Cambridge Assessment International Education

Cambridge International AS & A Level

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

0123635990

PSYCHOLOGY **9990/22**

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.

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Section A

Answer **all** questions in this section.

1 From the study by Schachter and Singer (two factors in emotion):

(a) Identify the sampling technique used in this study.

..... [1]

(b) Explain how this sampling technique was used in this study.

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..... [2]

(c) One ethical strength of this study was that health checks were done.

Explain why this is an ethical strength.

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..... [2]

2 From the study by Bandura et al. (aggression):

(a) Identify the sample and the population in this study, using the following information:

The findings of this study on 72 children were generalised to suggest that all children learn aggression through observation.

sample: .....

population: ..... [1]

(b) Explain **one** reason why generalisations should **not** be made from the 72 participants in this study, other than because of their age.

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..... [2]

3 In a study investigating the emotions associated with birthdays, qualitative and quantitative data are being collected. A possible problem with some of this data is subjectivity.

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

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..... [1]

(b) Suggest **one** way that qualitative data could be collected for this study.

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..... [2]

4 In the study by Baron-Cohen et al. (eyes test), standard deviations were calculated on the Autism Spectrum Quotient (AQ) scores and are shown in Table 4.1.

Table 4.1

	AS/HFA group	IQ-matched group
standard deviation of AQ scores	6.0	2.9

Explain what the information in Table 4.1 indicates about the results of these two groups.

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..... [2]

5 Explain what is meant by 'operationalisation' in relation to the dependent variable and independent variable, using the study by Piliavin et al. (subway Samaritans).

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..... [3]

6 Describe reliability and validity, using any examples.

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..... [6]

Section B

Answer **all** questions in this section.

7 Zayn is conducting a laboratory experiment to investigate the effects of lighting on attention. The participants' attention will be tested using a listening task in either bright light or dim light.

(a) Identify the independent variable in Zayn's study.

..... [1]

(b) Identify the dependent variable in Zayn's study.

..... [1]

(c) **(i)** State **one** relevant variable that Zayn should control in his study.

.....

..... [1]

(ii) Suggest how Zayn could control the variable you suggested in **(c)(i)**.

.....

..... [1]

(iii) Explain why Zayn should control the variable you suggested in **(c)(i)**.

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..... [1]

(d) Explain **one** practical reason why it is better for Zayn to test attention using a listening task rather than a visual task.

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..... [2]

(e) Suggest **one** weakness of Zayn using a laboratory experiment to study attention.

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..... [2]

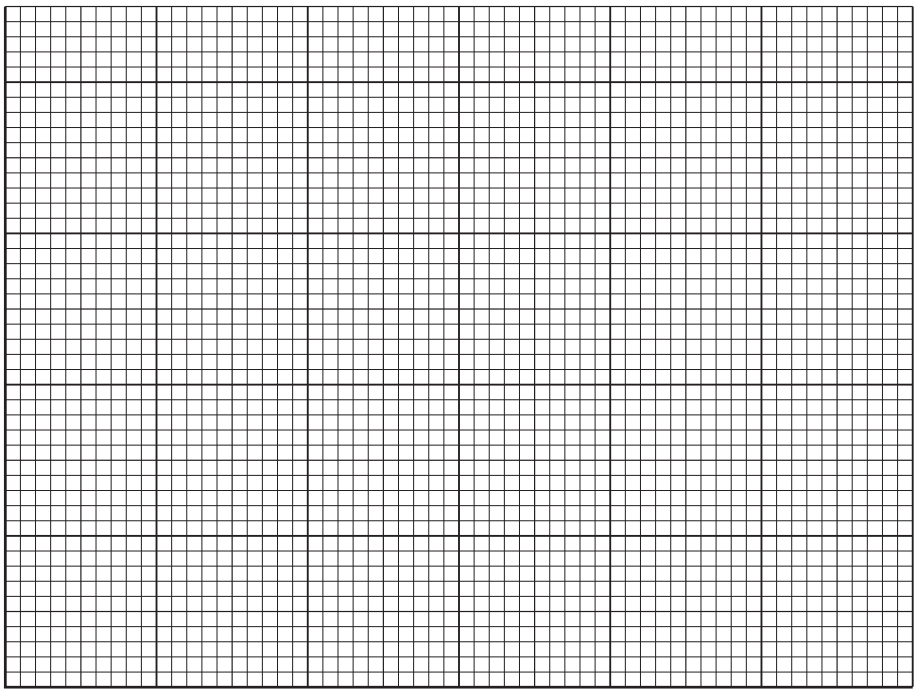
8 Gwyn is conducting a study about obedience to traffic rules. She believes that hot weather makes people angry so they disobey rules. Each day she has recorded the daily temperature and counted the number of speeding offences in her town. Gwyn has categorised the data in Table 8.1 according to temperature.

Table 8.1

Temperature (°C)	19–20	21–22	23–24	25–26	27–28
Number of speeding offences	6	10	9	13	17

(a) Draw a histogram of Gwyn's data. You **must** label the axes.

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[3]

(b) Outline what Gwyn can conclude from her data.

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..... [1]

(c) A colleague says that several situational variables may be important in Gwyn's study and that she should have controlled them.

(i) Explain how **one** situational variable could have affected Gwyn's results.

.....

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..... [2]

(ii) Suggest how Gwyn could have reduced the effect of the situational variable that you referred to in **(c)(i)**.

.....

..... [1]

9 Hazel is conducting an overt, participant observation to identify factors that affect the emotions of residents in a home for elderly people. She is a volunteer at the home, so the residents know her.

(a) Explain **one** practical reason why it is useful that the residents know Hazel.

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..... [2]

(b) **(i)** Explain **one** ethical problem caused by the residents knowing Hazel.

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..... [2]

(ii) Suggest **two** ways that Hazel could overcome the ethical problem that you explained in **(b)(i)**.

1 .....

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2 .....

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..... [4]

Question 10 appears on Page 10.

Section C

Answer **all** questions in this section.

10 Jilpa plans to explore how personalities vary. She thinks that people's personalities can have several characteristics, for example, how serious/playful, talkative/quiet or optimistic/pessimistic they are.

(a) Describe how Jilpa could conduct a study using a structured interview to investigate a range of characteristics in people's personalities.

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..... [10]

(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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..... [4]

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