

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

Cambridge International Advanced Subsidiary and Advanced Level

**MARK SCHEME for the May/June 2015 series**

**9698 PSYCHOLOGY**

**9698/23**

Paper 2 (Core Studies 2), maximum raw mark 70

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2015 series for most Cambridge IGCSE<sup>®</sup>, Cambridge International A and AS Level components and some Cambridge O Level components.

® IGCSE is the registered trademark of Cambridge International Examinations.

Page 2	Mark Scheme	Syllabus	Paper
	Cambridge International AS/A Level – May/June 2015	9698	23

### Section A

**1 Schachter and Singer (emotion) conducted a laboratory experiment to investigate the two-factor theory of emotion. An alternative way to collect data would be to use a field experiment.**

**(a) Describe different types of data collected in experiments. [5]**

Any five correct points

1 mark for each point up to a maximum of five points.

No answer or incorrect answer, 0

If only one type of data is described give a maximum of 3 marks.

Maximum of 2 marks awarded for identification of type of data (e.g. quantitative, qualitative, etc would be awarded 2 marks)

Indicative content:

Quantitative data

Numerical data

Can be obtained from closed questions, rating scales, behavioural checklists, etc.

Qualitative data

Descriptive data

Can be obtained from open questions, observations of behaviour.

Any other appropriate point

**(b) Design an alternative investigation using a field experiment to investigate the two-factor theory of emotion and describe how it could be used. [10]**

Candidates should describe the who, what, where and how.

Major omissions include the what and how. Candidates must describe how the DV is collected. They must also indicate that it is in a natural environment.

Minor omissions include who and where (plus the what and/or how if unclear can also count as a minor omission).

It is possible to achieve 9 marks with a small minor omission (e.g. sampling method).

Very unethical research must be capped at 4.

If not investigating two factor theory of emotion cap at 2. If unclear, cap at 4.

Alternative study is incomprehensible.	0
Alternative study is muddled and impossible to conduct.	1–2
Alternative study is muddled but possible.	3–4
Alternative study is clear with a few minor omissions.	5–6
Alternative study is described with one minor omission and in some detail.	7–8
Alternative study is described in sufficient detail to be replicable.	9–10

Page 3	Mark Scheme	Syllabus	Paper
	Cambridge International AS/A Level – May/June 2015	9698	23

- (c) Evaluate this alternative way of studying the two-factor theory of emotion in methodological and practical terms. [10]

Indicative content:

Candidates need to consider a number of points regarding their study. These points can be both positive and/or negative.

Appropriate points could include a discussion about

Difficulty in accessing a large sample of participants

Lack of generalisability

Could be unethical if situation is upsetting to participants (e.g. giving adrenaline without the person's knowledge)

May have to deceive participants/not get informed consent depending on nature of study

Social desirability/demand characteristics

Validity of data collection technique

Reliability of data collection technique

Ecological validity

Any other appropriate point

In order to achieve higher marks (5+) the candidate must link their points to their investigation described in part (b).

To be considered specific to the investigation the response must be in context for a minimum of **two** separate points.

No evaluation.	0
Evaluation is muddled and weak.	1–2
Evaluation is simplistic and/or not specific to the investigation. May include one point that is brief and specific to the investigation.	3–4
Evaluation is simplistic but specific to the investigation (may include general evaluation). May include one very detailed point.	5–6
Evaluation is good and specific to the investigation. Two or more points.	7–8
Evaluation is detailed and directly relevant to the investigation. Two or more points.	9–10

Page 4	Mark Scheme	Syllabus	Paper
	Cambridge International AS/A Level – May/June 2015	9698	23

**2 Haney, Banks and Zimbardo conducted a simulation study to investigate social roles in a mock prison.**

**(a) What is meant by the term ‘ethical guideline’?** [2]

1 mark partial / 2 marks full

An ethical guideline is what is in place to protect participants in a psychology experiment – 1 mark.

An ethical guideline is what is in place to protect participants in a psychology experiment such as protection from harm and distress. – 2 marks.

**(b) Describe how one ethical guideline was followed in this study.** [3]

1–2 marks partial

3 marks full

Examples

Possible response:

Participants were debriefed. – 1 mark

Participants were debriefed at the end of the study where they met other participants and staff. – 2 marks

Participants were debriefed at the end of the study. They met on three occasions other participants and staff where they could openly express their reactions and strong feelings about the study. – 3 marks.

