

**CHAPTER TEST ANSWERS****Chapter 4 Issues in information systems****Section A****Multiple-choice questions**

- 1 Intellectual property is:  
**D** an original creation of the mind.
- 2 A stakeholder is:  
**C** any person who is affected by an issue.
- 3 Use of social media, such as Facebook, may be a significant issue because:  
**A** cyberbullying is increasing.
- 4 Increasing technology use in industry may be a social issue because:  
**B** unemployment is rising.
- 5 For farmers, increasingly automated technology in machinery may be a difficult issue because:  
**B** it is difficult to maintain automated technology themselves.
- 6 E-commerce may be an issue to local retailers because:  
**D** they may lose business to foreign traders.
- 7 The internet is an issue for the publishers of printed newspapers and magazines because:  
**A** sales are falling.
- 8 Phishing involves:  
**B** scammers gaining a victim's login information by pretending to be from a trusted organisation.
- 9 Identity theft is an issue because:  
**A** criminals can pretend to be the victim and empty their bank accounts.
- 10 Bank ATM users should be wary of:  
**C** card skimming.
- 11 Which Victorian legislation protects the information a patient gives to their doctor?  
**C** *Health Records Act 2001*
- 12 An issue related to websites with product reviews is that:  
**D** 'fake positive' reviews may be posted by people paid to promote a product.

13 When seeking reliable information, a researcher would most likely trust:

C primary sources.

14 Which of the following is a secondary source of data?

B A newspaper

15 When collecting data, using an interview method is good because:

A you can change questions based on previous answers.

## Section B

### Short-answer questions

1 A researcher wants to gather detailed, deeply personal information of the feelings of game players regarding violent video games.

a Name the best method for gathering such information and classify the data it gathers as primary or secondary.

*Answer:* Interview would be best because since the data needs to be detailed and deeply personal (1 mark). However, students could name questionnaires or surveys. The method should be categorised as primary (1 mark). A secondary data source would not be appropriate for such deep and personal data collection.

b Justify your choice of method.

*Answer:* The justification of the method is most important. Students may suggest:

- the ability of an interview to be affected by previous answers (1 mark)
- observing body language (1 mark)
- the tendency of people to open up more to real humans (1 mark)
- the greater detail gained from verbal answers compared with handwritten responses (1 mark).

2 The same researcher from Question 1 believes that the information she gets from her subjects is not entirely honest regarding their behaviour after playing violent games. She wants to determine whether their self-reports about their post-gaming behaviour are accurate.

Suggest a method for collecting this data. Justify your choice. Suggest three things she could do to ensure the collected data is valid.

*Answer:* Observation would be best (1 mark), because subjects could be seen behaving more naturally (1 mark). Ways she could ensure the data was valid include the following.

- Observer should not interfere in natural behaviour (1 mark)
- Observer should have a checklist of behaviours to record (1 mark)
- Observer should be constantly recording observations to be reviewed and interpreted at leisure later (1 mark).

**3** Dr Siddhartha, a researcher, wants to gather information on people's attitudes to online gambling, which he hypothesises badly affects Victorian families. He wants to gather information from as many people as possible in as many locations as he can across Victoria. He needs to obtain this data quickly and process it easily statistically.

**a** Suggest a data-gathering method that Dr Siddhartha should use, and justify your choice.

*Answer:* Questionnaires (1 mark), because they are easy to distribute, cheap to produce and process (1 mark), and because the data has a limited set of possible answers (1 mark).

**b** The doctor has a choice between collecting the data online, and collecting it using pen and paper. Which should he choose, and why?

*Answer:* Online data is quicker, cheaper and easier to distribute (1 mark), and the data is entered by the subjects, which reduces data-entry time and cost (1 mark).

**4 a** Explain two important reasons to reference the sources used in your research.

*Answer:* To prevent accusations of plagiarism (1 mark) and to give readers resources for further study (1 mark)

**b** Outline one major consequence of failing to reference your sources fully and properly in an academic publication.

*Answer:* Any of the following answers are acceptable: Expulsion from academic society, being dismissed from a job, disgrace, ridicule and legal proceedings

**5** Identify what 'data integrity' means and how it can be achieved.

*Answer:* For the purposes of Computing, data integrity refers to the quality of the data held (1 mark).

It can be achieved through:

- correctness (1 mark)
- reasonableness (1 mark)
- accuracy (1 mark).