



Cambridge International AS & A Level

PSYCHOLOGY

9990/04

Paper 4 Specialist Options: Application and Research Methods

For examination from 2024

SPECIMEN PAPER

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 **10** 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 Freeman et al. (2003) on virtual reality and persecutory ideation:
- (a) (i)** Explain the sampling technique that was used to recruit participants in this study. [2]
 - (ii)** Explain **one** reason why Freeman et al. did **not** use participants with a history of mental illness. [2]
 - (b)** Suggest how **one** sampling technique could have been used to recruit participants for this study, other than the technique used by Freeman et al. [2]
 - (c)** Explain **one** strength and **one** weakness of using students as participants in research using virtual reality. [4]
- 2** Case studies are often used to study fear-related disorders such as phobias.
- (a)** Outline the psychodynamic explanation of phobias. [2]
 - (b)** Suggest how the psychodynamic explanation can explain why individuals differ in the development of phobias. [2]
 - (c)** Explain **one** strength and **one** weakness of using case studies to study phobias. [4]

Consumer Psychology

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

- 3** The key study by Robson et al. (2011) presented photographs of tables and seating (chair and banquette) in which tables were placed at different distances from each other.
- (a) (i) Describe the banquette seating as used in this study. [2]
- (ii) Explain why table spacing distances of 6 and 24 inches were chosen by Robson et al. [2]
- (b) Suggest **one** ethical issue that could apply if photographs of people sitting at tables had been used rather than photographs of empty tables and seating. [2]
- (c) Explain **two** advantages for a restaurant which uses banquette seating for customers, rather than individual chairs. [4]
- 4** Research on menu design sometimes involves tracking eye movement patterns when a customer scans a menu.
- (a) Describe **one** finding from research on eye movement patterns that shows how customers scan menus. [2]
- (b) Suggest **one** way in which menu design can be studied, other than by tracking eye movement patterns. [2]
- (c) Explain **two** strengths of using eye movement patterns to study menu design. [4]

Health Psychology

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

- 5** From the key study by Yokley and Glenwick (1984) on community interventions:
- (a) Outline **two** of the experimental conditions used in the study. [4]
 - (b) Suggest why Yokley and Glenwick included two control conditions in their study. [2]
 - (c) Explain **two** weaknesses of conducting field experiments to study participation in immunisation interventions in communities. [4]
- 6** The UAB pain behaviour scale can be used with patients in hospital. It uses repeated observations to measure changing levels of pain.
- (a) Describe how this scale is used with a patient in hospital. [2]
 - (b) Suggest why it is important to use repeated observations to measure changing levels of pain. [2]
 - (c) Explain **one** strength and **one** weakness of using this scale to measure pain behaviour. [4]

Organisational Psychology

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

- 7 From the key study by Giacalone and Rosenfeld (1987) on sabotage in the workplace:
- (a) Describe **two** ways in which ethical guidelines were followed in this study when presenting the questionnaires to workers. [4]
 - (b) Suggest **one** reason why workers in this study would **not** want their managers to see their answers. [2]
 - (c) Give **two** reasons why unethical studies on workers in organisations should **not** be conducted. [4]
- 8 McClelland proposed a theory of achievement motivation.
- (a) Outline **one** of the needs proposed by McClelland. [2]
 - (b) The needs proposed by McClelland's theory are individual needs.
Suggest why situational factors are also essential to the achievement of the need that you outlined in part (a). [2]
 - (c) Explain **two** ways in which this theory is limited in its application. [4]

Section B

Answer **one** question from this section.

Clinical Psychology

- 9** Schizophrenia can be treated biochemically with drugs, such as antipsychotics, but they are not always effective.
- (a)** Plan an experiment to investigate the effectiveness of antipsychotic drugs to treat schizophrenia.
- Your plan must include details about:
- sampling technique
 - 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)** State **two** reasons for your choice of sampling technique. [2]
- (ii)** Explain **one** strength of your choice of sampling technique. [2]
- (iii)** Explain **one** reason for your choice of directional or non-directional hypothesis. [2]

Consumer Psychology

10 A pleasant odour, such as the smell of flowers, could be the most important retail atmospheric to influence the behaviour of consumers. However, some people do not like the smell of flowers, instead preferring the smell of fruit.

(a) Plan an experiment to investigate the influence of different odours in a retail environment on the behaviour of consumers.

Your plan must include details about:

- sampling technique
- 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) State **two** reasons 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 directional or non-directional hypothesis. [2]

Health Psychology

- 11 (a)** Plan a study using an interview to investigate age differences in rational non-adherence to medical requests.

Your plan must include details about:

- sampling technique
- interview 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) State **two** reasons for your choice of sampling technique. [2]

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

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

Organisational Psychology

12 Workers are absent from the workplace for different reasons. It would be useful for management to know the main reason for absenteeism.

(a) Plan a study using a questionnaire to find the main reason for absenteeism among workers in a workplace.

Your plan must include details about:

- question 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) State **two** reasons for your choice of question format. [2]

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

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

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