BCS Higher Education Qualification

Diploma

September 2019

EXAMINERS' REPORT

Systems Analysis and Design

General comments[1]
Questions 4 and 5 were much more popular than Question 6. The best results were achieved for Question 4. The Question 5 results were worse but reasonable while the Question 6 results were much weaker.

Question number: A1
Syllabus area:
4.   Use appropriate methods and techniques to produce an analysis of a given scenario 6.   Provide suitable documentation for systems analysis and design activities.
Total marks allocated: 25
Examiners' Guidance Notes
This question was attempted by 63% of candidates with some very good answers. The average mark awarded was 56%. As in previous years a number of candidates confused data flows with processes - naming flows with names like "reschedule job". There were no other common problems.

Question number: A2
Syllabus area:
2.   Discuss various approaches to systems analysis and design and explain their strengths and weaknesses. 3.   Evaluate the tools and techniques of systems analysis and design that may be used in a given context.
Total marks allocated: 25
Examiners' Guidance Notes
A popular question being attempted by76% of candidates who obtained an average mark of 56%. Many candidates made a good job of this question - clearly being aware of the way this subject is discussed in the course texts.

Question number: A3
Syllabus area:
2.   Discuss various approaches to systems analysis and design and explain their strengths and weaknesses.
Total marks allocated: 25
Examiners' Guidance Notes
An unpopular question. Only 22% attempted the question obtaining an average mark of 48%. Many candidates were hazy about the details of incremental and iterative models of software development - often confusing the two terms with each other or describing a waterfall approach.

Question number: B4
Syllabus area:
5.   Use appropriate methods and techniques to produce a design for a given scenario
6.   Provide suitable documentation for systems analysis and design activities
Total marks allocated: 25
Examiners' Guidance Notes
Nearly 91% of candidates attempted this question and the substantial majority of them achieved a pass mark for their answers.
Many answers for part (a) were very good and the majority of candidates were able to practically demonstrate the normalisation process. Some candidates however did not provide proper explanations, did not show primary and foreign keys and did not demonstrate sufficient understanding of the normalisation process.
Part (b) was answered generally well. Some candidates had problems with relationships (with cardinalities of relationships in particular). Some candidates produced ERDs which were inconsistent with the normalised relations/tables.

Question number: B5

Syllabus area:

2.   Discuss various approaches to systems analysis and design and explain their strengths and weaknesses.

5.   Use appropriate methods and techniques to produce a design for a given scenario

6.   Provide suitable documentation for systems analysis and design activities

Total marks allocated: 25

Examiners' Guidance Notes

This question was attempted by appr.86% of candidates and 57% of them achieved a pass mark (a substantial improvement).

Part (a) was answered generally well. Some candidates however were unable to give proper and correct examples of relationships between classes. A number of candidates also had problems with definitions/explanations of relationships between classes (association and aggregation in particular). Also a small number of candidates did not draw relevant fragments of class diagrams.

Part (b). Many candidates produced reasonable answers i.e. they identified proper similarities and differences between class diagrams and entity relationship diagrams.

Question number: B6

Syllabus area:

3.   Evaluate the tools and techniques of systems analysis and design that may be used in a given context.

5.   Use appropriate methods and techniques to produce a design for a given scenario

6.   Provide suitable documentation for systems analysis and design activities

Total marks allocated: 25

Examiners' Guidance Notes

Relatively a small number of candidates (44%) attempted this question, and the results are substantially worse than the results of Question 5. Some answers were adequate, but many answers were very weak.

Part (a) caused many problems. Many answers were insufficient e.g. the candidates did not explain how the diagrams **relate** to each other. Also many candidates provided wrong explanations of the diagrams.

Most candidates who answered part (b)(i) provided insufficient answers.

Part (b)(ii): Only a small number of candidates produced reasonable state charts/state machines. Some candidates produced 'activity diagrams' instead. Many candidates did not show proper states.