BCS THE CHARTERED INSTITUTE FOR IT

BCS HIGHER EDUCATION QUALIFICATIONS BCS Level 5 Diploma in IT

PROFESSIONAL ISSUES IN INFORMATION SYSTEMS PRACTICE

Tuesday 22nd April 2025 - Afternoon

Answer **any** 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) How do both of the below help BCS to maintain standards in the profession?
 - i. BCS set the education and experience requirements for its members.
 - ii. BCS specifies a Code of Conduct.

(12 marks)

- b) How do branches and special interest groups help BCS to fulfil its Royal Charter? (5 marks)
- c) You are a BCS member and you work in an IT team that manages an accounting software system for your company. You realise that the reports generated from the system may result in the company paying less tax than it should do.

The system has been running in your company for 3 years and this issue has not been raised by anyone. Your manager advised you to ignore this issue. You think that this needs to be investigated and corrected.

How might the 'Professional Competence and Integrity' and 'Duty to Relevant Authority' sections of the BCS Code of Conduct apply here?

(8 marks)

A2.

A company develops e-commerce applications that are used by large companies.

a) The HR department in the company is planning the workforce needs for the next year.

For existing projects, it has a list of staff needs of certain grades and the specialist skills needed. Discuss **two** additional inputs that the company can use for its HR planning process.

(8 marks)

b) The company decides that it needs more staff to help with telephone and online customer support. It is considering outsourcing the customer support work to another organisation.

Discuss **one** advantage and **one** disadvantage of outsourcing this work.

(9 marks)

 c) The company is reviewing its use of staff appraisals. Discuss one advantage and one disadvantage of using management by objectives as part of an appraisal process.
 (8 marks)

A3.

A software company is developing Al solutions for its customers in the banking and finance sector. The company has invested heavily in the development of their Al tool for stock predictions.

The initial cost of developing this AI software was £2 million. The net income is anticipated to be £250,000 in the first year with a £100,000 increase every year. There is an estimated operational cost of £50,000 per year.

- a) Create a cashflow statement for the next **five** years and workout the payback period. (15 marks)
- b) To support this Al software it was important to buy some cloud services. The cloud services cost £10,000 per year. Explain how this purchase will be recorded in the income statement, cash flow statement and balance sheet.

(6 marks)

c) Discuss how depreciation can be calculated on accounting software purchased by a company.

(4 marks)

[Turn Over]

Section B Answer Section B questions in Answer Book B

B4.

A UK company develops software products for the finance industry. It has different products for insurance companies and banks. It sells its software to companies in several countries across the world.

The company's main activities are to develop and sell the products. Part of the company is also focused on new product development.

The company has recently grown, taking on more employees.

- a) The company is currently structured using a function-based structure.
 - i. Explain what a function-based structure is and provide a diagram to illustrate how this company might use this structure.

(4 marks)

ii. The company is reviewing how it is structured. It is considering the use of a geographical structure or a product structure.

Discuss what these **two** types of structure are and whether they would be relevant for this company.

(12 marks)

b) Discuss the concepts of delegation and job specialisation and how they can be used by this company.

(9 marks)

B5.

A UK company sells computers and other electronic products.

a) Discuss **five** examples of information that the company should provide to consumers, under the UK Consumer Contract Regulations.

(10 marks)

b) A UK consumer has purchased a computer from the company. Discuss the protection that the UK Consumer Rights Act provides for this consumer.

(15 marks)

B6.

a) Outline the UK Computer Misuse legislation.

(8 marks)

b) Discuss how the UK Computer Misuse legislation applies to phishing attacks.

(9 marks)

c) Outline the maximum penalties for breaching UK Computer Misuse legislation.

(8 marks)

END OF EXAMINATION