BCS Higher Education Qualification

Diploma

October 2023

Examiners' Report

Computer Networks

Questions Report:

Marker name	All markers of section A are required to add comments here:
A1	
	Many Candidates did not know what routing metrics were. They need to understand the difference between technologies like VPNs/hardware like routers compared to metrics such as cost.
A2	
	Many Candidates had some understanding of Single and bit errors but not Burst errors. Candidates could state generically what hamming codes are but not the details of how the technique works.
A3	
	Many Candidates did not know what QoS is or the characteristics that make it up. Jitter and bandwidth were mentioned mostly but not reliability or delay. Another issue was of the flow techniques. It was not well understood how to improve flow characteristics.
Marker name	**All markers of section B are required to add comments here:**
B4	
	This was answered by a number of candidates. The question was split into three parts. For part a.) most candidates were able to identify the main purpose of multicasting; however, maximum marks were limited due to a lack of further detail. Part b.) was not well understood by candidates with no candidates providing suitable examples of multicast routing types. Part c.) was answered by most candidates with suitable applications of use for multicasting however these were listed rather than discussed in most cases. For part d.) a number of candidates discussed standard routing protocols rather than routing protocols specifically related to multicasting.
B5	
	This question was attempted by a limited number of candidates. For part a.) candidates generally understood the operation of multicasting; however, higher marks were often not obtained due to a limited number of valid discussion points surrounding its functions. Part b.) was answered poorly by most candidates with confusion between multiplexing types shown and a limited number of candidates provided relevant diagrams. For part c.) most candidates discussed how TCP or UDP operate rather than discussing how multiplexing works in relation to the components of these protocols.

B6	
	This question was a popular choice with candidates. For part a.) A high volume of candidates attempted this part. Most candidates were able to calculate and identify one of the subnets and its key addresses; however, due to incorrect calculations, other subnet ranges were incorrect or not listed. A number of candidates only listed the first subnet, having misread the question, and some missed the first subnet possible on the range going directly to the 2nd as a starting range. For part b.) A number of candidates spent time listing internet connection technologies rather than discussing the implications surrounding IP addressing on the network.