#### BCS THE CHARTERED INSTITUTE FOR IT

# BCS HIGHER EDUCATION QUALIFICATIONS BCS Level 5 Diploma in IT

### PROFESSIONAL ISSUES IN INFORMATION SYSTEMS PRACTICE

Wednesday 24<sup>th</sup> September 2014 – 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. The BCS Royal Charter states that the purpose of the BCS is to promote the study and practice of Computing and to advance knowledge and education in the field for the benefit of the public. List and explain FIVE things that the BCS is authorised to do in order to fulfil these purposes

(5 x 5 marks)

- A2. a) Describe the THREE principles that are fundamental to the idea of a limited company. (9 marks)
  - b) People working together in a partnership are said to be **jointly and severally** responsible for the partnership's liabilities. Explain what is meant by the phrase 'jointly and severally'. (4 marks)
  - Give THREE examples of matters covered by the articles of association of a limited company.
     (6 marks)
  - d) Distinguish between the roles of executive director and non-executive director. (6 marks)
- A3. List FIVE different functions that the human resources (HR) department of a medium sized company (100 to 200 professional staff) would be expected to carry out and explain briefly what is involved in each. (5 x 5 marks)

#### Section B

## Answer Section B questions in Answer Book B

- B4. A high volume printer was purchased for £100,000. The expected life of the printer is 100 million copies.
  - a) Calculate the depreciation for each of the first four years and the book value at the end of the four years
    - i) using the straight line method and writing the printer off over five years;
       (5 marks)
    - ii) using the reducing balance method, with a depreciation rate of 20%; (5 marks)
    - iii) on the basis of usage, assuming the number of pages produced annually is as follows:

	Number of pages (millions)
Year 1	15
Year 2	25
Year 3	25
Year 4	30

(5 marks)

- b) It was decided to dispose of the printer at the end of the four year period, for £10,000. For each of the three depreciation methods used in part (a), explain the effect that the disposal will have on the profit and loss account for the final period. (6 marks)
- c) Which of the three depreciation methods do you consider is the most appropriate in this case, and why? (4 marks)
- B5. Cloud computing is the use of internet-based infrastructure, hardware and software to provide services on demand. Organisations such as Google, Microsoft and Amazon sell infrastructure capacity (e.g. storage, communications and processing) and software services (e.g. mail, office products). Cloud computing uses such resources across the world, as appropriate, and the precise location where a piece of data will be stored or processed is not necessarily specified.
  - AC Services is a company that has developed a cloud-based software service for small businesses to run their business systems, including accounts, human resources, sales, product and client management.
  - a) Discuss the data protection considerations that potential clients of AC Services should take into account. (12 marks)
  - b) Describe three issues that clients of AC Services might expect to see addressed in the contracts they are asked to sign. (6 marks)
  - c) Explain the term **jurisdiction**. Why might jurisdiction be relevant to the contracts between AC Services and its clients? (7 marks)

B6. a) Mobility, a mobile application developer, has developed a new 'app' for business travellers called TripPlanner. Discuss what Mobility might do to protect the commercial value of the intellectual property in the app.

(17 marks)

b) Mobility has decided to use Open Source Software components within TripPlanner to search the web for suitable hotel deals and plan the route between particular cities. Discuss how this affects the intellectual property situation. (8 marks)