Examiner Report	
Qualification Name	Higher Education Qualification
Qualification Level	Professional Graduate Diploma
Date/ Series	April 2024
Module	Programming Paradigms

General Comments

In general, candidates attempted most parts of the exam well.

Some answers were general, where candidates had some general discussion about the topic even though it was not directly related to what had been asked. For future candidates, it would be good to focus the answer on the question asked before considering if wider details would be relevant.

It is recommended that future candidates should look more closely at the mark allocation of questions. They can use that information to help them decide how much time and content to answer for the different parts of the questions.

Question no.	comments
A1	In part (a), many candidates correctly described the capability of a pointer to a base class being capable of pointing to a derived class object (entailing the use of inheritance and polymorphism), enabling run-time binding of the type alluded to in the question. Several candidates talked about encapsulation rather than polymorphism. In part (b), which asked about class interfaces, several candidates spoke about Java interfaces rather than the more general concept of a class having an externally visible interfaces through which it communicates (typically meaning its public methods).

Question no.	comments
A2	Part (a) was generally very well answered, with most candidates being able to identify key features of an IDE, and many compared this to the use of a command-line approach. In part (b), there was a general focus on coding standards and relatively little was said about standardised languages, suggesting that some further study on this concept may be required.

Question no.	comments
A3	In (a), the majority of candidates seemed to have a good basic grasp of the event-driven paradigm and provided appropriate examples (most often in relation to GUIs). Part (b) was less well answered, with some candidates discussing testing more generally but not specifically highlighting why it is more difficult in practice to test event driven systems.

Question no.	comments
B4	In many answers to part (a), a considerable number of words were written that essentially paraphrased the question, which is unnecessary and may have consumed time duration the exam. Other than that, most were able to mention some relevant concepts (such as deadlock and race conditions) but fewer were able to provide a clear and concise discussion. In part (b), many had problems identifying three distinct possible approaches to resolving the problem, although some candidates did suggest the use of semaphores and monitors.

Question no.	comments
B5	In (a), which essentially requires familiarity with the declarative and imperative paradigms, many candidates provided reasonable answers, although it did seem that there was less familiarity with the declarative paradigm overall. In (b) some correct answers were given, but in general there was a tendency to provide code but not provide a very clear account for the part of the question that asked for a discussion and explanation.