# **BCS Higher Education Qualification**

# Diploma

# April 2023

## **EXAMINERS' REPORT**

### **Principles of Internet Technologies**

# **Questions Report:**

A1	
	Part a) was generally well answered with many candidates providing lengthy explanations but some lost marks by not describing accurately the difference between guidelines and standards. A minority of answers correctly identified the difference between standards and guidelines while also providing good examples of each. A few candidates provided correct descriptions of guidelines and standards but lost marks on the examples they gave which were not accurate.
	Part b) was poorly answered by candidates. Many responses were general and did not include client side and server side or refer to JavaSript which the few good responses did. Many candidates referred to node.js being helpful for creating websites. Some candidates skipped the definition of node.js and went on to explain the benefits of using it.
	Part c) was also poorly answered. Only a few candidates referred to CSS, client-side JavaScript and scripting to personalise information. Candidates provided general responses that referred to adding multimedia. Others provided examples of coding without explanation so lost the opportunity to gain extra marks.
	Part c) was well answered with most candidates providing a good description and a varied range of examples of issues encountered during website maintenance. Most provided detailed examples. Candidates did not address section iii) of the question correctly with only a small number providing examples that included manual and automated methods.
A2	
	For part a) most candidates were able to correctly name the three types of e-commerce with a minority losing marks for providing incorrect answers such as e-marketing or e-business. Answers with fuller explanations of the types of commerce scored higher marks while those with a bullet point list achieved lower marks.
	Many candidates were able to provide detailed responses for part b) with good explanations of how Covid-19 had impacted learning at their place of study and in general. Most provided examples of applications used for online study including Zoom and Teams. Candidates providing fuller examples scored the higher marks.
	Most responses to part c) correctly identified and discussed two advantages to using a search engine with a small number providing only one advantage.
	Part d) was well answered with examples and discussion. Candidates lost marks where they did not accurately describe what mobile first is and instead provided a

	general response to development for all devices. The better responses provided a range of examples for advantages to mobile first with candidates mentioning the high number of users.
A3	
	This question was overall poorly answered with candidates skipping elements of part a). Some attempted section i), ii), and iii) and skipped iv) and v) therefore losing the opportunity to gain extra marks. The candidates who did response provided a bullet list with very brief explanations of each and examples. No candidate successfully explained all four terms with schema and element being particular obstacles.
	Very few provided accurate descriptions of the difference between CSS element selector and CSS id selector with most describing each and including an example but failing to provide an explanation of the difference. Most candidates discussing the advantages of using CSS for website design answered well with the more detailed responses and range of advantages discussed gaining more marks. Formatting was mentioned as an advantage more than other benefits that could have been identified.
	For section d), responses on the whole were good with the better answers providing more detail on why mobile first is important in website design and accurately describing mobile first as opposed to a general response on development for mobile displays. Most candidates who discussed why it is so important mentioned reach and the number of users.
B4	
	This question was answered well. In part a), candidates were able to demonstrate their knowledge of what the acronyms stood for. There was some confusion as to what part of the TCP/IP model these acronyms mapped to though. In part b), there a greater demonstration of knowledge and the diagrams were done to a good standard.
B5	
	There appeared to be confusion amongst some candidates in part a) as to what the utility tools were. Some gave very general answers that were not appropriate. Parts b) to d) tended to have better answers. Though in part c) candidates knew what NAT was but could not contextualise it properly in the case of IPv4 addressing.
B6	
	There was an indication that candidates knew what IoT was, but they struggled in part b) regarding how these technologies should be evaluated. Candidates described them rather than evaluating them. The candidates did however demonstrate a wide range of knowledge for wireless technologies in part c).