Other possible responses could refer to:

Psychological harm – the study was ended after 6 days rather than continuing for 14.

Follow ups done over a year after the study to reveal negative effects of the study.

Ethical approval was given by Stanford University and financed by the Navy.

Some participants did leave.

Not all were psychologically harmed.

Consent forms were signed.

Page 5	Mark Scheme	Syllabus	Paper
	Cambridge International AS/A Level – May/June 2015	9698	23

- (c) Discuss the strengths and weaknesses of research that breaks ethical guidelines using the Haney, Banks and Zimbardo study as an example. [10]

Appropriate strengths and weaknesses will be varied. These could include:

**Weaknesses**

Participants will find the experience upsetting  
 Will give Psychology a bad reputation  
 In the future, people will not want to participate in psychological research  
 Studies may not get funding easily

**Strengths**

May be realistic if no deception/harm caused  
 May avoid demand characteristics/social desirability as participants do not know they are in a study  
 May be able to study anti-social behaviour as participants will be placed into uncomfortable situations  
 Research may be more useful as the studies will be more realistic (and therefore more upsetting)

Any other appropriate point

No comment on the strengths and weaknesses of unethical research.	0
Comment given but muddled and weak.	1–2
Consideration of at least a strength and a weakness not specific to investigation OR Consideration of either a strength/weakness that is specific to unethical research and investigation.	3–4
Consideration of two or more points (at least one strength and one weakness) which are clear and specific to investigation.	5–6
Consideration of at least two strengths and two weaknesses which are clear and specific to investigation.	7–8
Consideration of at least two strengths and two weaknesses which are good and directly relevant to the investigation.	9–10

Page 6	Mark Scheme	Syllabus	Paper
	Cambridge International AS/A Level – May/June 2015	9698	23

(d) Discuss the extent to which the study by Haney, Banks and Zimbardo is deterministic. [10]

Candidates may discuss findings/features of the study by Haney, Banks and Zimbardo that are general and not specific to determinism. Give a maximum of 2 marks to these candidates.

Appropriate comments could include linking determinism to:

Supporting determinism:

Participants start off behaving 'normally' and rapidly change into role appropriate behaviour within 24 hours of the start of the study.

Examples of role appropriate behaviour.

Role appropriate behaviour becomes more extreme as the study continues.

Zimbardo acts as the prison warden and also falls into his role.

Against determinism:

Individual differences of participants (some got into their roles less than others).

It was just acting.

Candidates can just argue one side of the debate and still achieve full marks so long as they make 2+ points.

Any other appropriate comment

No comment on determinism.	0
Comment on determinism which is muddled and weak.	1–2
Comment on determinism which is not specific to the investigation OR consideration of determinism which is simplistic but specific to investigation.	3–4
Consideration of determinism which is simplistic but specific to investigation and somewhat detailed. This could include one point. OR Consideration of determinism which is detailed but not specific to investigation.	5–6
Consideration of determinism is good but brief (2 or more points) and specific to investigation. OR Consideration of determinism with one issue which is detailed and directly relevant to the investigation and the other issue(s) is more simplistic.	7–8
Consideration of determinism (2 or more points) which is detailed and directly relevant to the investigation.	9–10

Page 7	Mark Scheme	Syllabus	Paper
	Cambridge International AS/A Level – May/June 2015	9698	23

### Section B

3 (a) Outline what is meant by the ‘individual differences approach’ in psychology. [2]

1 mark partial  
2 marks full

This means where differences between people are identified – 1 mark.  
This means where psychological differences between people are explored. This shows how all of us are unique in terms of our personality and our behaviour. – 2 marks.  
Appropriate responses could also include assumptions of the individual differences approach.

Using the studies from the list below, answer the questions which follow:

**Veale and Riley (mirror gazing)**  
**Billington et al. (empathising and systemising)**  
**Thigpen and Cleckley (multiple personality disorder)**

(b) Describe the behaviour that was investigated in each of these studies. [9]

Indicative content: Most likely answers (any appropriate answer receives credit):

**Veale and Riley:** Investigated BDD. Investigated beliefs and behaviours in front of the mirror e.g. types of surfaces used, gazing time, thoughts during gazing, etc.

