



Cambridge International AS & A Level

CANDIDATE
NAME



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PSYCHOLOGY

9990/23

Paper 2 Research Methods

October/November 2024

1 hour 30 minutes

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- 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.

INFORMATION

- 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. Any blank pages are indicated.

**Section A**

Answer **all** questions.

- 1** Outline what is meant by the term 'random sampling'.

.....
..... [1]

- 2** In a laboratory experiment, the happiness of participants is being compared in two situations:
- with other people
 - without other people.

Identify the dependent variable (DV) in this study. Justify your answer.

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..... [2]

- 3** In the study by Fagen et al. (elephant learning), most of the data collected was quantitative. Some qualitative data was collected, including an initial observation that one elephant preferred to drink saline rather than water.

- (a)** Define what is meant by 'qualitative data'.

.....
..... [1]

- (b)** Define what is meant by 'quantitative data'. Include an example from the study by Fagen et al.

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..... [2]





4 Studies in social psychology can use stooges or imagined people to cause participants to respond.

(a) In the study by Piliavin et al. (subway Samaritans), stooges were used as 'victims'.

Suggest **one** way to improve the ecological validity of this study in relation to the victims.

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..... [2]

(b) In the study by Perry et al. (personal space) Experiment 1, responses to imagined people were measured.

(i) Suggest **one** reason why measuring responses to imagined people is more ethical than measuring responses to stooges.

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..... [2]

(ii) Suggest **one** reason why measuring responses to stooges is more practical than measuring responses to imagined people.

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..... [2]





5 Pozzulo et al. (line-ups) calculated the mean number of correct identifications of human faces per child.

Explain how the researchers calculated this mean in this study.

[2]

6 Describe laboratory experiments and field experiments, using any example(s).

[6]





- 7 Daiyu is conducting a case study about a seven-year-old child with autism. She is interested in the child's interactions with their family and other children.

- (a) Suggest **two** techniques, other than interviews, that Daiyu could use in her case study to collect data about the child. Justify your answers.

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2

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[4]

- (b) Suggest **two** pieces of information about the child's interactions that would be useful for Daiyu to collect in her case study. Justify your answers.

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[4]

- (c) Outline **one** practical reason why obtaining information from the child could be difficult.

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..... [1]





- 8 Hazel is conducting a study in a park to compare the behaviours of adults who have children with them and adults who do not have children with them. She plans to record three behaviours of the adults: whistling, singing and shouting, rather than all actions that people perform.

- (a) Explain the type of observation that Hazel plans to use because she is only recording whistling, singing and shouting.

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..... [2]

- (b) Outline how Hazel could operationalise **one** of the three behaviours she plans to record.

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..... [1]

- (c) Hazel had planned to be an overt observer, but a colleague has said she should be a covert observer.

- (i) Suggest **one** reason why it would be more ethical to be an overt observer than a covert observer in this study.

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..... [2]

- (ii) Suggest **one** reason why it would be more practical to be a covert observer than an overt observer in this study.

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..... [2]





- 9 Hudson is planning to correlate how much a person wants to sleep (sleepiness) and the amount of time since their last meal. He will ask people to estimate the amount of time since their last meal, but he needs to find a way to measure sleepiness.

- (a) (i) Suggest **one** way that Hudson could measure sleepiness. Do **not** use an interview in your answer.

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..... [2]

- (ii) Explain **one** strength of the measure of sleepiness you suggested in part (a)(i).

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..... [2]

- (iii) Explain **one** weakness of the measure of sleepiness you suggested in part (a)(i).

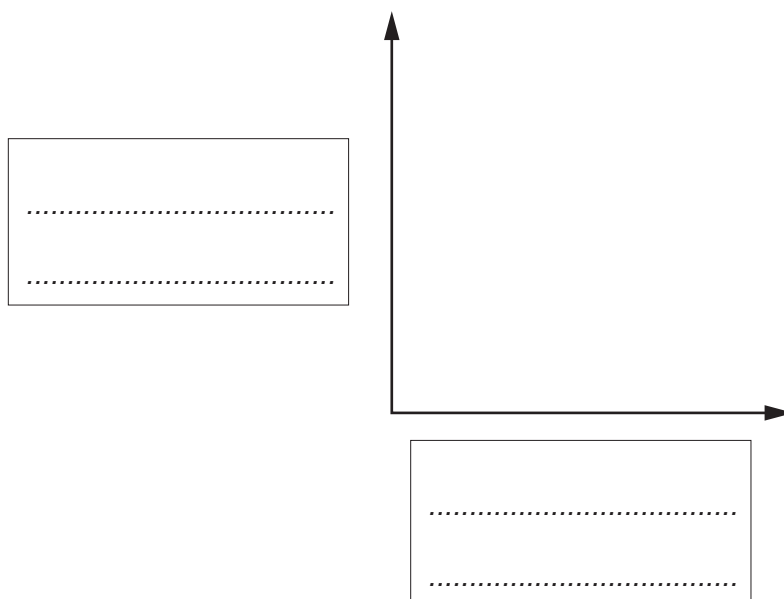
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..... [2]

- (b) Sketch a scatter graph, using the axes below, to show what the pattern of results would look like if Hudson found a negative correlation. You **must** label the axes.





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- (b) (i) Explain how **one** part of the procedure you described in part (a) helps to make the study reliable.

Do **not** refer to sampling or ethics in your answer.

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..... [2]

- (ii) Explain how **one** part of the procedure you described in part (a) could be a problem for reliability of the study.

Do **not** refer to sampling or ethics in your answer.

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