



# Cambridge International AS & A Level

**PSYCHOLOGY**

**9990/42**

Paper 4 Specialist Options: Application and Research Methods

**May/June 2025**

**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 In the key study by Freeman et al. (2003) using virtual reality (VR) to investigate persecutory ideation, comments were made by the participants about the avatars.
  - (a) Give **one** positive and **one** negative comment made by the participants about the avatars. [4]
  - (b) Suggest how the comments about avatars could be analysed. [2]
  - (c) Explain **one** strength and **one** weakness of collecting qualitative data in this study. [4]
  
- 2 Obsessive-compulsive disorder (OCD) can be measured using psychometric tests such as the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS).
  - (a) Outline the scale used to assess question items on the Y-BOCS. [2]
  - (b) Suggest **one** way that the reliability of the Y-BOCS could be tested. [2]
  - (c) Explain **one** strength and **one** weakness of using psychometric tests to measure OCD. [4]

### Consumer Psychology

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

- 3 The key study by North et al. (2003) expected participants to spend more money in the classical music condition than in the pop music condition.
  - (a) (i) State what was found about total spend across the three conditions of the independent variable. [2]
  - (ii) State what was found about spending on wine. [2]
  - (b) Suggest **one** way the effect of classical music on behaviour in a restaurant could be investigated, other than by spending money. [2]
  - (c) Give **two** reasons why generalisations **cannot** be made about musical style and restaurant customers' spending from one study. [4]
  
- 4
  - (a) Explain what is meant by the term 'wayfinding' when in a shopping mall. [2]
  - (b) Suggest how wayfinding could be investigated, other than in a shopping mall. [2]
  - (c) Explain **two** strengths of conducting research on wayfinding in shopping malls. [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) Outline **two** dependent variables (dependent measures) recorded by Yokley and Glenwick. [4]
  - (b) Suggest **one** way that parents could receive information about the importance of inoculations for their children, other than by post or telephone. [2]
  - (c) Explain **two** strengths of gathering objective data on inoculation adherence. [4]
- 6
- (a) Outline what is meant by a visual analogue scale to measure pain. [2]
  - (b) Suggest **one** way the validity of a visual analogue scale could be tested. [2]
  - (c) Explain **two** strengths of using a visual analogue scale to measure acute 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) (i) Outline **two** features of the sample used in this study. [2]
  - (ii) Outline how participants were recruited for this study. [2]
  - (b) Suggest the effect that an alternative location could have had on the results of this study. [2]
  - (c) Explain **two** strengths of the use of random allocation in this study. [4]
- 8
- (a) Outline what is meant by the term 'social loafing', using an example from any organisation. [2]
  - (b) Suggest **one** way that social loafing can be reduced in a meeting in an organisation. [2]
  - (c) Explain **two** strengths of studying social loafing in a work environment. [4]

## Section B

Answer **one** question from this section.

### Clinical Psychology

- 9 (a) Plan a study using an observation to investigate which type of compulsion is **most** common in people diagnosed with obsessive-compulsive disorder (OCD).

Your plan must include details about:

- structured observation or unstructured observation
- type(s) of data. [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** weakness of your choice of structured observation or unstructured observation. [2]

- (iii) Explain **one** reason for your choice of type(s) of data. [2]

### Consumer Psychology

- 10 (a) Plan a study using an interview to investigate the effect of background noise on the taste of food eaten at an outdoor market.

Your plan must include details about:

- interview format
- sampling technique. [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 format. [2]

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

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

**Health Psychology**

- 11 (a)** Plan a study using an online questionnaire to investigate differences between adult males and adult females in rational non-adherence to medical advice.

Your plan must include details about:

- closed questions
- sampling technique.

[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 closed questions. [2]

**(ii)** Explain **one** weakness of your choice of closed questions. [2]

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

**Organisational Psychology**

- 12 (a)** Plan an experiment to investigate the effectiveness of a reward system to reduce the number of accidents in a factory where clothes are made.

Your plan must include details about:

- experimental design
- type of experiment.

[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 type of experiment. [2]





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