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# Examiners' commentary

## 2017–2018

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### CO1108 Information systems: foundations of e-business – Zone B

#### General remarks

Overall, the performance on this examination was satisfactory. However, candidates are once again asked to pay attention to the presentation of their work. Please remember to write legibly, and to structure your answers in a way which shows the logic of your thinking. Make use of underlining and clear paragraph breaks. You should start each question on a new page.

#### Comments on specific questions

##### Question 1

- a. This was a straightforward question. Good answers provided a brief definition of outsourcing and some excellent answers pointed out that there are various types of outsourcing. A wide range of disadvantages to outsourcing were discussed, with some being more appropriate than others. Many candidates focussed too heavily on the fact that the outsourcing was to be sent from Scotland to India, rather than considering more generic issues and then discussing how these might apply to Sovereign.
- b. This question was well answered. Most candidates provided full and appropriate descriptions of the four phases of building and maintaining systems. Good descriptions of appropriate testing were also provided.

##### Question 2

- a. Answers to this question could have been better. It was a straightforward question. Candidates generally provided an acceptable high level description of each of these types of networks, but the comparisons between them were vague. For example, candidates commonly pointed out that the coverage of these networks differs but did not provide any sort of estimate as to how wide an area each of them covers.
- b. This question was frequently misinterpreted. Good answers pointed out that for a large company, it is common for them to rely on both private and public infrastructures. Good answers then went on to give examples of key networking technologies that support both types of infrastructure. Examples of these types of networking technologies might include the traditional telephone system, mobile cellular communication, wireless local-area networks, videoconferencing systems, a corporate website, intranets, extranets, and an array of local and wide-area networks, including the Internet. These are just some examples and a wide range of other examples were discussed and were equally acceptable.

##### Question 3

- a. Answers to this question were disappointing. Good answers provided an explanation of what is meant by the logical view and then went on to describe the purpose of Entity Relationship Diagrams. They also provided a diagram to support their answer as it would apply to the scenario of Simpson Graphics, showing and describing the entity relationships.

- b. Good answers provided detailed descriptions of relational database models and marks were awarded for appropriately designing the three tables for clients, designs and orders.

#### Question 4

- a. In many instances, candidates did not understand that the value chain is a representation of the processes that add value to an organisation. Good answers to this question frequently included a diagram of a value chain as well as a description and diagram of the supply chain.
- b. Many candidates did not understand what is meant by the term “business process”. Good answers to this question defined what is meant by a process and then went on to describe five processes in the value chain. Many of these reflected the processes identified in their answer to part (a), such as receiving and handling of inputs. They then continued to describe how the identification of inbound logistics could lead to the introduction of EDI systems to support this process.

#### Question 5

- a. This question was answered well. Good answers described a firewall as a combination of hardware and software that controls the flow of incoming and outgoing network traffic. Firewalls prevent unauthorised users from accessing internal networks whereas intrusion detection systems monitor the most vulnerable points on the network to detect and deter unauthorised intruders.
- b. Good answers to this question described digital certificates at the beginning of their answer. They then went on to apply this to the E-Cars scenario highlighting the risks associated with staff taking work home on their computers and how a digital certificate would ensure that the staff member had produced a document which includes their name and their public key. As the document is digitally signed by a certification agency, they will first check that the documents are genuine. Hence members of E-Cars staff wishing to send information to each other can look up each other's digital certificate and ensure the security of the transfer of data between appropriate parties
- c. Most candidates correctly identified and described five issues that should be included in the Security Policy. Many of these answers included a mixture of issues from both the Acceptable Use Policy and the Authorisation Policy, or were exclusive to either of these. Almost all these descriptions were acceptable.

#### Question 6

- a. Answers to this question were disappointing. This question referred to the organisational, technical and behavioural dimension of information systems which are described in the subject guide. Most candidates provided a good description of the organisational dimension and adequate descriptions of the technical dimension, but struggled with giving a sound description of the behavioural dimension.
- b. This was an interesting question which allowed candidates to think innovatively in their answers. A wide range of environmental factors were identified and were acceptable. Some excellent answers provided creative views on the environment which systems need to interact with such as governments and regulatory authorities.