



Cambridge International AS & A Level

PSYCHOLOGY

9990/42

Paper 4 Specialist Options: Application and Research Methods

February/March 2024

1 hour 30 minutes



You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **five** questions in total:
Answer questions from **two** options.
Section A: answer **four** questions.
Section B: answer **one** question.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

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 **8** pages. Any blank pages are indicated.

Section A

Answer questions from **two** options in this section.

Clinical Psychology

Answer **all** questions if you have studied this option.

- 1 From the key study by Grant et al. (2008) on treating gambling disorder with drugs and placebo:
 - (a) Explain what is meant by a double-blind, placebo-controlled trial as used in this study. [4]
 - (b) Suggest **one** effect if a double-blind trial had **not** been used in this study. [2]
 - (c) Explain **two** strengths of conducting placebo-controlled trials in studies of gambling disorder. [4]

- 2 Generalised anxiety disorder can be assessed using the GAD-7.
 - (a) Outline how answers are scored on the GAD-7 scale. [2]
 - (b) Suggest how the validity of the GAD-7 could be tested. [2]
 - (c) Explain **one** strength and **one** weakness of the GAD-7 scale. [4]

Consumer Psychology

Answer **all** questions if you have studied this option.

- 3 From the key study by North et al. (2003) on musical style and restaurant customers' spending:
 - (a) (i) Outline **two** variables within the restaurant that were controlled, other than the music CDs. [2]
 - (ii) Describe how counterbalancing was used in this study. [2]
 - (b) Suggest **one** effect if counterbalancing had **not** been used in this study. [2]
 - (c) Explain **two** strengths of controlling the music CDs. [4]

- 4 Menu item choice can be affected by both primacy and recency.
 - (a) Explain what is meant by primacy in relation to menu item choice. [2]
 - (b) Suggest **one** feature of a menu that might affect item choice, other than primacy or recency. [2]
 - (c) Explain **one** strength and **one** weakness of conducting a study on menu item choice in a laboratory. [4]

Health Psychology

Answer **all** questions if you have studied this option.

- 5 From the key study by Yokley and Glenwick (1984) on improving medical adherence using community interventions:
- (a) (i) Describe **one** cause of confounding identified by Yokley and Glenwick. [2]
 - (ii) Explain what was done in the study by Yokley and Glenwick to prevent confounding. [2]
 - (b) Suggest **one** strategy for promoting health that could be used to improve medical adherence, other than the strategy used by Yokley and Glenwick. [2]
 - (c) Explain **two** strengths of conducting field experiments to study participation in immunisation interventions in communities. [4]
- 6
- (a) Explain what is meant by 'mirror treatment' for phantom limb pain. [2]
 - (b) Suggest **one** biological/biochemical way in which phantom limb pain can be treated. [2]
 - (c) Explain **two** strengths of mirror treatment for phantom limb pain. [4]

Organisational Psychology

Answer **all** questions if you have studied this option.

- 7 From the key study by Claypoole and Szalma (2019) on electronic performance monitoring:
- (a) Describe how the **two** forms of electronic presence were used in this study. [4]
 - (b) Suggest **one** way in which worker performance could be monitored, other than electronic presence. [2]
 - (c) Explain **one** strength and **one** weakness of conducting a study on electronic performance monitoring, using students as participants. [4]
- 8
- (a) Describe how data was collected in **one** study about the impact of the design of the work environment on people who work in open plan offices (e.g. Oldham and Brass, 1979). [2]
 - (b) Suggest how **one** job characteristic might be affected by a move to a different type of office. [2]
 - (c) Explain **one** strength and **one** weakness of the way that data was collected in the study you described in part (a). [4]

Section B

Answer **one** question from this section.

Clinical Psychology

- 9 (a) Plan a covert observation to investigate the effectiveness of covert sensitisation for treating kleptomania.

Your plan must include details about:

- structured observation or unstructured observation
- steps for making the study reliable. [10]

- (b) For **one** piece of psychological knowledge on which your plan is based:

(i) Describe this psychological knowledge. [4]

(ii) Explain how you used **two** features of this psychological knowledge to plan your study. [4]

- (c) (i) Explain **one** reason for your choice of structured observation or unstructured observation. [2]

(ii) Explain **one** strength of using covert observation in your study. [2]

(iii) Explain **one** reason for your choice of steps for making the study reliable. [2]

Consumer Psychology

- 10 Wayfinding is affected by factors such as signs and 'you are here' maps.

- (a) Plan a study using a questionnaire to investigate whether the use of signs is more effective than 'you are here' maps when wayfinding in a shopping mall.

Your plan must include details about:

- sampling technique
- question format. [10]

- (b) For **one** piece of psychological knowledge on which your plan is based:

(i) Describe this psychological knowledge. [4]

(ii) Explain how you used **two** features of this psychological knowledge to plan your study. [4]

- (c) (i) Explain **one** reason for your choice of sampling technique. [2]

(ii) Explain **one** weakness of your choice of sampling technique. [2]

(iii) Explain **one** reason for your choice of question format. [2]

Health Psychology

- 11 (a) Plan a field experiment to investigate which psychological treatment is the **most** effective for managing pain.

Your plan must include details about:

- experimental design
- directional or non-directional hypothesis. [10]

- (b) For **one** piece of psychological knowledge on which your plan is based:

(i) Describe this psychological knowledge. [4]

(ii) Explain how you used **two** features of this psychological knowledge to plan your experiment. [4]

- (c) (i) Explain **one** reason for your choice of experimental design. [2]

(ii) Explain **one** weakness of your choice of experimental design. [2]

(iii) Explain **one** reason for your choice of directional or non-directional hypothesis. [2]

Organisational Psychology

- 12 Within each 24-hour period, workers in different offices have different work patterns: workers in Office A work 8 hours (9 am–5 pm); workers in Office B work 8 hours flexitime.

- (a) Plan a study using an interview to investigate which work pattern gives workers more job satisfaction.

Your plan must include details about:

- interview technique
- question scoring/interpretation. [10]

- (b) For **one** piece of psychological knowledge on which your plan is based:

(i) Describe this psychological knowledge. [4]

(ii) Explain how you used **two** features of this psychological knowledge to plan your study. [4]

- (c) (i) Explain **one** reason for your choice of interview technique. [2]

(ii) Explain **one** weakness of your choice of interview technique. [2]

(iii) Explain **one** reason for your choice of question scoring/interpretation. [2]

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of Cambridge Assessment. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which is a department of the University of Cambridge.