BCS THE CHARTERED INSTITUTE FOR IT

BCS HIGHER EDUCATION QUALIFICATIONS
BCS Level 5 Diploma in IT

IT PROJECT MANAGEMENT

Monday 26th March 2018 - 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 allowed in this examination.

Section A
Answer Section A questions in Answer Book A

A1

a) Give TWO reasons why a business case report should be produced at the outset of a new project.

(4 marks)

b) Identify and describe at least SIX different components of a business case report.

(12 Marks)

c) The business case is agreed and signed off at the project initiation stage. Give THREE situations where the business case can be used during or after the project.

(9 Marks)

A2

a) Define the word "stakeholder" in relation to an IT development project.

(3 Marks)

b) You work for a small research organisation with a number of branches throughout the country. At the moment each of these branches uses a different main database system. It has been decided by Head Office that the database system used by your branch should be expanded and then used by all of the other branches, to replace their existing database systems. They would need to transfer all their data to this expanded database on a main server, which would be located in the organisation's offices. A network would be set up linking all the branches to this main server.

List and explain at least FOUR different types of stakeholder in this new project. Identify their main concerns and their stake in the project.

(16 Marks)

c) As a project manager in a project team and using the Tuckman model, list and explain very briefly the FOUR main phases that the team might go through before becoming fully effective.

(6 Marks)

A small accounting company needs to update and extend its existing time recording system. You are the project manager and have drawn up an outline project plan for the main project activities, as follows:

Activity	Duration (weeks)	Dependent on
A Draw up and agree requirements	4	none
B Select and order additional hardware	4	A
C Develop and unit test new software	12	A
D Install and test additional hardware	4	B
E Test hardware backup and security procedures	4	D
F Document new software	4	C
G Install new software and system test	6	C, D
H Go Live	2	E, F, G

a) Draw a fully analysed activity-on-node network diagram for this project, using a standard node convention, to display the duration, the earliest and latest start and end dates and the float for each activity. Supply a node key. Name, and display on the network diagram, the critical path and state the minimum duration in weeks.

(10 marks)

b) As the project proceeds, activity A was completed on time but problems occurred with both activity B and activity C. At the end of week 16 activity B is only just completed and activity C is only 75% complete (with another 3 weeks' work required, meaning that it will finish at the end of week 19). You are satisfied that all these problems are now resolved and the remaining project activities can progress at the originally planned rate.

Draw a Gantt chart for the project that shows the revised schedule taking account of the actual durations of completed activities and the knock-on effects on remaining activities. Mark clearly, and name, the critical path for these remaining activities. Highlight the progress to date at the end of week 16.

What is the new end date for the project? **(15 marks)**

Section B
Answer Section B questions in Answer Book B

B4

a) Project control involves regular monitoring of activities which can be identified on the project Gantt chart. Different types of activity might be assigned higher priority in the level of monitoring that takes place. Briefly explain why the following types of activity might be prioritised.

      i)   Activities that have no free float
      ii)   High risk activities
      iii)   Activities that consume critical resources

(9 marks)

b) Explain for whom you would expect to produce a highlight report and describe the typical items of information it might contain.

(10 marks)

c) When significant changes to a project are requested their impact can be assessed by producing an exception report. Describe the FOUR types of issues that such a report might consider.

(6 marks)

B5

a) Identify any FOUR generic project risks that you might find in a software project check list and explain how each of those risks might be reduced.

(16 marks)

b) Describe any THREE techniques you might use in identifying specific project risks.

(9 marks)

B6

a) ISO9001 is a framework used in applying a quality management system to the creation of products and provision of services by an organisation. Briefly describe the principles that ISO9001 is built on.

(10 marks)

b) In your role as project manager you are tasked with evaluating potential suppliers of software packages and systems. Explain the advantages and disadvantages of relying on a supplier having ISO9001 accreditation as an indicator of quality.

(10 marks)

c) Capability maturity models (CMM) have been developed to assess an organisation's sophistication and are quality based on five levels of process maturity. Briefly outline the five maturity levels.

(5 marks)

END OF EXAM