CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the May/June 2014 series

9698 PSYCHOLOGY

9698/13 Paper 1 (Core Studies 1), maximum raw mark 80

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 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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1 From the study by Mann et al. (lying):

(a) The observers who coded the behaviours on the videos were only told "to code the video footage". Explain why they were <u>not</u> given information about the hypothesis. [2]

Would have biased their decisions / introduced demand characteristics

1 mark partial (simple comment or unexplained term), 2 marks full (expanded comment or comment and relevant term)

(b) How did Mann et al. ensure that the two coders were coding the video clips in similar ways? [2]

Did reliability checks on a random sample of 36 clips / 55% of clips (including all 16 suspects)
checked using **Pearson's** correlations; Gaze aversion (r = .86); Blinking (r = .99); Head movements (r = .95); Self-manipulations (r = .99); Illustrators (r = .99); Hand/finger movements (r = .99); Speech disturbances (r = .97). Deviations from the official English language (r = .55).

The Pearson's correlations show evidence of a strong consistency between the two coders.

t–tests were used to test for average differences between the two coders to ensure that the average scores for the two coders did not differ. None of these **t–tests** were significant.

1 mark partial (simple comment, 'name' of test or 'interrater/coder reliability test'), 2 marks full (expanded comment or comment and relevant name/term)

2 In the study by Loftus and Pickrell (false memories) the participants were sent a booklet. Describe this booklet and what the participants were required to do with it. [4]

1 mark per detail described × 4

Participants given booklet containing stories about the participant's childhood (1 mark)

The booklet contained 3 true stories about the participant's childhood and one false one (2 marks)

5 page booklet, with true and false stories, the latter always third, the participants filled in the details they remembered about each one (4 marks)

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3 From the study by Baron-Cohen et al. (eyes test), describe the Autism Quotient (AQ) results for the high-functioning autism/Asperger syndrome (HFA/AS) group compared to the student controls (group 3). [4]

HFA/AS: Mean AQ 34.4 (all males)
Student controls: difference between genders;
both lower than HFA/AS: Mean AQ 18.3 (all)
Mean AQ males = 19.5
Mean AQ females = 16.6

1 mark partial (1 difference observed, no data)
2 marks partial (2 differences observed, no data OR 1 difference, with data)
3 marks partial (2 differences observed, 1 with data)
2 marks partial (2 differences observed, both with data)

controls had lower AQ than HFAs (1 mark)
AS had higher AQ than students, and the female students were lower still, only 16.6 on average (3 marks)

4 From the study by Held and Hein (kitten carousel):

(a) Describe how the kittens were divided between the conditions. [2]

pairs of kittens,
the two paired kittens from the same litter, each pair from a different litter,
one from each pair,
randomly,
one in active group, one in passive group.

1 mark partial, 2 marks full (both statements)

10 active, 10 passive = 1 mark

(b) Suggest why this allocation of kittens to groups was important. [2]

So that differences between the active and passive kittens were less likely to be due to individual differences (as each pair was from the same litter)
So that the spread of differences in kittens generally is represented (because lots of differences are represented)

1 mark partial, 2 marks full (any single idea well expressed or more than one explanation)

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5 The study by Milgram (obedience) involved observing the reactions of the participants at different times during the experiment.

(a) State <u>two</u> ways the participant (the 'teacher') demonstrated tension during the experiment. [2]

"sweat, tremble, stutter, bite their lip, groan, dig their fingernails into their flesh… nervous laughter and smiling…seizures… embarrassed…"
"twitching, stuttering, pulling earlobe, twisted hands, pushed his head into his hands, muttered 'Oh God, let's stop it'".

1 mark per reaction × 2

(b) State <u>two</u> ways the participant (the 'teacher') reacted at the end of the experiment. [2]

"heaved sighs of relief, mopped their brows, rubbed their fingers over their eyes, or nervously fumbled cigarettes. Some shook their heads, apparently in regret. Some subjects had remained calm throughout the experiment, and displayed only minimal signs of tension from beginning to end."

"In the post-experimental interviews subjects took pains to point out that they were not sadistic types, and that the laughter did not mean they enjoyed shocking the victim."

1 mark per behaviour × 2

NB Accept post-experimental interview comments

6 Piliavin et al. (subway Samaritans) studied bystander intervention and calculated the median time taken to help (latency).

(a) What is the median used for and how is it calculated? [2]

Use: average / central tendency / when data are ordinal
Calculated by: putting scores in (rank/numerical) order and finding the middle one (adding the two middle ones together and dividing by 2 if there is an even number in the group)

1 mark for use, 1 mark for calculation

(b) What were the median latencies for the cane <u>and</u> drunk trials when there was no model? [2]

cane 5 seconds, drunk 109 seconds

1 mark partial (cane shorter than drunk), 2 marks full (both times, approximately)

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7 Tajfel (intergroup categorisation) suggests that early schooling which stresses 'teams' and 'team spirit' might be questionable. Use the results from Tajfel's study to explain this belief. [4]

e.g.:
Tajfel found that the boys discriminated just because they'd been put into groups, suggesting that children learn to discriminate on flimsy grounds. So competing against another team e.g. in different coloured bibs (even if randomly allocated rather than with friends or representing the school/team) could produce discriminatory behaviour.

