BCS The Chartered Institute for IT

BCS HIGHER EDUCATION QUALIFICATIONS

BCS Level 5 Diploma in IT

IT PROJECT MANAGEMENT

Wednesday 29th September 2010 – 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.*

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

Section A

Answer Section A in Answer Book A

A1. a) List and explain very briefly the FOUR main criteria for assessing the success of a project **(4 marks)**

b) Explain how a project manager might use information generated as part of project control reporting to identify situations that are behind schedule for each of the following reasons:

i) staff who are intended to be working full-time on the project are taken off sometimes to help resolve emergency situations on other projects;

ii) the original estimates of development times were too low

iii) the project scope has been extended to meet additional requests from users

iv) staff productivity is lower than expected.

(8 marks)

c) Identify at least FOUR different options that are available for bringing such a project back on schedule when it has been found to be running late.

(8 marks)

d) Explain briefly the cost implications of each of the options that you have identified in part c).

(5 marks)

A2. The sales department in your company, who have their own in-house sales system, are being relocated to new offices where they will also have a new server–based sales database system. The IT section have set out an outline plan for the IT aspects of the move, with 9 main tasks (with estimated durations in weeks):

Identifier	**Activity**	**Duration (weeks)**
A	order and deliver the new database system and server	4
B	design and install the network infrastructure	7
C	order, deliver and install new PCs and printer	9
D	test the database system, server and network	3
E	test the PCs with the server and network	2
F	copy existing sales data to the new database system	1
G	copy other existing PC software to the new PCs	3
H	test all software and database on the new PCs and server	1
I	train users	2

Tasks A, B and C can be undertaken at the same time, but A and B must be completed before D can start. Tasks C and D must be completed before E can begin. E must be completed before F and G can start. F and G can be undertaken at the same time, but both must be completed before H can start. I must follow H.

a) Draw a network diagram (Activity-on-Node) for this project, showing (on the diagram) the earliest and latest start dates, the earliest and latest finish dates, duration and float for each task.

Provide a node key explaining the layout and contents of the nodes used in your diagram.

Draw a Gantt chart for the same project tasks, showing each of these tasks, all dependencies and each task's duration.

Highlight the critical path on each diagram.

What is the total duration of this critical path?

(17 marks)

b) Discuss briefly the most significant differences between the two types of diagram, and highlighting TWO advantages of the Gantt chart and TWO advantages of the network diagram.

(8 marks)

A3. a) Explain the main reasons for using:

i) change control and

ii) configuration management

when developing a new in-house computer system. Highlight at least TWO advantages and ONE disadvantage of each.

(12 marks)

b) List and explain briefly FIVE major stages in the change control process.

(7 marks)

c) List and explain briefly the THREE major elements of a configuration management system.

(6 marks)

Section B

Answer Section B in Answer Book B

B4. You have just taken over a project from another project manager. The previous project manager had begun the Risk Management process by completing the risk identification and analysis part of a risk register. You now have to complete the Risk Management process.

Id	Risk	P	I
A	There is a risk that key technical staff will leave to join a competitor.	Low	High
B	There is a risk that our offices will be flooded again	High	High
C	There is a risk that the software we are buying will contain some bugs	High	Low
D	Unless we get the project budget approved before Year End in two weeks there is a risk the project may not get funding.	Low	High

a) In the risk register what do the letters 'P' and 'I' stand for?

(2 marks)

b) Which risk should you deal with first and why?

(4 marks)

c) What are the FIVE possible responses you could take to any risk?

(10 marks)

d) Choose THREE of the risks in the risk register and for each one select an appropriate response from the FIVE possibilities above. Justify your selections.

(9 marks)

B5. You are approaching the end of the second stage of a four stage project. You have created a plan to show the work that needs to be done and now you must assign resources to the tasks.

a) Describe FIVE factors that you would consider when allocating staff to a task.

(10 marks)

You know that you have all the right skills in the team but not enough people with these skills to hit the project deadline.

b) What are some of the possible actions you could take?

(8 marks)

It has been decided that the project needs to hire a new member of staff.

c) List the steps that you need to go through from identifying the need for a new resource right through to the end of the recruitment process.

(7 marks)

B6 a) Explain the FOUR MOST important factors that are considered at the end of any stage.

(12 marks)

b) In a project to create a new system the PM has to consider the requirements of the business as expressed by senior managers AND the users of the system. Identify and justify TWO situations where consulting the users may NOT be appropriate.

(8 marks)

c) List FIVE ways that you could find out user requirements.

(5 marks)