# **BCS Higher Education Qualification**

## **Professional Graduate Diploma**

### October 2022

### **EXAMINERS' REPORT TEMPLATE**

#### **Software Engineering 2**

### **Questions Report:**

A1	Syllabus content: 3.4 Demonstrate knowledge and awareness of UML and its use.
	This question was only attempted by two candidates, both of whom passed. Good knowledge demonstrated across all sections. For the wider cohort, this may be indicative of a lack of knowledge of the subject matter of Advanced UML and formal notation.
A2	Syllabus Content: 2.1 Demonstrate awareness of and ability to apply software maintenance methods.
	This question on the syllabus topic of software maintenance, was attempted by most candidates, with the highest pass rate. Good knowledge demonstrated across all sections.
А3	Syllabus Content: 1.4 Demonstrate knowledge and awareness of software management.
	<ul> <li>a) Very limited awareness of project management issues in other sectors was presented in the answers given, and any areas of commonality and similarity within the software development sector. Responses were often generic, opinion-based descriptions of management theory or practice.</li> <li>b) Very limited knowledge of organisational structures for development teams was demonstrated, and responses were often restricted to very detailed descriptions of hierarchical structures.</li> <li>c) Very few candidates demonstrated any knowledge of the model and were unaware of the main differences.</li> </ul>
B4	Syllabus Content: 3.1 Evidence knowledge and awareness of the methods and techniques for software reuse.
a)	Many candidates provided a sufficient explanation of the common ways in which software reuse takes place e.g., they briefly outlined Component reuse and Object and function reuse. However, they did not sufficiently discuss the second part of this question concerning the reasons why achieving the benefits of reuse is difficult.
b)	A substantial number of candidates did not answer this question in full i.e. they provided a sufficient explanation of open-source assets and, to a lesser extent, an explanation of product lines, but the required discussion was insufficient.
B5	Syllabus Content: 3.3 Demonstrate knowledge and awareness of open-source software engineering practice.
a)	In general most candidates sufficiently explained Open Source Software (OSS) but NOT Open Source Software Engineering (OSSE). Only a few candidates were able to explain how OSSE adheres to the principles of software engineering. In general the discussion of techniques and tools used in OSS development was less than adequate.

Additional Examiner comments:
Usually a question 'consists' of a few related tasks e.g. "Explain and discuss".  Many candidates do not address all of these tasks (discuss in particular).  Candidates are encouraged to read the question carefully and answer all aspects of the question.  Before writing their answer, they are encouraged to fully understand the question i.e. all tasks required.
Any actions taken or suggested:

Report to be submitted to BCS by the Moderator:

Date: