#### BCS THE CHARTERED INSTITUTE FOR IT

# BCS HIGHER EDUCATION QUALIFICATIONS BCS Level 5 Diploma in IT

## PROFESSIONAL ISSUES IN INFORMATION SYSTEMS PRACTICE

Wednesday 25<sup>th</sup> September 2013 – Afternoon Answer 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) Using TWO relevant examples, explain the purpose of the BCS Code of Conduct.

(10 marks)

b) Identify THREE key roles and/or responsibilities of the BCS and, using examples, explain how these are fulfilled.

(15 marks)

a) Syniad Software Plc is a large and successful producer of professional level desk-top publishing packages. It operates globally and produces versions of its packages for eight different alphabets. Discuss the different ways in which the organization might be structured, paying particular reference to the relationship between the research and development function on the one hand, and sales, marketing and customer support on the other.

(12 marks)

b) There is a vacancy for a senior developer in your organization's IT team and a short list of candidates has been drawn up. All the candidates on that list are regarded as being equal in terms of their formal qualifications. Describe THREE different techniques that might be used to select the most suitable candidate, indicating the strengths and weaknesses of each technique.

(13 marks)

A3. a) Explain what is meant by the term **job evaluation** and describe why it is useful. (8 marks)

Distinguish between **analytical** and **non-analytical** job evaluation schemes.

(4 marks)

b) Briefly describe the SFIAplus standard.

(7 marks)

Explain how SFIAplus relates to job evaluation.

(6 marks)

### Section B

## Answer Section B questions in Answer Book B

a) Employees of Magic Web Sites Ltd work a five day week. They are entitled to 20 days holiday a year in addition to public holidays. On average, each employee loses ten working days per year through sickness. Magic Web aims to allow each employee 15 days per year for training. Experience shows that employees spend an average of five days a year unproductively, as a result of scheduling problems. In accordance with government regulations, employers must pay social security contributions equal to 6% of salary. In addition, the company enrols its employees in a pension scheme to which it contributes 5% of salary.

Calculate the average direct cost of one day's work from an employee earning £30,000 per year. State explicitly any assumptions you make.

(15 marks)

b) Norbert Stobart plc is a medium-sized logistics company. It owns computer and communications equipment that cost £100,000 in total when it was bought. The equipment was bought from system supplier SYSSUP plc; some of it was held in stock at SYSSUP and some of it was specially ordered by SYSSUP.

Compare and contrast the way that the equipment would be treated in the accounts of the two companies.

(10 marks)

B5. a) Explain the law relating to the sending of 'spam' to individuals within the European Union. (8 marks)

How does this law differ from the corresponding law in the USA?

(4 marks)

b) The security department of a bank has discovered that one of the bank's programmers has made unauthorised modifications to a programme he has been maintaining; these modifications divert a very small percentage of the value of each transaction into an account belonging to the programmer's mother.

How do the provisions of the Computer Misuse Act 1990 relate to this scenario?

(13 marks)

B6. John Taylor and Kate Smith are employees of Softdata, an online data analytics company. They have identified a new idea for a mobile app based on social media data about companies. They design and develop this app in their own time. The app utilises ideas that they are aware of from their commercial experience with Softdata, and is in competition with the company's own web service.

The app is launched and John and Kate decide to resign from their employment to start a new company, Social Media Ltd.

Discuss the following legal and professional issues:

a) What legal and moral rights do John and Kate have to develop this app, given the BCS Code of Conduct, the law as it relates to intellectual property rights in work carried out by employees and any other intellectual property rights protection that Softdata has for its existing software.

(15 marks)

b) Given the design of the system on small mobile screens, what are the implications of disability discrimination legislation?

(10 marks)