

BIRKBECK COLLEGE

(University of London)

BSc Examination for Internal Students

Department of Computer Science and Information Systems

Social and Organisation Issues in Computing

COIY030H6 - CREDIT VALUE: 15 credits

**Tuesday 19th May, 2015
14:30**

Exam Paper

Duration: 2 hours

**There are five (5) questions in this exam paper.
Students should answer three (3) questions.**

Question 1

- a) What is the purpose of data protection legislation in the UK? Describe four of the principles underpinning data protection legislation in the UK.
[11 Marks]
- b) What do the Privacy and Electronic Communications Regulations 2003 (PECR) cover? What do the amended regulations say about website cookies?
[11 Marks]
- c) What is the purpose of Freedom of information regulation in the UK and to whom does it apply? What are the Environmental Information Regulations for?
[11 Marks]
- [33 Marks]

Question 2

- a) Give three circumstances in which interception of employee data by employers may be allowed. What 'best' practices should employers follow regarding employee data surveillance?
[18 marks]
- b) Under what circumstances can state agencies intercept a citizen's data? Describe RIPA and what it governs.
[10 marks]
- c) Describe the objectives of the European Charter of Rights of Citizens in the Knowledge Society, 2006.
[5 marks]
- [33 Marks]

Question 3

- a) Define what is meant by Intellectual Property (IP) and provide some examples. List three ways in which IP can be protected in the law.
[8 marks]
- b) While working as an employee of HeartAche, a technology company, you have developed software for medical devices that measure blood pressure and heart rate for diabetes patients in the UK. Your application uses a combination of custom and open-source code. In this situation, how should the IP be protected? Describe how ownership of IP is assigned.
[14 marks]
- c) HeartAche is approached by a manufacturer of medical equipment in the USA that wishes to deploy your software in its monitoring devices and market these around the world. How does this change your position on IP protection?
[6 marks]
- d) What is the difference between 'First to File' and 'First to Invent' in patent systems?
[5 marks]

[33 marks]

Question 4

- a) What is Malware (provide two examples)?
[7 Marks]
- b) A number of high-profile cyber-attacks in the past few years have highlighted the use of malware as a weapon. Provide two instances and describe the primary ethical issue raised when governments use malware as a weapon.
[8 marks]
- c) List two laws in the UK that are concerned with computer misuse, and describe what aspects of computer misuse they govern.
[10 marks]
- d) What are the limitations of legislation concerning computer misuse?
[8 marks]

[33 Marks]

Question 5

Your software company is selected to develop a bespoke software programme for a small insurance firm. You agree with your client to contract for this work in two phases: the first, a time and materials (T&M) contract for a short scoping exercise at the beginning of the project to agree a work plan; and the second phase a fixed price contract for the actual development work.

- a) Explain the difference between a T&M and Fixed Price contract.
[8 marks]
 - b) Why it is of benefit to you AND to your client to contract in this way?
[12 marks]
 - c) During the development phase, the client asks for a new function, not specified in the original requirement. How do you deal with this contractually?
[5 marks]
 - d) Describe a typical payment arrangement for a bespoke computer software development project?
[8 marks]
- [33 marks]**