Cambridge Assessment International Education

Cambridge International AS & A Level

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

1755408271

PSYCHOLOGY **9990/22**

Paper 2 Research Methods **February/March 2021**

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.

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[Turn over

Section A

Answer **all** questions in this section.

1 **(a)** Outline what is meant by a 'questionnaire'.

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..... [2]

(b) Explain **one** advantage of using a questionnaire rather than an interview in research.

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..... [2]

2 Outline what is meant by an 'aim'. Include an example from **one** core study from the cognitive approach in your answer.

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3 The study by Milgram (obedience) used volunteer sampling.

(a) Explain what is meant by 'volunteer sampling', using this study as an example.

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(b) Suggest **two** ways that Milgram could have obtained a volunteer sample with a wider variety of participants.

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2 .....

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..... [4]

4 In the study by Piliavin et al. (subway Samaritans), participant variables may have affected the results.

Explain what is meant by 'participant variables', using this study as an example.

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..... [2]

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5 Dement and Kleitman (sleep and dreams) used a sample of volunteers.

Suggest why this sample may **not** have been representative of sleep and dreams in the general population.

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..... [2]

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

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Section B

Answer **all** questions in this section.

7 Uma has a bird feeder in her garden. When she moved the bird feeder, some species of bird were faster to find it than others. Uma has moved the feeder a second time and is conducting an observational study to investigate which bird species are faster to learn the new location of the bird feeder.

(a) Uma is going to use a structured observation.

Suggest how she could record her data.

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..... [3]

(b) Uma cannot decide how many different bird species to observe.

(i) Suggest **one** reason why it would be better to record a small number of different species.

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(ii) Suggest **one** reason why it would be better to record a large number of different species.

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..... [2]

8 Dr Malt is testing whether a new drug to improve attention in mental health patients is better than an old drug. In her experiment, she is measuring the patients' attention to a stimulus.

(a) Explain what is meant by an 'independent variable', using Dr Malt's study as an example.

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(b) **(i)** Suggest how Dr Malt could operationalise her dependent variable.

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(ii) Explain **one** advantage of operationalising the dependent variable in this way.

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(c) Dr Malt decides she must use deception. She tells the participants in both the 'new drug group' and the 'old drug group' that they are receiving the new drug.

(i) Suggest **one** reason why it is important for Dr Malt to deceive her participants.

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..... [2]

(ii) Suggest **one** reason why it is an ethical problem that Dr Malt is deceiving her participants.

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..... [1]

(iii) Suggest how Dr Malt could reduce the problem you have identified in part **(c)(ii)**.

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..... [1]

9 Zhu is conducting a correlational study in a factory to investigate the relationship between two variables:

- the number of hours an employee works
- how happy that employee is.

(a) Suggest **one** way that Zhu could record the number of hours an employee works.

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..... [2]

(b) Suggest **one** way that Zhu could record how happy each employee is.

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(c) For her sample, Zhu is looking for a factory where there is a variety of jobs for the employees.

Suggest **two** reasons why this is important.

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Section C

Answer **all** questions in this section.

10 Cari thinks that adults wearing brightly coloured clothing are more helpful to children than adults wearing clothing that is not brightly coloured. She is planning a field experiment to investigate which adults are more likely to return a ball to children who have kicked it out of reach.

(a) Describe how Cari could conduct a field experiment to investigate whether adults who wear brightly coloured clothing are more helpful than those who do not.

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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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