BCS THE CHARTERED INSTITUTE FOR IT

THE BCS HIGHER EDUCATION QUALIFICATIONS
BCS Level 5 Diploma in IT

IT PROJECT MANAGEMENT

Friday 5th April 2013 – Morning
Answer **any** FOUR questions out of SIX. All questions carry equal marks
Time: TWO hours

Answer any Section A questions you attempt in Answer Book A
Answer any Section B questions you attempt in Answer Book B

The marks given in brackets are **indicative** of the weight given to each part of the question.

Only **non-programmable** calculators are allowed in this examination.

Section A

Answer Section A questions in Answer Book A

A1

a) Name FOUR criteria by which a project can be judged a success.

(4 marks)

b) Your company has decided to develop a new in-house computer system and the project plan has been prepared. Explain briefly the FOUR key steps (which might then be repeated) in the project control life cycle.

(5 marks)

c) A project board has been set up and will meet monthly. You are the project manager and must prepare a report for each meeting. Describe EIGHT different types of information that you might expect to include in each such monthly report.

(16 marks)

A2

a) Explain what in project management is meant by 'quality'. Identify THREE differences between quality assurance and quality control.

(12 marks)

b) Describe TWO techniques for carrying out quality control on a software system during EACH of the following stages of a project

i) design
i) build
iii) system integration
iv) system acceptance.

Bear in mind that it is possible that some specific techniques can be carried out during more than one of these stages

(8 marks)

c) In addition to software what else can be tested on an IT project?

(5 marks)

Turn Over]

A3

A small IT department has been asked to set up an online enquiry database system. The IT manager (who will act as project manager) has drawn up an initial plan of the work involved:

	Activity	Weeks
A	elicit requirements from the intended users, and draw up a specification	3
B	design the underlying database	2
C	build and test the input and data validation software	7
D	build and test the enquiry software	5
E	build and test the reports software	4
F	integration testing	2
G	write the user manuals	3
H	system testing by the end users	2

Task B must follow A

Tasks C, D and E can run concurrently, but must follow B

Tasks F and G can run concurrently, but cannot start until all three tasks C, D and E have been completed

Task H must follow tasks F and G

a) Draw an Activity on Node network diagram for this project, showing the earliest and latest start and end dates, and the float, for each node. Use week numbers as the time units. Highlight the critical path on the diagram and state the minimum duration for the project.

(11 marks)

b) The IT manager has one analyst (named M) and two programmers (named X and Y) available for the project. The analyst is also an experienced database designer, and will write the user manuals. One of the programmers (programmer X) has good experience of developing data input programs.

On the network diagram identify the types of staff, including end users, needed for each of the tasks. Note that the individuals should not be identified.

(4 marks)

c) Bearing in mind the types of staff identified as appropriate for each task in (b) above, re-draw the project plan as a Gantt chart. On this diagram name the individuals required for each task and state the new minimum duration.

(10 marks)

Section B

Answer Section B in Answer Book B

B4

A large steel company has decided to move the corporate legacy systems onto a cloud computing solution. The work is complex and involves various parts of the company across its four main sites. The work will involve colleagues from Sales, Finance, and Operations as well as specialist IT suppliers. The IT department has expressed concerns about moving established systems beyond the company's control. The move is part of a wider change to reduce staff numbers.

a) Draw an organisation chart that will be appropriate for managing this work

(10 marks)

b) Describe the purpose and contents of TWO reports that the project manager will need to obtain from their project team.

(10 marks)

c) Explain the nature and purpose of an exception report.

(5 marks)

B5

a) Describe FIVE techniques a project manager could use to identify risks

(10 marks)

b) Explain what the difference is between project risks and business risks

(4 marks)

c) Describe FIVE common responses to a project risk

(11 marks)

B6

a) Explain the advantages and disadvantages of buying an off the shelf (OTS) package as opposed to writing new software.

(10 marks)

b) Describe THREE different approaches to estimating effort for an IT system development project. For each one, explain whether it would be suitable for OTS package implementations or new software projects or both.

(15 marks)