity." Evaluate this statement based on the following subheadings:

- (a) The ancient scientists and philosophers had made a significant impact on human understanding and ethics.
- (b) The major events that change the global ethical system.
- (c) The measures taken by the world community to protect ethical and moral value systems challenged by the development in science and technology.

4. Based on medical ethics, answer the following questions.

- (a) What is meant by conflict of interest in the field of medical ethics?
- (b) Briefly explain situations in which conflict of interest can occur in medical science.
- (c) Explain the negative effects of conflict of interest affect the treating patients.

5. (a) Briefly explain the main steps of the clinical trial protocol.
(b) Describe the ethical considerations applicable to medical researches involving human subjects and animal-based research.
(c) Giving suitable examples, briefly explain unethical situations in agriculture and food production.

6. Assuming that you were invited as a key note speaker by a School Inventor's Society to educate the students on the "Protection of Intellectual Rights of New Inventors in Sri Lanka."

Prepare a detailed outline of the Key-note address based on:

- a). Basic requirement of legal protection /rights of new inventions.
- b) Nature of protection/rights provided for the inventors and their new invention.
- c) Events that may violate the new invention in the competitive business world.
- d) Products that are not eligible to be granted legal protection.
- e) Proposal for future protection strategies of new inventions in the modern scientific development.

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