BCS Higher Education Qualification

Diploma

September 2020

EXAMINERS' REPORT

COMPUTER NETWORKS

General comments

For Section A – the evidence suggests that many candidates though had some understanding of the subject knowledge, they struggled to demonstrate putting the theory into practice.

For Section B - the evidence suggests that many candidates have a limited understanding of the areas of the curriculum they are being examined on . Many candidates had a tendency to just write down the nearest list of knowledge of what they thought they knew rather than actually addressing what the question was asking.

Questions Report:

Qu.¹	Comment
A1	This was the least popular question of Section A. It was very disappointing to notice that only one of the candidates achieved a pass mark in this question. The highest mark was 10 out of 25 and the average mark was 4. It is clear that candidates were fully unprepared for this question. Candidates either did not attempt the question, or their response demonstrated complete lack of understanding of CSMA/CD and Wi-Fi mobility.
A2	This was the most popular question of Section A. It is the examiner's opinion that candidates had some basic understanding of IPv6, but they struggled to apply the knowledge to convert addresses.
A3	This was the second most popular question of Section A. It is the examiner's opinion that this question was attempted because candidates seemed familiar with error detection techniques. However, it appears that candidates were unprepared with how to calculate CRC and measure the Hamming distance of two codewords.
B4	For this question not many students attempted even though the different types of NAT plus descriptions could net 9 points, use of RFC19018 and PAT another 7 points (poorly answered) and the IPv6 to IPv4 was barely answered at all with some students saying it was not necessarily what was being taught.
B5	The answers to this question were very disappointing, many students didn't know the fundamentals of routing protocols as a whole and very few could identify convergence as the property needed. Most students failed to read the questions, just memory dumping the characteristics of link state and distance vector routing protocols as a whole. The last part again barely many students had a clue about other routing protocols such as path vector or hybrid routing protocols and listed any application protocol they could remember.
B6	Qu6 should have been the easiest and was the most widely attempted question. Types of addressing should have been the easiest for the first part and this is where most students picked up the marks but some were not at all familiar with what constitutes port numbers et al. Connection orientated and connectionless networks were poorly

addressed, and students dumped the differences between TCP and UDP which will allow student to maybe pick up a small amount of marks for saying TCP is one and UDP is another but again failed to address what the question was asking. The last part identifying the differences between baseband and broadband was very poorly answered with only a tiny proportion of students picking up more than 1 or 2 marks but is clearly defined in the curriculum.