



GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY

Faculty of Engineering

Department of Civil Engineering

BSc Engineering Degree

Semester 5 Examination – June/ July 2020

(Intake 35- All Engineering Streams)

CE 3142- PROFESSIONAL ETHICS

Time allowed: 2 hours

19 June, 2020

INSTRUCTIONS TO CANDIDATES

This paper contains 4 questions on 3 pages

Answer ALL questions

This is a closed book examination

This examination accounts for 70% of the module assessment. A total maximum mark obtainable is 100. The marks assigned for each question and parts thereof are indicated in square brackets

If you have any doubt as to the interpretation of the wordings of a question, make your own decision, but clearly state it on the script

Assume reasonable values for any data not given in or provided with the question paper, clearly make such assumptions made in the script

All examinations are conducted under the rules and regulations of the KDU

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Question 01

- (a) Explain how a person is introduced to Values during the formative years (09 marks) ↗
(b) Why is Ethics of importance to an organization, highlighting the benefits to the organization, and the role played by the employer, employees and organizations culture (16 marks) ↘

[Total = 25 marks] ↙

Question 02

- (a) Engineering Codes of Ethics states that “Engineers shall perform professional services only in the areas of their competence”
Describe what is meant by this clause and how the Code of Ethics can be violated by not complying with its requirements (13 marks) ↗

- (b) Engineering Code of Ethics requires that Engineers should continue their professional development throughout their careers, and assist and encourage engineers under them to advance their knowledge and experience,
Explain the importance that this Clause has in the development and growth of the engineering profession in Sri Lanka (12 marks) ↗

[Total = 25 marks] ↙

Question 03

Explain the following concepts with examples of possible ethical issues:

- (a) Loyalty (6 marks) ↗
(b) Confidentiality (6 marks) ↗
(c) Conflict of Interest (7 marks) ↘
(d) Standard of Care (6 marks) ↗

[Total = 25 marks] ↙

Question 04

The primary cause for major engineering disasters in the past, has been the violation of professional ethics, and the main violations can be considered as:

- (a) Failure to safeguard life and property (8 marks)
(b) Corporate goals over-riding Engineering advise and concerns (8 marks)
(c) Not making public serious engineering flaws - failure to “whistle blow” (7 marks)

Considering the disasters of the Titanic, the Turkish Airlines DC-10 aircraft and the Volkswagen Emissions violation, give examples of how ethical violations contributed to major engineering disasters.

[Total = 25 marks] ↗

End of question paper

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