

**UNIVERSITY OF KENT**

**FACULTY OF SCIENCES**

**LEVEL 6 EXAMINATION**

**SCHOOL OF COMPUTING**

**Computing Law and Professional Responsibility**

**Wednesday, 16 May 2018 : 09.30 - 11.30**

The paper contains FIVE questions, TWO in Section A and THREE in Section B.  
Answer ALL the questions from Section A and TWO questions from Section B.

Calculators are not permitted.

**Answer each question in a separate book.**

Stationery: White Answer Booklet x 4

## SECTION A

*Answer all TWO questions from this section.*

1. (a) Briefly explain what types of intellectual property each of the following protects, and in each case give an *example* of the type of intellectual property being protected.
    - (i) Copyright [4 marks]
    - (ii) Patents [4 marks]
    - (iii) Trade Marks [4 marks]
  - (b) Governments around the world have progressively increased the duration of copyright protection, delaying the entry of protected works into the public domain. Given that copyright was originally intended to incentivise people to create new work, to what extent do these changes to the law help, and to what extent do they hinder this goal? [8 marks]
  - (c) The software LOIC (Low Orbit Ion Cannon) can be used to mount Internet DOS (denial of service) attacks. What risks do you run if you install it on a machine connected to the University of Kent network? According to which law would it be illegal to use it, and what would the penalty be? [10 marks]
  - (d) Would it be important for you as a computing professional to be a member of a professional organisation, e.g. ACM or BCS? Explain your answer. [10 marks]
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2. “In my role as a coder within a project, it is my professional responsibility to produce code that has no bugs.” Give two arguments in support, and three arguments against this statement (no more than one sentence for each). [10 marks]

## SECTION B

*Answer exactly TWO questions from this section.*

3. (a) With reference to 3 specific real life examples, critically discuss when whistleblowing might and might not be justified. [17 marks]
- (b) Draft a Whistle Blowing Policy Statement for the University of Kent. [8 marks]
4. (From the news, 22 January 2009): Japanese firms Tmsuk and Alacom have announced the T-34, a security robot that detects intruders, and can throw nets at them. It can be controlled from a mobile phone using real-time images.

Scenario: You are the director of a small company that is the market leader in robotic vacuum cleaners. Tmsuk have contacted you: they would like to sell the T-34 in the UK through your firm, and would like your help in adapting the T-34 software for the English speaking world, and the development of successor models.

- (a) Describe how you would deal with this request: which considerations would be involved, and what decision would you take? Be explicit on any technological assumptions you make. [10 marks]
- (b) Indicate how your answer in part (a) is influenced or motivated by: ethical values; legal considerations; elements and principles of particular codes of practice; any other guiding principles. [15 marks]
5. (In the news, October 2008: ) Researchers at Ecole Polytechnique Federale in Lausanne, Switzerland, have shown that with sophisticated equipment (an antenna, electrical measuring instruments, and a PC) it is possible to detect what is being typed on a keyboard from 20 meters distance, even through a wall. This applies to standard USB or PS/2 keyboards.

Scenario: You are responsible for data protection and security at a large office with hundreds of computers, and sensitive data could be typed in at any of these. Your budget is limited, and you are expected to cause minimal disruption to day-to-day business in executing your role.

- (a) Describe how you would respond to this news item when your organisation is
- (i) A large city's social security office;
  - (ii) A commercial bank;
  - (iii) The UK embassy in Moscow. [4 marks each]
- (b) Indicate how your answers in part (a) are influenced or motivated by: ethical values; legal considerations; elements and principles of particular codes of practice; any other guiding principles. [13 marks]