BCS Higher Education Qualification

Diploma

May 2021

EXAMINERS' REPORT

COMPUTER NETWORKS

General comments
For Section B – the evidence suggests that many candidates still have a limited understanding of some areas of the curriculum they are being examined on. Many candidates tended to just write down the nearest "technical" dump of what they think they knew rather than actually addressing what the question was asking.

Questions Report:

Qu.[1]	Comment
A1	Question A1 was attempted by all candidates. Candidates demonstrated a good understanding of TCP and UDP protocols. However, many candidates were not able to explain the characteristics of the TCP windowing concept.
A2	Question A2 was attempted by all candidates. It is the examiner's opinion that candidates had some basic understanding of the OSI reference model, and the relation between the OSI and TCP/IP. However, it appears that many candidates were unprepared with describing the benefits of using layered models in computer networks.
A3	This was the least popular question of Section A – only four candidates attempted the question. It is clear that candidates were fully unprepared for this question.
B4	Those that answered this question, most (a) answered the differences between link state and distance vectoring routing protocols successfully but some were confused and got the differences round the wrong way especially with reference to convergence. Easy marks were obtained for (b) identifying which routing protocols were which but many were confused by EIGRP and answered hybrid although that wasn't a choice in the question. Some leniency was allowed for the "hybrid" answer (1 mark). Most students were unsure about Autonomous Systems in part (c) and what it meant. Types of table from link state routing protocols was also confusing to them in (d) as was the actual operation of OSPF in (e)
B5	This was the most widely answered question and probably the one that attracted the most marks. However, students displayed poor knowledge in confusing Class AB, B, C et al with RFC1918 addresses and some made the wrong assumptions. Some could handle the subnetting question but many found it difficult. Students could identify the differences between MAC and IP Addresses but the concept and operation of ARP appeared to be alien to many.

B6	This was the least answered question and whilst some students could deal with simple terminology like bandwidth, jitter and delay in (a), they were poorly equipped to deal with the intricacies of Intserv/Diffserv in (b) or how QoS is supported in IPv4/IPv6 in (c). This was the poorest areas of the curriculum examined and perhaps needs some strengthening in the curriculum delivery,