



CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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9990/23

May/June 2020

1 hour 30 minutes

You must answer on the question paper.

No additional materials are needed.

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [].

This document has **12** pages. Blank pages are indicated.

Section A

Answer **all** questions in this section.

- 1** Describe the difference between qualitative and quantitative data.

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..... [2]

- 2** The study by Piliavin et al. (subway Samaritans) was conducted in a subway train.

- (a)** Suggest **one** advantage of conducting a study in this location.

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..... [2]

- (b)** Suggest **one** disadvantage of conducting a study in this location.

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..... [2]

- 3 The study by Saavedra and Silverman (button phobia) was a case study.

Explain the **two** reasons that the case study method was chosen, using examples from this study. Do **not** refer to 'longitudinal' in your answer.

1

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2

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..... [4]

- 4 Baron-Cohen et al. (eyes test) collected data from several standardised tests.

(a) State what is meant by 'standardisation'.

.....

..... [1]

(b) State **two** ways that the Eyes Test was standardised.

1

.....

2

..... [2]

5 Descriptive statistics used in studies can include the range and the standard deviation.

(a) State what these descriptive statistics measure.

..... [1]

(b) Explain **one** advantage of the standard deviation compared to the range.

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..... [2]

6 Describe the use of the ethical guidelines of 'numbers' and 'housing' in relation to animals in research, using any examples.

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..... [6]

Section B

Answer **all** questions in this section.

- 7 Jodie is investigating attitudes to doodling in class. She wants to obtain a sample that includes students and teachers.

(a) Name **one** sampling technique Jodie could use to obtain her sample.

..... [1]

(b) Suggest how Jodie could use this sampling technique to obtain her sample.

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..... [2]

(c) Suggest **one** advantage of using this sampling technique in Jodie's study.

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..... [1]

(d) Explain **one** problem with using this sampling technique in Jodie's study, compared to **one** other sampling technique.

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..... [3]

8 Todd is using a questionnaire to investigate personality, such as being a calm or anxious person.

(a) Explain what is meant by a 'questionnaire'.

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..... [2]

(b) (i) Suggest **one** open and **one** closed question about personality that Todd could use in his questionnaire.

Open question:

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Closed question:

..... [2]

(ii) Explain whether the open or the closed question that you suggested in part (b)(i) would provide more information about personality.

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..... [2]

(c) Describe how Todd could obtain informed consent from the participants in his study.

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..... [2]

9 Arjun and Mary have collected data about aggression in adults using an observation.

(a) They want to know if they have good inter-rater reliability.

Suggest how they would test this for their study.

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..... [3]

(b) Explain why it is important that Arjun and Mary have good inter-rater reliability in their study.

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..... [2]

(c) Suggest **one** advantage of using participant observation in Arjun and Mary's study.

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..... [2]

(d) Suggest **one** disadvantage of using participant observation in Arjun and Mary's study.

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..... [2]

10 Kenley is studying whether manipulating participants' mood (to 'good' or 'bad') will make them better at identifying positive facial expressions such as 'friendly' and 'happy'.

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- This image shows a full page of a handwriting practice worksheet. It consists of multiple sets of three horizontal dashed lines spaced evenly down the page, providing a guide for letter height and placement. The background is plain white, and there are no other markings or text present.

(b) Identify **one** practical weakness/limitation with the procedure you have described in your answer to part (a) and suggest how your study might be done differently to overcome the problem.

[4]

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