**Billington et al.:** Measured cognitive style – empathising and systemising in the participants. Also related this to subject choice at university.

**Thigpen and Cleckley:** Investigated multiple personality disorder. They observed and tested Eve. They looked at her handwriting, behaviour in sessions, EEG, scores on intelligence test, Rorschach ink blot test, etc.

Accept answers that refer to the behaviour investigated and/or how the behaviour was investigated.

For each study:	
No answer or incorrect answer.	0
Identification of point relevant to question but not related to study or comment from study but no point about behaviour investigated from the study. The description may be very brief or muddled.	1
Description of point about behaviour investigated from the study. (Comment with lack of understanding). A clear description that may lack some detail.	2
As above but with analysis (comment with comprehension) about behaviour investigated from the study. A clear description that is in sufficient detail.	3
Max mark	9

<b>Page 8</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge International AS/A Level – May/June 2015</b>	<b>9698</b>	<b>23</b>

**(c) What problems may psychologists have when they investigate individual differences?**  
**[9]**

Emphasis on problem. Answers supported with named (or other) studies. Each problem does not need a different study; can use same study.

Indicative content:

- Often unethical as participants are vulnerable (e.g. have mental health problems)
- May have to ask quite intrusive questions
- Demand characteristics
- Social desirability
- Difficult to make studies ecologically valid
- Validity of measures used to collect data
- Difficult to make general conclusions about human behaviour
- Study lacks generalisability

Or any other relevant problem

Marks per point up to a MAXIMUM of three points.	
No answer or incorrect answer.	0
Identification of problem.	1
Description of problem related to individual differences OR a weak description of a problem related to individual differences and applied to a study.	2
Description of problem related to individual differences and applied to the study effectively.	3
Max mark	9



Page 9	Mark Scheme	Syllabus	Paper
	Cambridge International AS/A Level – May/June 2015	9698	23

4 (a) Outline what is meant by the term ‘quantitative data’. [2]

1 mark partial / 2 marks full

Example answer

Numerical data – 1 mark

Numerical data/numbers where comparisons can be made – 2 marks

Using the studies from the list below, answer the questions which follow:

**Bandura et al. (aggression)**

**Dement and Kleitman (sleep and dreaming)**

**Mann et al. (lying)**

(b) Describe how the quantitative data were collected in each of these studies. [9]

**Bandura et al.:** Observations were made of the children behind a one-way mirror. Children were judged by two observers who used time sampling. Three measures of imitation were obtained – imitation of physical aggression, imitative verbal aggression and imitative nonaggressive verbal response on a tally chart.

**Dement and Kleitman:** Participants were woken with a door bell and asked if they were dreaming (yes or no), how long the dream lasted (5 or 15 minutes). Responses were recorded into a tape recorder. Quantitative data was also taken from the EEG and EOG machines.

**Mann et al.:** Observers looked at the behaviour of 16 suspects in their police interviews. Truthful and deceptive behaviour was tallied. Observers noted down 8 behaviours such as blinking, head movements, etc.

For each study:	
No answer or incorrect answer.	0
Identification of point relevant to question but not related to study or comment from study but no point about quantitative data from the study. The description may be very brief or muddled.	1
Description of point about quantitative data from the study. (Comment with lack of understanding). A clear description that may lack some detail.	2
As above but with analysis (comment with comprehension) about quantitative data from the study. A clear description that is in sufficient detail.	3
Max mark	9

<b>Page 10</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge International AS/A Level – May/June 2015</b>	<b>9698</b>	<b>23</b>

**(c) What advantages may psychologists have when they collect quantitative data? [9]**

Emphasis on advantage. Answers supported with named (or other) studies. Each advantage does not need a different study; can use same study.

Indicative content:

Easy to compare groups of participants.  
 Easy to apply statistical tests to the data.  
 Sometimes easier to interpret  
 Easy to summarise results  
 Sometimes faster for the participants to do the study.

Or any other relevant advantage

Marks per point up to a MAXIMUM of three points.	
No answer or incorrect answer.	0
Identification of advantage.	1
Description of advantage related to quantitative data OR a weak description of an advantage related to quantitative data and applied to a study.	2
Description of advantage related to quantitative data and applied to the study effectively.	3
Max mark	9