

BCS THE CHARTERED INSTITUTE FOR IT

BCS HIGHER EDUCATION QUALIFICATIONS
BCS Level 5 Diploma in IT

IT PROJECT MANAGEMENT

Friday 6th October 2023 - Afternoon

Answer **any** FOUR questions out of SIX. All questions carry equal marks.

Time: TWO hours

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

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

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

Section A
Answer Section A questions in Answer Book A

A1.

impact	High		R5		R4
	Significant	R2			R6
	Medium	R1			R3
	Low				
		Low	Medium	Significant	High
		Likelihood			

a) A probability impact grid (also known as a Summary Risk Profile) has been constructed for a project as shown above. The risk tolerance line is shown in bold. Some of the project risks (labelled R1-R6) have been plotted on the diagram.

For **each** of the following terms used on the grid: explain their meaning, give an example and discuss how it can be measured.

- i. Impact;
- ii. Likelihood.

(6 marks)

b) Using the grid above, identify the highest and lowest risk. Justify your choices.

(4 marks)

c) Explain, in detail, how a probability impact grid is used within project management.

(5 marks)

d) What is the purpose of the risk tolerance line? How does it affect the way R3 and R5 are treated?

(4 marks)

e) Explain what **each** of the following terms mean together with an example.

- i. Accepting the risk;
- ii. Avoiding the risk;
- iii. Transferring the risk.

(6 marks)

A2.

a) Product breakdown structure (PBS) and Work breakdown structure (WBS) are tools used in project planning. Discuss the role that PBS and WBS have in project planning and the relationship between them. **(5 marks)**

b) Your colleague has suggested that PBS and WBS are alternatives, and it is confusing if both are used. Do you agree with her? Justify your answer. **(4 marks)**

c) You work as a project manager for a small software house which has been contracted to develop an Android App for an environmental charity. The app records surveys of wildlife and updates a cloud database. The database is also accessible to PC users via a web browser.

Create a product breakdown structure (PBS) diagram for the project, showing at least **TWELVE** different products that could be produced at the various stages. **(9 marks)**

d) Create a work breakdown structure (WBS) for the project showing at least **TEN** different activities with at least **TWO** levels of detail. **(7 marks)**

A3.

a) Explain, in detail, why it is necessary to monitor and control a project. **(6 marks)**

b) Discuss the difficulties involved in monitoring a software development project. **(6 marks)**

c) Information is needed to monitor a project:

- i. What aspects of a project are usually monitored to evaluate project progress?
- ii. Explain the formal reports that are used for monitoring projects and clearly state who produces them and to whom they are sent. **(7 marks)**

d) Discuss the advantages and possible disadvantages of **TWO** control strategies you might consider using to get the project back on its planned level of progress. **(6 marks)**

[Turn Over]

Section B
Answer Section B questions in Answer Book B

B4.

- a) Describe **FOUR** advantages and **FOUR** disadvantages of buying in software applications rather than building them in house for a development project.
(8 marks)
- b) Explain the purpose of configuration management in the project change control process.
(5 marks)
- c) Describe the following **TWO** elements of configuration management.
- i. Configuration item identification;
 - ii. Configuration control.
- (6 marks)**
- d) Explain the purpose of a project post-implementation review report and state how it differs from the end of project lessons learned report.
(6 marks)

B5.

- a) Explain why it is possible for a software application to be built from good quality software but possess poor product quality.
(8 marks)
- b) Describe the **FIVE** stages typically used in a capability maturity model (CMM) to assess an organisations level of sophistication and capability in its production practices.
(10 marks)
- c) Describe how the 'Inspection' testing technique is structured and managed to detect defects in a product.
(7 marks)

B6.

- a) Explain the following **FOUR** management styles and state the most appropriate stage of project team maturity the style is suited to:
- i. Directive autocrat;
 - ii. Permissive autocrat;
 - iii. Directive democrat;
 - iv. Permissive democrat.
- (12 marks)**
- b) A large project is about to start, and a shortage of skilled specialist development staff has been identified. There is no time available to recruit or train in-house staff.
- Explain **TWO** ways in which the required staff resources might be acquired and state a possible advantage and disadvantage of **each** of your choices.
(10 marks)
- c) Describe how staff motivation can be improved using techniques of job enlargement and job enrichment.
(3 marks)

END OF EXAMINATION