BCS THE CHARTERED INSTITUTE FOR IT

BCS HIGHER EDUCATION QUALIFICATIONS BCS Level 6 Professional Graduate Diploma in IT

MANAGEMENT INFORMATION SYSTEMS

Monday 23rd March 2015 - Afternoon Answer <u>any</u> THREE questions out of FIVE. All questions carry equal marks. Time: THREE 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 transport and logistics company has decided that it no longer requires a Head Office and its strategic aim is to become a virtual organisation.
 - a) Discuss the various MIS technologies that could be used to create a virtual organisation. (15 marks)
 - b) The company's auditors have concerns that information held by the virtual company would lack security. List and describe FIVE measures that could be adopted to ensure this information remains secure. (10 marks)
- A2. A large financial organisation is considering the installation of document management systems and workflow systems. The organisation deals with many thousands of transactions each day, including those received on paper, electronically and as a result of telephone calls.
 - a) Describe the main features of a document management system. (8 marks)
 - b) Describe the main features of a workflow system. (8 marks)
 - Using examples, explain how a combination of document management systems and workflow systems could improve productivity in the large organisation described above.
 (9 marks)
- A3. A medium-sized financial services organisation is seeking a replacement MIS Manager to restore confidence in the MIS function and to lead a redevelopment of its corporate systems.

The organisation's current systems were developed about fifteen years previously, but new systems are needed to meet changing business requirements.

The MIS department has begun some redevelopments, but these have failed due to misunderstandings over who should be involved at each stage of the development process. Also, because the costs of the redevelopments exceeded the perceived

[Turn Over]

benefits, the management expect the replacement MIS manager to use some form of cost benefit analysis for all future projects.

As part of the selection process for the new MIS Manager, you have been asked to make a presentation to demonstrate your suitability for the position. Prepare notes for the presentation to clearly demonstrate your understanding of the following:

- a) The role of the MIS Manager and the personal qualities required. (8 marks)
- b) The involvement of user staff and MIS staff in all the development stages, from initial system request to post implementation review. (8 marks)
- c) The net present value (NPV) method of cost benefit analysis, including its advantages and disadvantages. (9 marks)

Section B

Answer Section B questions in Answer Book B

- B4. A large food retailing company has procured and implemented a new Human Resources (HR) system. The management reporting functions of the HR system are weak and senior management want to improve fixed management reporting capabilities. The following options are being considered:
 - Option 1: The in-house development of a fixed reporting facility (using existing DBMS software) that would import data from the HR system.
 - Option 2: The procurement of a compatible software package that provides a set of standardised fixed reports directly off the HR data repository.
 - a) Discuss the strengths and weaknesses of the two options. State any assumptions you make about the organisation within your answer. (13 marks)
 - b) Irrespective of the strengths and weaknesses, senior management have selected option 2. There are three packages available to choose from. Explain, with the aid of examples, the process you would adopt to choose the most suitable package to purchase. (12 marks)

B5.

- a) For EACH of the following Strategic Information Systems Planning (SISP) techniques, explain how it works and assess its ability to identify the most important MIS developments for an organisation.
- i) SWOT analysis.

(8 marks)

ii) Value Chain Analysis (VCA).

(8 marks)

b) Explain, with the aid of suitable examples, the role of a digital dashboard in supporting management control activities. (9 marks)