

# Cambridge International AS & A Level

| CANDIDATE<br>NAME |  |  |                     |  |  |
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PSYCHOLOGY 9990/22

Paper 2 Research Methods

February/March 2020

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. Blank pages are indicated.

## **Section A**

Answer all questions in this section.

| 1 | Froi | m the study by Piliavin et al. (subway Samaritans):                                  |       |
|---|------|--|-------|
|   | (a)  | Describe how the quantitative data was collected in this study.                      |       |
|   |      |  |       |
|   |      |  |       |
|   |      |  |       |
|   |      |  | . [2] |
|   | (b)  | Suggest one advantage of using quantitative data in this study.                      |       |
|   |      |  |       |
|   |      |  |       |
|   |      |  |       |
|   |      |  | . [-] |
| 2 | Froi | m the study by Canli et al. (brain scans and emotions):                              |       |
|   | Ехр  | lain what is meant by 'generalisability', using <b>two</b> examples from this study. |       |
|   |      |  |       |
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| 3 | In a | n ex | periment with a repeated measures design, there may be a problem with order effects.                        |
|---|------|------|---|
|   | Ехр  | lain | one type of order effect.   |
|   |      |      |   |
|   |      |      |   |
|   |      |      |   |
|   |      |      | [2]   |
| 4 |      |      | udy by Laney et al. (false memory), a comparison was made between a 'love asparagus'<br>nd a control group. |
|   | (a)  | (i)  | Name the experimental design used in this comparison.   |
|   |      |      | [1]   |
|   |      | (ii) | Explain <b>one</b> disadvantage of this design.   |
|   |      |      |   |
|   |      |      |   |
|   |      |      | [2]   |
|   | (b)  | Des  | scribe <b>one</b> ethical problem in this study.  |
|   |      |      |   |
|   |      |      |   |
|   |      |      |   |
|   |      |      | [2]   |

| 0 | and used to allocate children to groups.   |
|---|--|
|   | Explain why this information was needed to allocate the children to groups.                      |
|   |  |
|   |  |
|   | [2   |
| 6 | Describe <b>two</b> different ways that dependent variables can be measured, using any examples. |
|   | 1  |
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|   | [6]  |

## Section B

Answer all questions in this section.

| 7 | peo | ple c | studying Sven, a man who has problems with his memory. He is unable to remember new or facts, even if they are repeated many times. Jenny is collecting data using techniques interviews, questionnaires and observations. |
|---|-----|-------|--|
|   | (a) | (i)   | Name the research method Jenny is using.   |
|   |     |       | [1]  |
|   |     | (ii)  | Explain <b>one</b> advantage of this research method in this study.  |
|   |     |       |  |
|   |     |       | [2]  |
|   | (b) | (i)   | Suggest <b>one</b> open question that Jenny could ask Sven to investigate his memory problems.   |
|   |     |       | [1]  |
|   |     | (ii)  | Suggest <b>one</b> closed question that Jenny could ask Sven to investigate his memory problems.   |
|   |     |       | [1]  |
|   |     | (iii) | Suggest <b>one</b> advantage of asking closed questions.   |
|   |     |       |  |

|   | (c) | One problem for Jenny is that whenever she talks to Sven, he does not recognise her.                |       |
|---|-----|---|-------|
|   |     | Suggest <b>one</b> reason why this is a problem for Jenny's study.                                  |       |
|   |     |   |       |
|   |     |   |       |
|   |     |   |       |
| 8 |     | et is investigating attitudes to healthy eating. She is considering using a questionnaire or rview. | or an |
|   | (a) | Explain what is meant by a 'questionnaire'.   |       |
|   |     |   |       |
|   |     |   | [1]   |
|   | (b) | Explain what is meant by an 'interview'.  |       |
|   |     |   |       |
|   | (c) | Explain <b>one</b> advantage of using questionnaires to investigate healthy eating.                 | [.]   |
|   |     |   |       |
|   |     |   |       |
|   |     |   | [2]   |
|   | (d) | Explain <b>one</b> disadvantage of using questionnaires to investigate healthy eating.              |       |
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|   |     |   | [2]   |

Question 9 appears on the following page

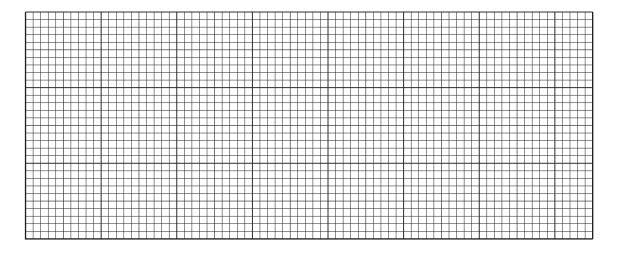
**9** Silas conducted an observational study about discrimination and counted examples of different kinds of discrimination. His data is shown in Table 1.

Table 1

|                     |               | Type of disc    | rimination observed |                     |
|---------------------|---------------|-----------------|---------------------|---------------------|
|                     | Being ignored | Being stared at | Verbal aggression   | Physical aggression |
| Number of instances | 16            | 12              | 6                   | 8                   |

(a) Draw a bar chart of Silas's results.

[4]



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| (b) |      | as was observing in a large playground in a school with the permission of the school and the parents of the children. | ool |
|-----|------|---|-----|
|     | (i)  | Explain whether there could be an issue with privacy in this study.   |     |
|     |      |   |     |
|     |      |   |     |
|     |      |   | [2] |
|     |      |   |     |
|     | (ii) | Explain whether there could be an issue with informed consent in this study.  |     |
|     |      |   |     |
|     |      |   |     |
|     |      |   | [2] |
| (c) | Exp  | plain the feature of Silas's observation that means it is a structured observation.                                   |     |
|     |      |   |     |
|     |      |   |     |
|     |      |   | [2] |

## **Section C**

Answer all questions in this section.

| 10 | beh | rice is studying repetitive behaviours in lessons, such as playing with a pen or doodling. These aviours could be beneficial to concentration or be a distraction. Clarice wants to know whether is a correlation between repetitive behaviours and the understanding of a lesson. |
|----|-----|--|
|    | (a) | Describe how Clarice could conduct a correlational study to test whether there is a relationship between repetitive behaviours and the understanding of a lesson.  |
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|     | [10]   |
|-----|--|
| (b) | Identify <b>one</b> 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 <b>not</b> refer to ethics or sampling in your answer.  |
|     |  |
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|     | [4]  |

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