

UNIVERSITY OF ESWATINI
MAIN EXAMINATION, FIRST SEMESTER
DECEMBER 2018

FACULTY OF SCIENCE AND ENGINEERING

**DEPARTMENT OF ELECTRICAL AND ELECTRONIC
ENGINEERING**

TITLE OF PAPER: PROFESSIONAL PRACTICE
COURSE CODE: EE411 / EEE 411

TIME ALLOWED: THREE HOURS

INSTRUCTIONS:

- 1. There are SIX questions in this paper. Answer any FIVE questions.
Each question carries 20 marks.**
- 2. If you think not enough data has been given in any question you may
assume any reasonable values.**

**THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION
HAS BEEN GIVEN BY THE INVIGILATOR**

THIS PAPER CONTAINS SEVEN (7) PAGES INCLUDING THIS PAGE

Question 1(20 marks)

- a) What is globalisation? (4)
- b) What developments have fuelled the globalisation phenomenon? (6)
- c) Name any ten globalisation services you can think of. (4)
- d) Do you think the Kingdom of Eswatini should be part of the Global Village and why? (3)
- e) What are the benefits of globalisation for Engineers? (3)

Question 2 (20 marks)

- a) Why should Engineers be familiar with legal issues in the environment they operate? (10)
- b) In most countries exists an “Engineering Council”, which is established by an Act of Parliament. What is the purpose for such an establishment? (6)
- c) Why do we need codes and standards in the Engineering profession?(4)

Question 3 (20 marks)

- a) What is the Intellectual Property (IP) and what are the two main branches it comprises of? (5)
- b) We have the following key forms of intellectual property: a patent, a copy right a trade secret geographic indications and a trade mark. Define each and indicate its importance to an engineer. (10)
- c) Name three organisations responsible for Intellectual Property issues and indicate where they are based (5)

Question 4(20 marks)

- a) How would you define a Contract? (4)
- b) What makes an agreement a Contract? (4)
- c) What does Contract Enforcement entail? (4)
- d) A supply contract has some basic terms and conditions. List at least eight (8) of these terms and conditions. (8)

Question 5 (20 marks)

- a) What is the difference between morals and ethics? (5)

- b) Do you think engineers need to know about ethics? (5)

- c) What is a code of Ethics and why do you think most organisations have developed codes of Ethics? (5)

- d) Who does an engineer interact with in his daily life or work place? (5)

Question 6 (20 marks)

- a) What is the importance of Health and Safety in a work place? (4)

- b) Name five causes of accidents in factories? (5)

- c) What can be done to minimise or prevent these accidents? (5)

- d) Who are the key stakeholders in the Health and Safety activity and what are their respective roles? (6)