CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the October/November 2013 series

9698 PSYCHOLOGY

9698/22 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 October/November 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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Section A

1 Billington et al (empathising and systemising) conducted a snapshot self report study to investigate cognitive style and entry into physical sciences and humanities. An alternative way to investigate this would be to conduct a longitudinal study of children and their eventual choice of subject at university.

(a) Outline the snapshot method and describe how it was used in Billington et al's study. [5]

Any five correct points
Give 1 mark for snapshot and up to 4 marks for applying it to Billington. Candidates can also be awarded 2 marks for snapshot and 3 marks for applying it to Billington.
1 mark for each point up to a maximum of five points
No answer or incorrect answer, 0.

Indicative content

This is a study that takes place over a short period of time.

Participants were asked to complete two questionnaires and two performance tasks online. The SQ-R has 75 items and the EQ has 40 items. This would take a short period of time.
The embedded figures task had 12 pairs of diagrams for participants to work through. The eyes task had four choices for each set of eyes and participants chose one. This would not take long for the participants to complete.

(b) Design an alternative study to the Billington et al study using the longitudinal method and describe how it could be conducted. [10]

Candidates should describe the who, what, when (time scale), where and how.

Major omissions include the what, some indication of time scale and how. Candidates must describe how the data is collected. Candidates need to indicate something about the length of the study. They also need to outline how the data is collected (e.g. questionnaires/ interviews) and what the data is that is collected (e.g. an example of a question asked could indicate this).

Minor omissions include who and clear indication of time scale.

It is possible to achieve 9 marks with a small minor omission.

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 that is clearly an alternative to the Billington study.	[7–8]
Alternative study is described in sufficient detail to be replicable that is clearly an alternative to the Billington study.	[9–10]

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(c) Evaluate this alternative way of studying empathising and systemising in practical and ethical 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:
Ethics of longitudinal research as it can be intrusive.
Ecological validity is good as longitudinal studies are natural, qualitative/quantitative data as both may be collected.
Researcher bias due to overinvolvement.
Generalisability is often poor as the sample is often small.
Reliability is very difficult.
Validity could be poor due to overinvolvement or good due to detail.
Demand characteristics, participants may become aware of the aim due to the length of the study.
Subject attrition.
Over involvement of researcher.
Any other appropriate point.

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

Candidates must discuss both practical and ethical points to achieve 7+ marks.

No comment on practical/ethical issues.	[0]
Comment on practical and/or ethical issues is muddled and weak.	[1–2]
Comment on practical and ethical issues which is not specific to the investigation **OR** Comment on one issue which is simplistic but specific to investigation.	[3–4]
Consideration of both practical and ethical issues which is simplistic but specific to investigation **OR** Consideration of one issue which is detailed and specific to investigation.	[5–6]
Consideration of both practical and ethical issues which is good but brief and specific to investigation.	[7–8]
Consideration of both practical and ethical issues which is detailed and directly relevant to the investigation.	[9–10]

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2 Schachter and Singer carried out a laboratory experiment on male university students to investigate the two factor theory of emotion.

(a) What is meant by the term 'generalisations'? [2]

1 mark partial
2 marks full

Indicative content

Generalisations are possible where the study is realistic or has a good sample – 1 mark.
The extent to which one group's results can be applied to the target/general population – 2 marks.
The extent to which a study is realistic and can be applied to everyday situations – 2 marks.

(b) Describe <u>one</u> control used by Schachter and Singer in their study. [3]

1–2 marks partial
3 marks full

Indicative content

Anything from –
Same amount of adrenaline given.
Euphoric/angry stooge behaved in a similar manner for each participant.
Materials in the room kept consistent.
Procedure the same for each participant (=2 mark answer, example needed for 3).
Same questionnaire at the end.
Same scripted behaviour of stooge for each participant.

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(c) Discuss the strengths and weaknesses of making generalisations from the study by Schachter and Singer. [10]

Appropriate strengths and weaknesses will be varied and need to link back to generalisations – except for representativeness and ecological validity which are already linked.

These could include:

Strengths
Representativeness as a good size sample was used.
Ecological validity – as the majority of the participants believed the stooges were genuine. Candidates might discuss the use of adrenaline which produced real physiological changes in the participants.
Usefulness – to medical profession.

Weaknesses
Ecological validity – was poor as the situation was unrealistic.
Usefulness – poor due to the weaknesses of the study.
Validity – poor due to possible demand characteristics and/or quantitative nature of study.
Representativeness – is poor due to it just being males, all students, from Minnesota, etc.

