

BCS Higher Education Qualification

Diploma

April 2023

EXAMINERS' REPORT

Systems Analysis & Design

Questions Report:

A1	<p>This question was answered reasonably well.</p> <p>Part a) - Most candidates managed to identify proper processes and datastores. However, external entities caused some problems.</p> <p>Part b) - Many candidates provided insufficient explanations of the different roles played by DFDs and ERDs in Structured Systems Development.</p> <p>Part c) - Only a small number of candidates sufficiently explained why DFDs are not normally used in Object Oriented Systems Development.</p>
A2	<p>This question was answered reasonably well.</p> <p>Part a) - This part was answered reasonably well, but many candidates confused fact finding interviews with job interviews.</p> <p>Part b) - This part caused some problems. Many candidates confused software project stakeholders with business organisation stakeholders. Some candidates did not attempt this part.</p>
A3	<p>This question was generally well-answered.</p> <p>Part a) - This part was answered well. However, there were weaker areas such as; some candidates omitted the Planning stage, some candidates specified the stages in the wrong order and some candidates provided insufficient explanations of stages.</p> <p>Part b) - In general the iterative aspect was better explained than the incremental aspect of modern methods.</p> <p>Part c) - Adequate answers were provided.</p>
B4	<p>Most students did well on this question showing that they understood the basic process of normalisation. Some simply presented the stages of the process without further explanation, but most ended with the right set of tables in third normal form.</p>
B5	<p>This question was generally well-answered. Most students were able to discuss generalisation and aggregation with suitable examples in Parts a) and b). Answers to part c) were a little more muddled and many students failed to make the key point that classes encapsulate behaviour as well as data.</p>

B6	
	<p>Most students who chose this question were able to produce a reasonable sequence diagram showing that they understood how these diagrams show the interaction between objects that would deliver a particular piece of functionality. However some struggled to explain the difference between sequence and communication diagrams. Only a minority were able to clearly explain that in sequence diagrams interaction is arranged in a time sequence whilst in communication diagrams the order of messages is represented by sequence numbers. Some candidates did not attempt to draw a statechart but the ones who did generally did well.</p>