BCS THE CHARTERED INSTITUTE FOR IT

BCS HIGHER EDUCATION QUALIFICATIONS BCS Level 5 Diploma in IT

PROFESSIONAL ISSUES IN INFORMATION SYSTEMS PRACTICE

Thursday 27th September 2012 – Morning. Answer <u>any</u> FOUR questions out of SIX. All questions carry equal marks. Time: TWO hours

Answer any <u>Section A</u> questions you attempt in <u>Answer Book A</u> Answer any <u>Section B</u> questions you attempt in <u>Answer Book B</u>

The marks given in brackets are **indicative** of the weight given to each part of the question.

Calculators are **NOT** allowed in this examination.

Section A

Answer Section A questions in Answer Book A

A1. a) Describe THREE ways in which the BCS promotes education.

(9 marks)

b) At a recent computing conference, a delegate was heard commenting that; "The future credibility of our industry will only be assured once all computing practitioners adhere to policies and standards set by their professional body, after all, practitioners in professions such as Medicine and the Law need a license to practise".

Do you agree or disagree with this statement? Give FOUR reasons to support your answer.

(16 marks)

- A2. a) Three techniques are applied in the process of job design, namely:
 - job rotation.
 - job enlargement.
 - job enrichment.

With the help of an example, explain how each of these techniques might benefit an IT organisation.

(12 marks)

b) You have set up your own small e-commerce business and hold the personal details of all the customers who have used your website on a database. You use this data to e-mail your customers regarding forthcoming special offers. Someone manages to gain access to your website and alters the prices displayed and some of the customers' details.

Discuss how the UK Data Protection Act 1998 and the UK Computer Misuse Act 1990 relate to this scenario.

(13 marks)

A3. a) State the THREE most important characteristics of a limited company.

(6 marks)

b) Explain the difference between a **public limited company** (plc) and a **private limited** company.

(4 marks)

c) Borth Software Ltd is a small but successful bespoke software company. It now wishes to set up a subsidiary, in the UK, to develop a pensions administration package. The UK government provides grants to encourage the growth of such companies in areas of high unemployment.

As managing director, you are responsible for raising the capital required to get the new subsidiary up and running. You have three sources of finance available, i.e.

- UK government grant
- loan
- sale of equity in Borth Software.

Explain the characteristics of each of these possible sources and outline the issues to be considered in each case.

(15 marks)

Section B

Answer Section B questions in Answer Book B

B4. a) Explain what is meant by depreciation.

(4 marks)

b) Describe three different ways of calculating depreciation, indicating any advantages or disadvantages of the methods or any circumstances that make a method preferable.

(12 marks)

- c) For each of the following assets, state which method is most appropriate and explain why.
 - a large file server bought for £50,000 to support services that your company provides for its clients;
 - ii) the licence for the accounting software that your company uses, which was also purchased for £50,000;
 - iii) a printing machine with a lifetime of two million units.

(3 x 3 marks)

- B5. You are a multimedia developer and have developed a number of applications (apps) for mobile telephones.
 - a) Explain how the UK Copyright, Designs and Patents Act 1988, and the UK Trademarks Act 1994 could be used to protect the apps that you develop.
 (15 marks)
 - b) Outline how the apps could be made accessible for those with impaired vision or hearing.

(10 marks)

B6. a) A student member of the BCS, who has been given poor marks by one of his lecturers, writes a blog alleging (falsely) that the lecturer has accepted bribes from other students to increase their marks. How does the BCS Code of Conduct apply to this situation?

(10 marks)

- b) Alice works for a public organisation and dislikes Bob, her boss, because he refuses to agree to her unreasonable requests. She makes a Freedom of Information request to the organisation asking for details of Bob's expense claims. She proceeds to publish these details in her blog, alleging, falsely, that Bob has being claiming expenses fraudulently.
 - i) Did the organisation act in accordance with the law when it revealed information about Bob's expenses in response to a Freedom of Information request?

(7 marks)

ii) What legal remedies are available to Bob?

(8 marks)