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

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(d) Discuss the extent to which the conclusions reached by Schachter and Singer are reductionist. [10]

Indicative content:

Appropriate points could include a discussion about:
Reductionism/holism and the factors in the study that make it complex (all of the different groups, complex nature of stooge's behaviour) and/or simple (questionnaire at the end was simplistic, behavioural coding).
The lack of ecological validity makes the study more reductionist and therefore the conclusions become based on simple evidence.
As the study is scientific it makes it more reductionist which makes the conclusions simplistic.
Generalisability – could be argued either way as the sample was large but unrepresentative.
Demand characteristics make the study more reductionist and the conclusions invalid.
Any other appropriate point.

No comment on reductionism.	[0]
Comment on reductionism is muddled and weak.	[1–2]
Comment on reductionism which is not specific to the investigation **OR** very brief evaluation which is specific to the study.	[3–4]
Consideration of reductionism which is simplistic but specific to investigation.	[5–6]
Consideration of reductionism which is good but brief and specific to investigation.	[7–8]
Consideration of reductionism which is detailed (with two or more points) and directly relevant to the investigation.	[9–10]

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Section B

3 (a) Outline what is meant nature and nurture in psychology. [2]

1 mark partial
2 marks full

Nature is what we are born with (biological/genetic) and nurture is what we learn (product of experience or the environment) or any other suitable answer.
Give one mark for each correct definition.

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

Bandura et al (aggression)
Held and Hein (kitten carousel)
Maguire et al (taxi drivers)

(b) Describe what each of these studies tells us about the importance of nurture to development. [9]

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

Bandura et al: The children in the study learn to be aggressive. Children watch the aggressive role model and directly copy their behaviour (e.g. hitting the bobo doll). Children also learn to become more aggressive generally and invent new aggressive behaviours (e.g. aggressive gun play). Answers could also include reference to same gender model imitation.

Held and Hein: Due to lack of activity, the passive kittens had failing paw placement, discrimination on visual cliff and blink response. These were all normal in the active kitten showing experience is necessary for perceptual skills.

Maguire et al: The experience of learning the knowledge has potentially caused a change in the function of brain activity in specific areas of the the taxi drivers. Landmarks and routes activated occipitotemporal regions, posterior cingulate gyrus, medial parietal area and the parahippocampal gyrus compared to the baseline. The main difference was in the right hippocampus which was activated during the routes task.

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

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(c) What are the problems for psychologists when investigating whether behaviour is due to nature or nurture? [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:
Difficult to distinguish whether behaviour is due to nature or nurture.
Studies are often on children which may be unethical.
Studies may lack ecological validity.
Validity/reliability of measuring devices used.
Sample may not be representative.
Difficult to find a representative sample.
If very realistic may be unethical.
If informed consent obtained may be unrealistic.
Difficult to control the variables in very realistic studies.
Difficult to replicate due to lack of control.

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 nature/nurture **OR** a weak description of a problem related to nature/nurture and applied to a study.	[2]
Description of problem related to nature/nurture and applied to the study effectively.	[3]
Max mark	[9]

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

1 mark partial
2 marks full

Indicative content
This approach investigates ways we are all different – 1 mark.
This approach believes all people are unique – 1 mark.
This approach believes all of us are unique in terms of our personality and our behaviour – 2 marks.

Appropriate answers could include assumptions or aims of the individual differences approach.

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

Rosenhan (sane in insane places)
Veale and Riley (mirror gazing)
Thigpen and Cleckley (multiple personality disorder)

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

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

Rosenhan: The pseudopatients kept diaries of their experiences in the hospitals. They recorded the behaviour of both staff and patients. They regularly asked various members of staff when they would be presented at the staff meeting and recorded the responses. They also kept track of the tablets they were given as well as the amount of time spent in therapy.

Veale and Riley: BDD and control patients completed a mirror gazing questionnaire. Questions focused on length of time mirror gazing, motivation before looking in the mirror, focus of attention, distress before and after looking in front of mirror, behaviour in front of the mirror, type of light preferred, types of reflective surfaces and mirror avoidance.

Thigpen and Cleckley: 100+ hours of therapy over 14 months. Records of therapy sessions and results from various tests kept by the therapists. These included IQ test, memory test, ink blot, EEG and drawing of human figures. The outside consultant gave his general impressions of Eve after his visit.

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 are the advantages of investigating individual differences? [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:

Usefulness of research.
Accepts varied results within studies rather than reaching general conclusions.
Holistic
Often gets very detailed results via case studies/longitudinal studies.
Can be ethical research.

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 individual differences **OR** a weak description of an advantage related to investigating individual differences and applied to a study.	[2]
Description of advantage related to investigating individual differences and applied to the study effectively.	[3]
Max mark	[9]

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