BCS THE CHARTERED INSTITUTE FOR IT

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

COMPUTER SERVICES MANAGEMENT

Monday 26th September 2016 – Morning / Monday 10th October 2016 – 10:00 – 13:00

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 Monday 26th September 2016 Answer Section A questions in Answer Book A

- A1. As the recently promoted Computer Services Manager, you have been tasked with selecting an outsourcing company to be responsible for all computer operations, including routine maintenance and enhancement of the existing systems. Senior management has invited three outsourcing companies to tender for this business.
 - a) Explain how the outsourcing companies and their proposals could be evaluated and a selection made.

(8 marks)

b) Describe the contents of a Service Level Agreement (SLA) that could be used to monitor and evaluate the ongoing operational service provided by the selected outsourcing company.

(9 marks)

c) Describe the possible **disadvantages** of outsourcing a computer service.

(8 marks)

- A2. In the context of computer services management, explain EACH of the following:
 - a) Capability Maturity Model for Software

(9 marks)

b) Disaster Recovery Planning

(8 marks)

c) Computer Misuse Act 1990

(8 marks)

A3. "The computer services knowledge and skills required to administer a small network of PCs are the same as those required to administer a large computer operation spread across several countries."

Discuss, and justify, the extent to which you agree or disagree with the above statement.

(25 marks)

SECTION A Monday 10th October 2016 – 10:00 – 13:00 Answer Section A questions in Answer Book A

A1. The Board members of an insurance company are considering using cloud computing to replace their in-house IT department and have asked you, a computer consultant, to advise them.

Some of the Board members have past experience of cloud computing and are concerned that service levels will decline. They are also concerned that the cloud computing company will perform unnecessary chargeable work and that the Board members will become involved in disputes. The other Board members disagree.

Prepare a report to include the following:

a) An explanation of how the required service levels could be achieved.

(7 marks)

b) A description of an escalation procedure that will prevent the Board becoming involved in minor disputes.

(6 marks)

c) An explanation of how Change Management could prevent unnecessary work being performed.

(6 marks)

d) A recommendation of appropriate governance procedures.

(6 marks)

- A2. In the context of computer services, identify the main points of the following:
 - a) ITIL
 - b) Depreciation of assets
 - c) Configuration management
 - d) PRINCE 2
 - e) Health and Safety (Display Screen Equipment) Regulations 1992

(5x5 marks)

- A3. Compare and contrast the following pairs:
 - a) Computer Misuse Act 1990 <u>and</u> Copyright, Designs and Patents Act 1988. (9 marks)
 - b) Operating system software <u>and</u> applications software.

(8 marks)

c) System development life cycle <u>and</u> the technology life cycle.

(8 marks)

SECTION B Answer Section B questions in Answer Book B

- B4. You work for the IT group of a local council. You have been told by your management that the IT support services of four councils in the same region of the country are to be merged and run as a single operation.
 - a) Write a report to the Head of Support Services of your council, who is a non-technical manager, describing THREE areas of IT service provision which would need to be considered in this merger.

(12 marks)

b) For ONE of these areas of IT service provision, draft a document which covers all the stages of negotiation and implementation which would be needed to safely transfer the service to the new service model.

(13 marks)

B5. The cost of a university's computing facilities is apportioned between the various departments according to the number of students in each department. This method has worked satisfactorily in the past but has the drawback of benefiting high users of computing resources at the expense of low users. The issue has been put in sharp focus by a proposal to close the Music Department to all new students, as it is perceived to be too costly. The head of the Music Department argues that the current system of computer charging is grossly unfair, as the Music Department uses few computing resources compared to the Engineering Department, even though the number of students is similar.

The Vice-Chancellor has asked you, the Computer Services Manager, to propose a charging method that fairly reflects the resources used by each department. Write a report to the Vice-Chancellor to:

a) List all the elements of a computing service.

(7 marks)

b) Describe and justify ONE approach by which the elements could be charged fairly to each department according to their usage. (10 marks)

Discuss how the implementation of revised charges could impact on the demand for computer services, both in the short term and the long term.

(8 marks)