CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International Advanced Subsidiary and Advanced Level

MARK SCHEME for the October/November 2015 series

9698 PSYCHOLOGY

9698/21 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.

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Section A

1 Dement and Kleitman (sleeping and dreaming) carried out a laboratory experiment to investigate the relationship between REM sleep and dreaming. An alternative way to investigate dreaming would be to carry out a case study.

(a) Describe the case study as a research method. [5]

Any five correct points
1 mark for each point up to a maximum of five points
No answer or incorrect answer, 0

Indicative content:

Involves a few participants.
Participants are often 'special' in some way.
Lots of detailed data.
Often takes place over a long period of time.
Often looks at development of the individual or small group.
Researchers can build a relationship with the participant.
May be in context of research/therapy.
An example is acceptable but will only be given a maximum of one mark.

(b) Design an alternative way to investigate REM and dreaming using the case study method and describe how it could be conducted. [10]

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

Major omissions include the who, what and how. Candidates must describe the sleeping behaviour being measured (e.g. memory of dreams). Some details must be given of who the participant(s) is in the study to indicate it is a case study and how the data is collected from the participant (e.g. through a diary, questionnaire, etc.)

Minor omissions include further details of who, where and unclear details of what and how (e.g. equipment used).

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

Unethical research is capped at 4 marks.
Not clearly a case study is capped at 4 marks.

Alternative study is incomprehensible.	0
Alternative study is muddled and impossible to conduct.	1–2
Alternative study is muddled and/or major omissions but possible.	3–4
Alternative study is clear with a few minor omissions and possible.	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

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(c) Evaluate this alternative way of studying REM and dreaming in methodological and practical terms. [10]

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 controlling participants in a more natural environment (if this is what the candidate decides to do).
Difficulty to get participants who wish to take part for a long period of time.
Disrupted sleep (ethical and/or validity issues)
Lack of generalisability
Difficulty in doing study in a home environment (if this is what the candidate decides to do)
Lack of reliability.
Social desirability

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

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

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2 Tajfel conducted a study to investigate intergroup categorisation.

(a) 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.

(b) Describe <u>one</u> quantitative finding from the study. [3]

1–2 marks partial
3 marks full

Examples

Possible response:
More points given to same group – 1 mark
More points were allocated to the same group using the matrices – 2 marks
More points were allocated to the same group using the matrices. For example, a boy that was an underestimator would award more points to the underestimators. – 3 marks

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(c) Discuss the strengths and weaknesses of collecting quantitative data using the Tajfel study as an example. [10]

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

Weaknesses

Lacks detail
Data is less useful due to this lack of detail
Can lack validity

Strengths

Can compare groups of participants more easily.
Can do statistical tests using numerical data.
Easier to summarise data.
Often the testing is more reliable and standardised.
Not bias/objective data.

Any other appropriate point.

No comment on the strengths and weaknesses of quantitative data.	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 quantitative data 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

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(d) Discuss the extent to which the findings of Tajfel's study can be applied to everyday life. [10]

Candidates may discuss how the findings of the study by Tajfel are useful and to who without discussing the extent to which the findings are useful. Give a maximum of 4 marks to these candidates.

Appropriate comments could include linking usefulness to:

Sample used is unrepresentative as all males, from Bristol, young, etc.
Limited data collection as all quantitative so lacks depth
Demand characteristics could be present
Boys may just be being competitive
Data lacks validity
Reliable study so can check accuracy of findings

Any other appropriate comment.

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

Section B

3 (a) Outline what is meant by the term 'reductionism' in psychology. [2]

1 mark partial, 2 marks full

An approach to understanding the nature of complex things by reducing them to the interactions of their parts, or to simpler or more fundamental things.

Reductionism is the argument that we can explain behaviour and experiences by reference to only one factor, such as physiology or learning.

Indicative content:
Only uses one thing. – 1 mark
Basic ideas – 1 mark
Simple ideas – 1 mark
Reductionism is an overly simplistic explanation of behaviour. – 2 marks

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

Baron-Cohen et al. (eyes test)
Bandura et al. (aggression)
Maguire et al. (taxi drivers)

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

Indicative content: Most likely answers (any appropriate answer receives credit). It can be either an issue that was addressed or not in the study:

Baron-Cohen et al.: Participants were shown 36 sets of eyes. They had 4 words to choose from and definitions were given of the words. The autistic/AS participants were also asked to state the gender of each set of eyes. 3 of the 4 groups were matched using an IQ test prior to the study. Participants in 3 of the 4 groups were given the AQ. (Must have eyes test in depth and one other for full marks).

Bandura et al.: Data collected through a one way mirror. Children observed by two observers for imitative and non-imitative behaviour. They were observed in five second intervals. Qualitative data in the form of some comments from the children. Allow – pre-study rating of the children on a five point scale for aggressiveness.

Maguire et al.: Participants are given radioactive glucose which is read by a PET scanner. They are asked to describe four different (routes, film plots, famous landmarks and film frames) and the PET scanner records the activity in different parts of the brain. Maguire was particularly interested in the activity of the hippocampus. (Need to mention that activity is measured in the hippocampus for full marks.)

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 data collection from the study. The description may be very brief or muddled.	1
Description of point about data collection 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 data collection from the study. A clear description that is in sufficient detail.	3
Max mark	9

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(c) What problems may psychologists have when they carry out reductionist research? [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:

May lack ecological validity
DV in study may not be valid as too simplistic
A complete picture of behaviour not given
Conclusions are not useful as too simplistic

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 reductionist research OR a weak description of a problem related to reductionist research and applied to a study.	2
Description of problem related to reductionist research and applied to the study effectively.	3
Max mark	9

4 (a) Outline what is meant by the 'cognitive approach' in psychology. [2]

1 mark partial, 2 marks full

The cognitive approach is the study of thinking. – 1 mark
The cognitive approach is about understanding thinking processes/information processing. – 2 marks

Answers which describe the different types of cognitive processes investigated (e.g. language, memory, perception) are also creditworthy.

Appropriate answers could include assumptions of the cognitive approach.

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

Loftus and Pickrell (false memories)
Held and Hein (kitten carousel)
Mann et al. (lying)

(b) Describe the cognitive processes investigated in each of these studies. [9]

Loftus and Pickrell: Investigated the formation of false memories. Investigated how these memories are formed and the confidence that the participants feel that these memories are real.

Held and Hein: Investigated the visual perception of kittens. The study looked at how perception develops from birth and the impact of experience on these skills. It investigated the effect of self-generated movement on visually guided behaviour.

Mann et al.: Investigated deceptive behaviour. The focus of this study was to show a link between lying and body language.

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 cognitive processes from the study. The description may be very brief or muddled.	1
Description of point about cognitive processes 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 cognitive processes from the study. A clear description that is in sufficient detail.	3
Max mark	9

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(c) What advantages may psychologists have when they investigate cognitive processes? [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:

Can be ethical if just asking participants to do simple cognitive tasks.
Usefulness of research.
Studies often take place in the laboratory which are high in control.
Studies are often experiments which show cause and effect.
Results/conclusions can be reductionist which are easy to understand and put into practice.

Any other appropriate 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 investigating cognitive processes OR a weak description of an advantage related to investigating cognitive processes and applied to a study.	2
Description of advantage related to investigating cognitive processes and applied to the study effectively.	3
Max mark	9

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