



Cambridge International AS & A Level

CANDIDATE
NAME



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PSYCHOLOGY

9990/23

Paper 2 Research Methods

May/June 2025

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 (a) Outline the ethical guideline of 'confidentiality'.

.....

..... [1]

- (b) Explain **one** way that the ethical guideline of confidentiality was followed in the study by Dement and Kleitman (sleep and dreams).

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.....

..... [2]

- 2 Cognitive psychologists sometimes study people's recall of past events.

- (a) Outline what is meant by 'subjectivity'.

.....

..... [1]

- (b) Suggest how subjectivity could be a problem when studying people's recall of past events.

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..... [2]



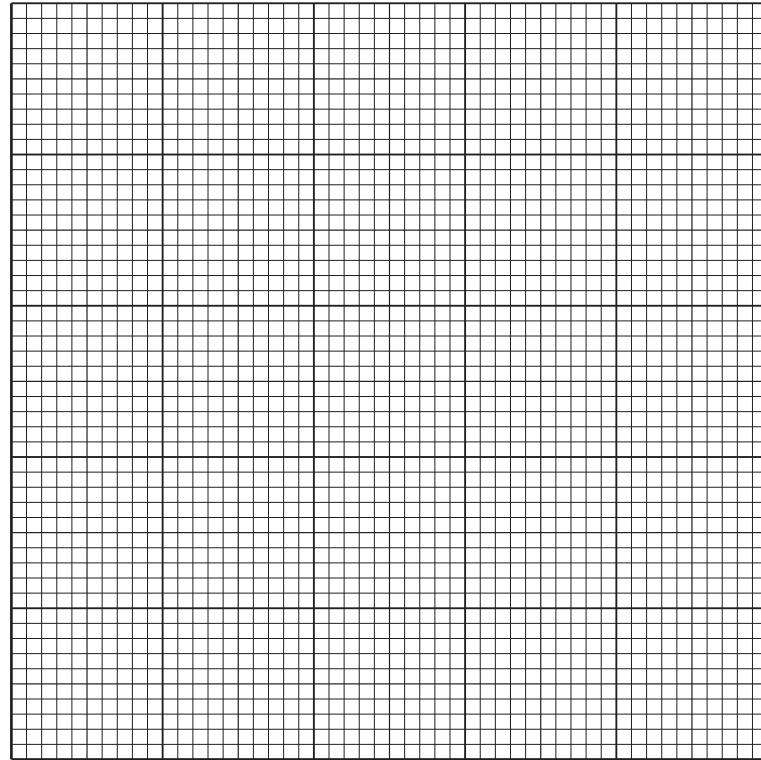


- 3 A study tested the relationship between average number of hours of sleep per night and physical health. The participants slept in their own homes. The results showed a positive correlation.

(a) Sketch a graph to show the results of this study. You **must** label the axes.

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[3]

(b) Suggest **two** problems with collecting data about the number of hours of sleep in this study.

1

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2

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[4]





- 4 An investigation is testing the hypothesis that, 'intelligence affects obedience'.

State whether this is a directional or a non-directional hypothesis. Justify your answer.

[2]

[2]

- 5 In the study by Bandura et al. (aggression), a sample of children was recruited from a university nursery. The sampling technique is not stated.

Suggest why Bandura et al. may **not** have used volunteer sampling.

[2]

[2]

- 6 Describe structured interviews and semi-structured interviews, using any example(s).

[6]





- 7 Dr Jones is conducting a case study of a man, Kevan, who has been practising mindfulness for 10 years.

- (a) Suggest **two** questions that Dr Jones could use in a self-report (questionnaire or interview) that would investigate different features of Kevan's mindfulness.

1

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2

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[2]

- (b) Dr Jones wants to investigate whether Kevan has changed in any ways that could be linked to his mindfulness. He plans to interview Kevan's friends.

- (i) Suggest **two** changes in Kevan that his friends could observe. These changes **must** be behavioural, emotional or cognitive.

1

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2

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[2]

- (ii) Explain why **one** of the changes that you suggested in part (b)(i) would be difficult to investigate.

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[2]





(c) Dr Jones has several different questions on his self-report that he has used repeatedly with a similar case. He has identified two problems:

- Problem 1: when he studies the responses to one item, he discovers that there are several different ways to interpret the answers.
- Problem 2: he is concerned that another item, which was supposed to measure mindfulness, is measuring happiness instead.

(i) Explain which problem relates to reliability.

.....
.....

[1]

(ii) Explain which problem relates to validity.

.....
.....

[1]





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8 Dr Mohan has proposed a study using monkeys in a laboratory. A colleague has two suggestions to make the study more ethical:

- suggestion 1: using animals which have less complex brains
- suggestion 2: using videos of the animals' behaviour in their natural habitat.

(a) Explain why suggestion 1 would make Dr Mohan's study more ethical.

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[2]

(b) Explain why suggestion 2 would make Dr Mohan's study more ethical.

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[2]





- 9 Kioni is conducting a longitudinal study. Her aim is to study changes in preferred personal space throughout her participants' lives.

- (a) Kioni is deciding how frequently throughout her participants' lives she should test them.

Suggest a suitable frequency for Kioni to use to test her participants throughout their lives.

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

- (b) Suggest **one** way for Kioni to re-contact her participants each time she needs to test them.

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..... [2]

- (c) (i) Describe **one** way that Kioni could measure personal space.

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..... [2]

- (ii) For the way you described in part (c)(i):

Suggest **one** strength of measuring personal space in this way.

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..... [2]





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- (d) Kioni is concerned that there may be variables other than age that could affect an individual's personal space preferences.

- (i) Suggest **two** variables that could affect an individual's preferred personal space, other than age and gender.

1

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2

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..... [2]

- (ii) For **one** of the variables that you suggested in part (d)(i):

Suggest how this variable could affect an individual's preferred personal space.

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..... [2]





Section B

Answer all questions.

- 10** Isla is a teacher. She thinks that allowing students to play with an object in class will improve attention. Isla is unsure whether it will be better to play with a pen or play with a different object that is not used for writing.

- (a) Describe how Isla could conduct an experiment to test whether attention is better if students can play with a pen or play with an object that is not used for writing.

Do not describe sample / sampling technique or ethical issues / guidelines in your answer.

[10]





(b) For **one** feature of the experiment you have described in part (a):

(i) Explain why that feature is a strength of the study.

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

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[2]

(ii) Explain how that feature could be a weakness of the study.

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

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[2]





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