

**BCS Higher Education Qualification**

**Diploma**

**April 2022**

**EXAMINERS' REPORT**

**Computer Networks**

**General comments**

Questions were attempted by the majority of students however a limited number provided detailed explanations which was required by most questions in section A. A number of answers were bullet point lists and brief statements which limited depth for higher mark allocations.

**Questions Report:**

Qu.	Comment
A1	
a)	A number of students listed other OSI layers rather than focusing on the specific characteristics of the data link layer and comparing it to the other layers.
b)	Several students confused switch forwarding methods at the datalink layer 2 with other processes such as unicast / multicast, older methods were also stated where the question asks for the main methods currently in use. Due to a number of students not correctly identifying A1(b)(i) this led to incorrect technology explanations for (b) (ii)
c)	Most students did not answer this question with detailed explanations and re-listed the question itself. Further details on broadcast domains could have gained further marks.
A2	
a)	This question was answered by a number of students. Key flags were listed by some students however a limited number included explanations as to their use which limited marks. Support diagrams responses could have been provided by the students to clarify and the lack of clarification (regardless of method) limited marks. Some students misread the question and listed OSI layers or applications instead of flags. For future sessions a diagram will be suggested although no candidates were disadvantaged by not submitting on this paper.
b)	Most students identified the correct protocol however the question focused on explanation and justification for this, limited explanations were provided on the benefits by most students.
A3	
a.)	A limited number of students answered this question, the majority of those that did answered correctly for all three sections.
b)	A limited number of students attempted this question. Answers provided gave understanding of process steps to reach the conclusion which gained partial marks however the bit string solution was incorrect in the majority of cases. Further annotation of calculation processes would also enhance responses.
B4	
a)	Most students attempted this question and got it correct. Though some did not understand what SMTP is, which would have helped gain marks in this section.

b)	Most students attempted this question and got it mostly correctly. Some did not know that HTTP/HTTPS was used and only put POP3 and IMAP
c)	Students mostly did not understand the limitations of POP3 and IMAP such as having a local copy of files but deleting it will also delete from the server ect
d)	Some students did well in this question because they read the question correctly. Others did not. They either did a diagram with no explanations or the reverse. The question asked specifically for both and in order.
B5	
a)	Most students did well in this question but outlined all the differences instead of the KEY differences between the technologies
b)	Some students did well in this question but other did not understand ATM (a networking technology) not a machine you take money out from your bank account. A good revision topic for networking in general.
c)	Some understood ATM but most did not read the question correctly. They listed what QOS is and does but did not list the "Parameters" in how it operates aka the rules it uses to function. This was the question asked.
B6	
a)	Most students did not attempt this question. Those who did, did not understand byte stuffing. This would be a good revision topic (along with the question below)
b)	Most students did not attempt this question. Those who did, did not understand byte stuffing overhead. This would be a good revision topic (along with the question above)
c)	Most students did not attempt this question. Those who did not understand hamming code conversion. Conversion of code from one form to another would have helped students overall in other questions not just this one. Aka binary to decimal etc.
d)	Most students did not attempt this question. Those who did not understand the two main causes of error transmission systems and did not illustrate their answers which was a requirement of the question. This would be a good revision topic