



# Cambridge International AS & A Level

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## PSYCHOLOGY

9990/41

Paper 4 Specialist Options: Application and Research Methods

October/November 2025

1 hour 30 minutes



You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

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### 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 [ ].

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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 The key study by Grant et al. (2008) treated gambling disorder in one of two double-blind placebo-controlled trials, in a university and treatment centres.
  - (a) (i) Identify the drug used in each trial. [2]
  - (ii) State the duration of each trial. [2]
  - (b) Suggest why placebo-controlled trials were used in this study. [2]
  - (c) Explain **one** strength and **one** weakness of using multiple locations within this study. [4]
- 2
  - (a) Outline **one** case study of schizophrenia. [2]
  - (b) Suggest why the data gathered from a person with schizophrenia might **not** be reliable. [2]
  - (c) Explain **two** strengths of using case studies to collect data on schizophrenia. [4]

### Consumer Psychology

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

- 3 From the key study by Becker et al. (2011) on food package design, a pre-test on packaging shape was conducted.
  - (a) Describe the procedure of the pre-test on packaging shape. [4]
  - (b) Suggest **one** effect on the results if the pre-test had **not** been conducted. [2]
  - (c) Explain **one** strength and **one** weakness of conducting studies on packaging shape for food in the entrance hall of a supermarket. [4]
- 4
  - (a) Explain what is meant by the term 'retail atmospherics'. [2]
  - (b) Suggest the effect **one** retail atmospheric might have on shopper ambience. [2]
  - (c) Explain **two** strengths of studying retail atmospherics for the seller (retailer). [4]

### Health Psychology

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

- 5 The key study by Bridge et al. (1988) on reducing stress during medical treatment divided the female participants into two experimental groups and one control group.
- (a) (i) Outline the procedure followed by the 'relaxation plus imagery' experimental group. [2]
  - (ii) Outline the experimental design that was used in this study. [2]
  - (b) Suggest **one** problem if a different experimental design was used in this study, other than the one you outlined in part (a)(ii). [2]
  - (c) Explain **one** strength and **one** weakness of using a sample of female participants in studies on reducing stress. [4]
- 6 (a) Outline the methodology used in **one** study on improving adherence in children (e.g. Chaney et al. 2004). [2]
- (b) Suggest **one** ethical guideline that applies to the children in the study you outlined in part (a). [2]
- (c) Explain **two** weaknesses of using parents/guardians to collect data about improving the adherence of children in their care. Do **not** refer to ethics in your answer. [4]

### Organisational Psychology

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

- 7 From the key study by Cuadrado et al. (2008) on women's access to managerial positions:
- (a) (i) State **two** features of the sample of participants used in this study. [2]
  - (ii) Outline what each participant was asked to do after reading the narrative (the description of the supervisor's behaviour). [2]
  - (b) Suggest why Cuadrado et al. used four different versions of the same narrative. [2]
  - (c) Explain **two** strengths of using an experiment to investigate women's access to managerial positions in this study. [4]
- 8 Walton's quality of working life (QWL) has an evaluation scale with eight conditions, including a fair and appropriate salary.
- (a) State **two** question items from the scale that relate to a fair and appropriate salary. [2]
  - (b) Suggest how the reliability of the QWL evaluation scale could be tested. [2]
  - (c) Explain **two** weaknesses of the question items from the QWL evaluation scale. [4]

## Section B

Answer **one** question from this section.

### Clinical Psychology

- 9 (a) Plan a study using a structured observation to investigate the effectiveness of imaginal desensitisation for treating gambling disorder.

Your plan must include details about:

- naturalistic or controlled 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 naturalistic observation or controlled observation. [2]

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

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

### Consumer Psychology

- 10 (a) Plan a field experiment to investigate the effect on spending when playing classical music in different types of restaurant.

Your plan must include details about:

- controls
- a 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 controls. [2]

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

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

### Health Psychology

- 11 (a) Plan an experiment to investigate the effectiveness of biofeedback to manage stress in university students.

Your plan must include details about:

- experimental design
- dependent variable. [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 dependent variable. [2]

### Organisational Psychology

- 12 (a) Plan a study using a questionnaire to investigate levels of job satisfaction following a job enlargement.

Your plan must include details about:

- questionnaire 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 questionnaire technique. [2]

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

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

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