



# Cambridge International AS & A Level

CANDIDATE  
NAME

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CENTRE  
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**PSYCHOLOGY**

**9990/21**

Paper 2 Research Methods

**October/November 2021**

**1 hour 30 minutes**

You must answer on the question paper.

You will need: Ruler

## 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 in this section.

- 1 (a) Explain why a questionnaire is a self-report method, including an example from a core study in your answer.

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..... [2]

- (b) Explain **one** strength of using questionnaires in research.

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..... [2]

- 2 Dement and Kleitman (sleep and dreams) compared dream duration estimates for 5-minute and 15-minute REM periods.

Write a null hypothesis for this part of the study.

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..... [2]

3 In the study by Bandura et al. (aggression), inter-rater reliability was measured.

(a) Outline what is meant by 'inter-rater reliability'.

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..... [1]

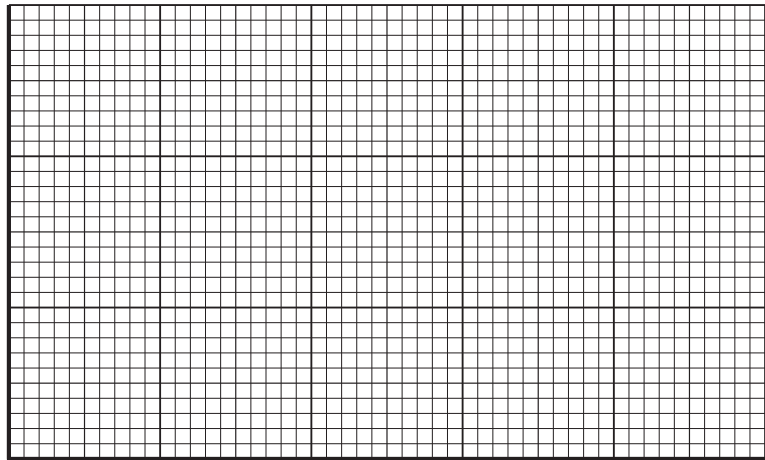
(b) Describe **one** part of the procedure that improved inter-rater reliability in this study.

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..... [3]

- 4 In the study by Piliavin et al. (subway Samaritans), observers counted the total number of victims helped. The results were that 62 'cane' victims and 19 'drunk' victims were helped.

Draw a bar chart of these results. You **must** label the axes.

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[4]

- 5 In a study on memory, participants had to recall a story. The researchers measured memory by rating the accuracy of each participant's recall of the story on a 10-point scale.

Suggest **one** weakness of using this scale to measure memory.

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6 Describe laboratory experiments and field experiments, using any examples.

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**Section B**

Answer **all** questions in this section.

7 Bruce is planning a case study of a famous woman known worldwide for her helpfulness.

(a) Explain **one** strength of the case study research method.

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(b) Explain **two** weaknesses of the case study research method, using Bruce’s study as an example.

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8 Nola is investigating whether there is a correlation between hours of sleep and how much a person argues. She thinks that people who sleep less may argue more. Her friend Tim is making suggestions about her procedure.

(a) Nola and Tim have different ideas for recording participants' hours of sleep per night:

- Nola plans to ask participants to record this at home.
- Tim says it would be better to record this in a laboratory.

(i) Suggest **one** ethical reason why Nola's idea is better than Tim's idea.

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(ii) Suggest **one** practical reason why Nola's idea is better than Tim's idea, other than avoiding the need to use a laboratory.

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(iii) Suggest **one** practical reason why Tim's idea is better than Nola's idea.

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(b) Nola finds the correlation she expected, that people who sleep less argue more.

Explain why Nola **cannot** know whether sleeping less causes people to argue more.

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9 Naomi is designing an observation of helping behaviour at an entrance to a library that has a door which is difficult to open. She intends to observe people carrying many books and will record the gender of each person who helps to open the door.

(a) Naomi could either be a participant observer or a non-participant observer.

(i) Suggest **one** advantage of her being a participant observer.

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..... [2]

(ii) Suggest **one** advantage of her being a non-participant observer.

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..... [2]

(b) Explain the type of data Naomi is collecting.

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(c) Situational variables could affect Naomi's results.

(i) State what is meant by a 'situational variable'.

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..... [1]

(ii) Suggest how **one** situational variable could affect Naomi's results.

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**(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.

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

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