

BCS THE CHARTERED INSTITUTE FOR IT

**BCS HIGHER EDUCATION QUALIFICATIONS
BCS Level 5 Diploma in IT**

IT PROJECT MANAGEMENT

Friday 30th September 2016 – 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

- a) It is suggested by Tuckman and Jensen that project teams go through a series of five identifiable stages in the life of a project. Describe EACH of the FIVE stages. **(10 marks)**
- b) It is important to understand the mix of different personalities within a project team. Belbin has identified nine team roles which a successful project team is most likely to have. Describe any FIVE of these team roles explaining their key strengths and weaknesses. **(15 marks)**

A2

- a) List FIVE general software project risks and describe the risk reduction techniques that can be applied to them. **(20 marks)**
- b) Risk exposure provides a measure of relative risk.
- i) Calculate the risk exposure for each hazard in table 1.0 below. Likelihood and impact have been scored out of 10. **(2 marks)**

hazard	likelihood	impact	risk exposure
A	2	9	
B	8	2	
C	10	2	
D	3	9	
E	4	7	

- ii) Which TWO hazards should be prioritised? **(3 marks)**

A3

- a) The framework for controlling a project to ensure it meets the project plan is the project control lifecycle. Draw and label a project control lifecycle diagram. **(8 marks)**
- b)
- i) The project manager is often required to make a highlight report. Outline FIVE types of information you might expect to see in a highlight report **(5 marks)**
 - ii) Name any other THREE report types that a project manager might produce, stating who gets them, for what purpose and what they typically contain. **(12 marks)**

SECTION B

Answer Section B questions in Answer Book B

B4 A travel agent is considering the replacement of its existing holiday booking system as this system is considered to be too restrictive in the range of options that can be offered to potential clients and users and can be difficult to use. There are also an increasing number of problems with its continuing reliability and maintenance.

- a) Identify up to FIVE significant business benefits that might be included in the business case for such a project, together with TWO specific financial measures that could be used to assess its financial viability. **(10 marks)**
- b) The business case has been accepted and an external company has been commissioned to undertake the project at an agreed cost. The project will comprise:
- i) final agreement of functional requirements;
 - ii) development and testing of replacement software;
 - iii) purchase and installation of replacement server, PCs and printers;
 - iv) implementation and maintenance of new system.

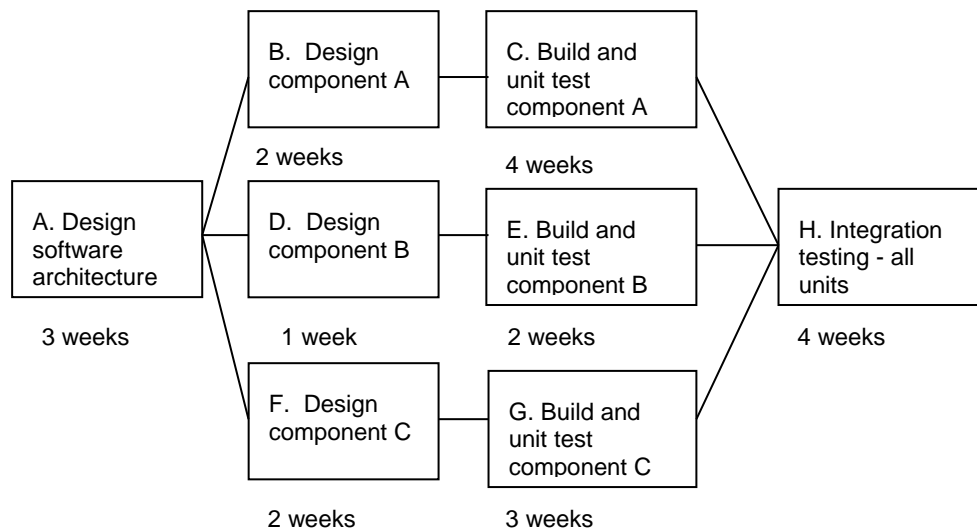
For EACH of these four components identify ONE potential business risk that might arise, and explain its possible effect on the original business case. **(8 marks)**

- c) Consider specifically items i and ii above, and identify THREE key reports that the project manager would require from their team in order to monitor and control these stages of the project and ensure that the business case is maintained. Identify a key action that the project manager should take to ensure the effectiveness of this monitoring and control. **(7 marks)**

B5

- a) Identify THREE types of Go-Live strategy that could be used to make a project operational and discuss the advantages and disadvantages of each strategy. **(12 marks)**
- b) Documentation is often overlooked at installation. Identify FOUR important documents that are will be handed over at Go-Live, explaining the importance of each one. **(8 marks)**
- c) Describe THREE ways in which the success of a system can be measured after it has become operational. **(5 marks)**

- B6** The activity network for the development of a small IT system, which comprises three main software components, is shown below:



- A lead software architect always undertakes the software architecture design.
- Software developers only carry out the designing, building, and unit testing of software components.
- A system tester only carries out the integration test.
- The weekly rates for these staff are:

Staff type	Weekly rate
Lead software architect	£1200
Software developer 1	£800
Software developer 2	£600
System tester	£500

- a) Explain the process by which staff resources are allocated to the activities identified as needed for a project. **(10 marks)**
- b) Illustrate the approach described in (a) above by applying it to the project above to produce a table, Gantt chart or histogram showing the staff allocated to each activity, and the planned timing of the activity. Note that only two software developers are available. **(11 marks)**
- Calculate the staff cost of the project.
- c) Discuss how you might re-plan the project if the lead software architect could also carry out the designing, building, and unit testing of software components. **(4 marks)**