#### BCS THE CHARTERED INSTITUTE FOR IT

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

#### COMPUTER SERVICES MANAGEMENT

Wednesday 30th March 2016 - Morning

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. You have been appointed the Computer Services Manager of a large international Charity that provides disaster relief following natural disasters. After a few days you become worried that the database of subscribers, medical staff and emergency volunteers maintained by the charity is insecure.

After considering all the possible risks to the Charity's information, describe the contents of an appropriate Information Security Policy and the actions necessary to protect this information.

(25 marks)

A2. During a financial audit it was revealed to the Chief Executive of an organisation that it has continued to pay an expensive maintenance contract to support server systems and disk arrays that were actually de-commissioned several years ago.

The Chief Executive has asked you, the replacement IT Services Manager who has just been appointed, what steps you intend to take to prevent such expensive and embarrassing situations arising again.

a). Write a report to the Chief Executive outlining the approach you intend to take in bringing matters under control. You should include details of THREE significant relationships with other organisational groups within the company which will be essential to the success of your proposals.

(12 marks)

b). For ONE of these relationships, write an operational document which can serve as a template for your staff in managing the relationship you have described.

(13 marks)

A3. The Computing Services group, for which you work as the Helpdesk Manager, provides support for some five hundred office workers on a single site in a major city.

You are concerned about the high level of turnover of front-line helpdesk support staff in your section, which you believe may be contributing to a poor incident clear-up rate and growing dissatisfaction among the customers.

a) Write a memorandum to the Head of Computing Services describing the problem. You should discuss THREE techniques you propose to use to address the problem of high staff turnover.

(12 marks)

b) With reference to ONE of your proposals, write a formal project plan which will allow you to design, implement and monitor the technique you intend to use. You should state any assumptions which you make regarding the organisation and its infrastructure.

(13 marks)

### Section B Answer Section B questions in Answer Book B

- B4. You are the newly appointed Information Security Manager for a group of sports and leisure centres. Using wireless technology, members are permitted to use their own devices at the leisure centre to access the internet at the club. A recent risk analysis revealed that there were some security issues based on members' use of the system.
  - a) Describe the content of an Internet Acceptable Use Policy for the use of leisure centre members.

(10 marks)

b) Explain the term "two-factor authentication" and why it might be used to improve the security of controlled access to the system.

(5 marks)

c) Describe the techniques which might be used to gain unauthorised access to systems and the measures that can be taken to prevent these risks.

(10 marks)

B5. As Computer Services Manager for a large financial organisation, you have been asked to investigate the adoption of a cloud computing approach.

Discuss the responsibilities of the organisation with respect to the 1998 Data Protection Act and the steps you would take to ensure compliance with this Act.

(25 marks)