# **BCS Higher Education Qualification**

## **Diploma**

### October 2021

### **EXAMINERS' REPORT**

# **Web Application Development**

## **General comments**

A large number of candidates made errors in their answers as they seemed to not fully understand the questions. For example, in question 5, some candidates confused the 'THREE key features of CSS pre-processors' with the three major style of CSS pre-processors'.

Question number: A1

Syllabus area:1.4, 1.2

Total marks allocated: 25
Examiners' Guidance Notes

All candidates attempted this question.

The key to answering this question was to understand the difference between web and application servers and the mobile web. Marks were lost where candidates did not make it clear that a web server receives requests and returns the requested web pages in the form of html. Application servers were less well understood, and candidates did not always make it clear that they take input and perform some process before returning a result, probably to a web server. The mobile web was even less well understood and answers that suggested capabilities that were not specific to mobile requirements were not awarded any marks. The key was that input should make use of facilities only available on mobile devices and should be usable if available, and the web pages returned should adapt to the small screen size. Issues such as screen readers etc. did not attract any marks as they are general to any web service and not just mobile.

**Question number: A2** 

Syllabus area: 2.5

Total marks allocated: 25

# Examiners' Guidance Notes

All candidates attempted this question.

Most candidates had a reasonable idea of what is meant by version control and could provide most advantages. The better candidates understood the advantages of being able to fork development and merge branches back into the main trunk once they had been verified and approved. Candidates chose Github as their example, and marks were awarded on the accuracy and completeness of their description.

**Question number: A3** 

Syllabus area: 6.2

**Total marks allocated: 25** 

## **Examiners' Guidance Notes**

Most candidates attempted this question.

Most candidates were able to identify a good range of security problems. Marks were lost either by providing minimal or no description of the risk, or repeating one already described. Candidates were less able to identify sound defences against each of them, which is where most marks were lost.

**Question number: B4** 

A1. Syllabus area: 4.3, 4.4 Total marks allocated: 25

# **Examiners' Guidance Notes**

In B4 a, few candidates explained the definition of back-end technology. In B4b, some candidates appear confused with the question. candidates explained which website used REST API, instead of how REST APIs are used.

**Question number: B5** 

A1. Syllabus area: 3.3
Total marks allocated: 25

# **Examiners' Guidance Notes**

This was one of the most popular questions in section B. Candidates performed well in Question 5a. In Question 5b, some of candidates confused the 'THREE key features of CSS pre-processors' with the three major style of CSS pre-processors'.

**Question number: B6** 

A1. Syllabus area: 6.1 and 6.4

Total marks allocated:

# **Examiners' Guidance Notes**

B6 was the least attempted question in section B.