BCS THE CHARTERED INSTITUTE FOR IT

BCS HIGHER EDUCATION QUALIFICATIONS
BCS Level 5 Diploma in IT

IT PROJECT MANAGEMENT

Friday 27th September 2013 - Afternoon
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

The increased popularity of 'lightweight' project methods, for example Agile, has led to some people questioning the need for well-established structured methods. There is no method that is always best, each is more appropriate in certain circumstances.

a) What kinds of project is an Agile approach most suited to?
(10 marks)

b) Explain the nature and benefits of each of the following:
i) prototyping **(10 marks)**
ii) time-boxing **(5 marks)**

A2

a) Explain the process by which the project manager would assign staff resources to the activities of a project.
(12 marks)

b) Identify any amendments that may be required to the original plan as a result of this resource allocation.
(4 marks)

c) Identify any other factors, not already discussed above, which the project manager may need to consider when creating this project team.
(9 marks)

A3

a) Describe FIVE techniques you can use to estimate the cost of a project, explaining the advantages and disadvantages of each one.
(15 Marks)

b) What actions can be taken to keep a project on track if a task takes longer than estimated?
(10 Marks)

Section B

Answer Section B in Answer Book B

B4 A small research organisation is planning to move to new premises outside the city. The outline plan for this move includes the following main tasks:

	Activity	Weeks
A	Inspect new premises, list all required communications facilities	3
B	Order and deliver all communications facilities and devices	10
C	Identify, order and deliver replacement PCs, printers, servers and other hardware	8
D	Order and deliver all required office equipment	11
E	Test new hardware with all communications equipment	1
F	Test new hardware with all existing operating and applications software	2
G	Test all applications software and databases on new hardware	2
H	Move all staff to new premises	1

Tasks B, C and D can all run simultaneously but are all dependent on task A.

Task E is dependent on tasks B and C

Task F is dependent only on task C

Task G is dependent on tasks E and F.

Task H cannot start until tasks D and G are completed.

a) Draw a full Activity on Node diagram for this project, showing clearly the earliest and latest start and end dates (as week numbers), and the float, for each node. No start or end nodes are required. Highlight and name the critical path, together with the minimum duration for the project.

(11 marks)

b) The office equipment (task D) takes two weeks longer than planned to be delivered and installed. Identify and explain briefly the resultant changes to the Activity on Node diagram and critical path.

(5 marks)

c) Draw a Gantt chart for the revised project, incorporating the change to task D as defined in part b). Show all task durations, dependencies, float and the critical path.

(9 marks)

B5

For a particular project it has been decided that the project manager should produce a report for the project board (or steering committee) at the end of each four-week period.

a) Describe the items of information that should appear on this report.

(9 marks)

b) Explain how the project manager would obtain the data used to generate the information in the report.

(9 marks)

c) A problem with the project turns out to be that the users keep asking for changes to the requirements. Discuss what might be done to deal with this problem.

(7 marks)

B6

a)

i) Describe THREE differences between quality assurance and quality control.

(9 marks)

ii) Provide an example of a quality assurance activity and an example of a quality control activity.

(4 marks)

b) What is a peer review and what may influence your decision to adopt it on a project?

(6 marks)

c) The emphasis on quality control can sometimes be placed on either inspecting design documentation early in the project or testing the finished products late in the project. Describe THREE advantages or disadvantages of either emphasis.

(6 marks)