



**Information technology in a global society**  
**Higher level**  
**Paper 3**

Wednesday 20 May 2015 (morning)

Candidate session number

1 hour 15 minutes

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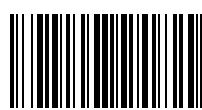
**Instructions to candidates**

- Write your session number in the boxes above.
- Do not open this examination paper until instructed to do so.
- Read the case study carefully.
- Answer all questions in the boxes provided.
- The maximum mark for this examination paper is **[30 marks]**.

8 pages

2215–5515

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Answer **all** the questions in the boxes provided.

Refer to the *Asociación de Supermercados Independientes*: An investigation into Big Data case study **and** to your own related research in responding to the following questions.

1. (a) Identify **two** characteristics of a data warehouse.

[2]

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- (b) Outline **one** reason why an extract, transform, load (ETL) process should be used when moving data from one computer system to another.

[2]

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08EP02

2. (a) Distinguish between data mining and data querying. [2]

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- (b) “ASI [Asociación de Supermercados Independientes] management are concerned that according to data privacy laws there must be appropriate access controls to protect customer and store data when accessed from the database system” (lines 119–121).

Explain **one** control that can be applied to staff access, and **one** control that can be applied to customer access.

[4]

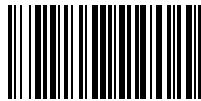


3. The information obtained by SUSA Analytics revealed that the number of staff working at various times was not always appropriate to the level of sales (lines 96–98). Based on this information, ASI management recommended that patterns of staff working hours should be reviewed by the store managers.

Discuss whether store managers should use this information to decide the hours the staff should work.

[8]





08EP05

**Turn over**

Your response to question 4 **must** include evidence of independent research linked to the *Asociación de Supermercados Independientes: An investigation into Big Data* case study.

4. With reference to your independent research, to what extent do the benefits for ASI's customers of receiving targeted advertising outweigh the ethical concerns that these customers may have about the impacts on their privacy, security and anonymity (lines 108–117)?

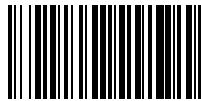
[12]





08EP07

**Turn over**



08EP08