

BCS Higher Education Qualification

Certificate

November 2020

EXAMINERS' REPORT

Information Systems Section A

General comment

Performance overall:

Candidates seemed to be lacking basic knowledge of the subject areas in a number of cases. With those who failed, demonstrates that students do not always read the questions correctly or they believe that by including extra sections on what they know regardless of actually addressing the question correctly, they might be awarded a higher grade. This approach also made the answers difficult to mark and award grades. It is also evident that some students did not actually have the correct knowledge on the issues raised. Sections of the questions were found in different parts of the answer papers not always indicating as to where they were, which meant taking extra time as if answers were not given in the correct place, those sections were marked and then had to be changed when other sections were discovered in different parts of the answer book.

With regard to the overall performance made by the students:

- The grammar and presentation is extremely poor in many cases.
- Overall a reasonable set of results with some good answers however, there are some cases where there still tends to be a lack of understanding of the question resulting in a lack of content and knowledge of the subject areas and the ability to structure answers correctly.
- The problems above indicate that students do not read the questions adequately, or they misunderstand the question and do not look at the mark allocation for each question.

The answers that were of a low standard, were mainly due to:

- misinterpreting the question and not understanding what was being asked of them
- only addressing parts of the question
- answers were not structured in relation to the structure of the marks of the question
- the depth/content of the answers did not reflect the actual grading of the question
- few relating to the model answers demonstrating a lack of understanding of the actual subject matter

Students did not always provide model answers but nevertheless in cases where they demonstrated a reasonable understanding of the subject, they were credited with a relevant mark.

Question number: 1

Syllabus area: System Analysis and Design, HCI

Total marks allocated: 30

Examiners' Guidance Notes

- (a) Suitable processes to development are acceptable such as structured methods or an Agile (prototype). A soft system method would not be really appropriate as the desired system is a hard one requiring typical business features. Appropriate tools and techniques are required.
- (b) The screens would be fairly simple. The first would record the enquiry, the second a list of the details of prospective buyers. Good screen design is expected including headings, footers, consistency and continuity.
- (c) There are many screen design techniques such as drop-down lists, radio buttons, help aids etc. These should be described with an example of each.

Question number:2

Syllabus area: System development, Management and support

Total marks allocated: 30

Examiners' Guidance Notes

- (a) As the name suggests, the purpose of the feasibility report is to ensure the viability of the required system. Management needs to be ensured that the time, effort, cost and other aspects needs to considered before too much time and cost are spent.
- (b) Both charts are useful in the preparation of the system development process. An example of each indicating the development process should show the difference. One is a network chart indicating critical paths and the other is a histogram.
- (c) Information flows within an organisation from top to bottom and vice versa. Each stage should be described with examples of the typical data and software used to provide that data.

Question number: 3

Syllabus area: System development techniques, Different methodologies, Quality assurance

Total marks allocated: 30

Examiners' Guidance Notes

- (a) The diagram should depict a dynamic/time-based view of the events of the entity car indicating the 'life' of a car.
- (b) A simple description of the reasons for the robustness of an object-oriented method is expected as only two marks are allocated.
- (c) This is an open-ended question of ten marks. There are many reasons for the failure of a large information system project. Typical reasons range from inadequate requirements to poor management, lack of expertise etc.

Question number: 4

Syllabus area: Security, Support of computer systems, implementation strategies

Total marks allocated: 30

Examiners' Guidance Notes

- (a) Companies need to be prepared for problems beyond their control, so should plan for a way to preserve their systems and data. This should include the setting up of teams, continuity plans and policies. Other measures should be included. The answer should be in report style.
- (b) In a large organisation such as a university, there is a subtle difference between the various technological managers. Information systems typically cover the software, technical matters as the name suggests look after the hardware and a database manager is in charge of the database and its integrity and functionality. Skills and typical qualifications are expected.
- (c) This question indicates that the system has been developed and now needs to be released to the users. There are several ways of doing this. Each has its own advantages and disadvantages.

Question number: 5

Syllabus area:

Total marks allocated:

Examiners' Guidance Notes

Most answer were reasonable.

But need to be mapped to business and the cloud, not home use and the cloud

Still a legacy that cloud is an insecure environment (from celebrity cloud hacks) which is not the case

A number of answers report that you don't know where your data is stored in the cloud. Each tutorial I run using AWS within the first minutes the students have to select which region they are developing in and what region the data will be stored in.

Any data auditor asking the business a question as to where their data was stored would expect to be told where, so that local legislation can be adhered too.

Focus of answers with cloud based questions need to focus on business and not the free tiers provided.

Question number: 6

Syllabus area:

Total marks allocated:

Examiners' Guidance Notes

A poorly answered question
Limited number of students even attempted it.

The question has been asked in the past and did get reasonable answers

An ERD is simply a picture, what is required to develop the ERD into a set of tables is a supporting documentation like data types and domains, list of keys, perhaps flow descriptions from a DFD to state volumes of data etc.

The question was looking for how you would support and validate an ERD with supporting documentation

Question number: 7

Syllabus area:

Total marks allocated:

Examiners' Guidance Notes

It's clear that some candidates clearly knew the difference between Quantitative and Qualitative questions but a lot didn't. Some of the examples given clearly show that there is confusion between the two. There appears to be a mapping for some students / centres that qualitative means quality, which is not the case.

What was missing is why we use the two styles and that were you get restrictive, multiple choice questions these are easily to machine mark and also machine deliver.

Question number: 8

Syllabus area:

Total marks allocated:

Examiners' Guidance Notes

Assuming that a lot of the candidates were prepped / taught by centres it was clear from the batches of student that could or could not answer this question that centres are either teaching or in a lot of cases, not teaching this NOSQL.

NOSQL has been asked before and is a database discipline that has been around for other 20 years.

Were the candidate knew about NOSQL they were able to successfully answer the question and attempt to compare and contrast again traditional SQL.

Question number: 9

Syllabus area:

Total marks allocated:

Examiners' Guidance Notes

With 96.5% attempting the maths question and an average mark around 70% there is no much you can discuss about the question

Candidates are still confusing mode and median etc, which might come from rote learning as I vary the order of questions.

Question number: 10
Syllabus area:
Total marks allocated:
Examiners' Guidance Notes
<p>A poorly answered question attempted by less than a third of the candidates</p> <p>With a question about quality few candidates seemed to understand about quality processes or procedures for ensuring that documentation is at a high standard.</p>
Question number: 11
Syllabus area:
Total marks allocated:
Examiners' Guidance Notes
<p>A mixed set of answers</p> <p>It is clear than reasonable number of candidates knew about security, they just did not know whether it was psychical or logical.</p> <p>There were a significant number of candidates who answer the question correctly but did not put the answer in the correct section or confused physical and logical security.</p>
Question number: 12
Syllabus area:
Total marks allocated:
Examiners' Guidance Notes
<p>The answer to multimedia question seem now to be a list of file types rather than discussing the positive or negatives of each media.</p> <p>Listing file types does not address the "discuss" or "guideline" elements of the question.</p>