1 mark partial (simple statement related to "groupness"/social identification)
2 marks partial (brief explanation of "groupness"/social identification and reinforcement of intergroup tensions)
3 marks partial (brief explanation of "groupness"/social identification and random allocation encouraging reinforcement of intergroup tensions)
4 marks full (expanded explanation)

8 From the study by Freud (little Hans):

(a) Describe <u>one</u> of the dreams that little Hans had. [2]

Most likely
Giraffe dream: big giraffe shouted because Hans took crumpled giraffe away and Hans sat on crumpled giraffe.
Plumber dream: Plumber came and replaced Hans's bum and widdler with bigger ones

1 mark partial (brief description), 2 marks full (expanded description)

NB Do not accept granddaddy fantasy as Hans was clearly awake.

(b) Explain how Freud related this dream to the Oedipus complex. [2]

Big giraffe = father, crumpled = mother, so he reduces his fear of his father and achieves his desire to have sex with his mother.
Plumber helps Hans overcome castration anxiety as he has a big widdler like his dad.

1 mark partial (brief description), 2 marks full (expanded description, probably containing appropriate term(s) relating to the Oedipus complex)

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9 Nelson investigated children's morals and found, in study 1, that the youngest children were affected by motive valence (whether the motive cue was good or bad).

(a) What did Nelson do in Study 2 to investigate whether motive valence was really most important and what did she expect would happen? [2]

(In Study 2) reversed the order of information about valence (in the verbal-only condition)/ so outcome information came first.
They expected (the preschool) children to attribute more importance to whichever cue was negative (motive or outcome).

1 mark partial (only 'what they did' or 'what they expected', however well)
2 marks full ('what they did' and 'what they expected', however briefly)

(b) Using Study 2 as an example, explain the experimental design. [2]

Independent groups (accept independent measures, between groups)
Different participants in each condition / level of the IV

1 mark partial (only description, however well done, without reference to Study 2)
2 marks full (description plus reference to Study 2, however brief)

10 From the study by Schachter and Singer (emotion):

(a) What reasons did the experimenter give the participants for the 20-minute delay in the anger condition after they had been given the injection? [2]

For "the Suproxin to get from the injection site into the bloodstream" he continued "We would like use to use these 20 minutes to answer these questionnaires…"

1 mark partial (brief description), 2 marks full (expanded description)

(b) What was the real reason for this delay? [2]

To allow time for the stooge to demonstrate angry behaviour (to provide a contrast to the effect of the euphoric stooge) to see whether the cognitive labels provided by the stooge's behaviour would affect the participant's interpretation of their physical arousal.

1 mark partial (brief description)
2 marks full (expanded description, mentioning both stooge's behaviour and participant's interpretation)

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11 In the study by Dement and Kleitman (sleep and dreaming), the occurrence of rapid eye movement (REM) periods was measured.

(a) Describe what Dement and Kleitman discovered about the occurrence of REM periods during the night. [2]

Never during initial onset of sleep
Fairly regular intervals throughout the night
Frequency constant for each individual
Frequency varied between individuals (every 70–104 minutes, average 92 minutes)
Eyes not constantly in motion during REM periods
Length varied (3–50 minutes, mean 20 minutes)
REM periods longer later in the night

1 mark partial (brief description)
2 marks full (expanded description, may include data but doesn't have to)

(b) Dement and Kleitman collected data from nights during which the sleepers had been woken. To what extent did they believe these findings were therefore generalisible? [2]

It <u>was</u> generalisible,
because the results were similar to studies of uninterrupted sleep.
because it is a physiological process and same in everyone

1 mark partial (simple statement 'it was')
2 marks full (statement with justification e.g. in relation to earlier studies or own findings (which resembled earlier findings))

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12 In the study by Rosenhan (sane in insane places) a diverse group of pseudo-patients was used.

(a) Describe <u>two</u> ways in which the pseudo-patients differed from each other. [2]

social role: students / established professionals
age: in 20s / older
gender: male / female
occupation: paediatrician/psychiatrist/painter/housewife

1 mark per difference × 2

(b) Explain why it was important to have a varied group of pseudo-patients in this study. [2]

Because the hospital staff might have responded differently to different types of people, so they needed to have a range so they could generalise. (2)

1 mark partial (to generalise / because staff might respond differently)
2 marks full (must explain *why* generalisation would have been difficult in relation to staff in this study)

13 In the study by Thigpen and Cleckley (multiple personality disorder) mainly <u>qualitative</u> data were collected.

(a) Describe the <u>qualitative</u> data relating to the facial expression of Eve White and the facial expression of Eve Black. [2]

EW: "face suggests a quiet sweetness, the expression in repose is predominantly one of contained sadness"
EB: "Face is pixie-like, eyes dance with mischief as if Puck peered through the pupils"

1 mark partial (description of either Eve White OR Eve Black)
2 marks full (description of both Eve White AND Eve Black)

(b) Describe the <u>qualitative</u> data relating to the voice of Eve White and the voice of Eve Black. [2]

EW: "voice always softly modulated, always influenced by a specifically feminine restraint"
EB: "voice a little coarsened, 'discultured,' with echoes or implications of mirth and teasing"

1 mark partial (description of either Eve White OR Eve Black)
2 marks full (description of both Eve White AND Eve Black)

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14 In the study by Billington et al. (empathising and systemising), the participants completed a questionnaire called the SQ-R, a revised version of the original systemising questionnaire. Describe the SQ-R. [4]

75 items
score range 0–150
assesses (cognitive and affective) empathy
participant responds with 'definitely agree', 'slightly agree', 'slightly disagree', 'definitely disagree' (to each item)
half the items are reversed

1 mark per aspect described × 4

15 From the study by Veale and Riley (mirror gazing):

(a) Describe the aim of the study. [2]

to investigate the exact mirror gazing **behaviours** in BDD
to investigate the **function** of mirror gazing in BDD
to investigate what **maintained** mirror gazing in BDD (even when it makes them feel worse)
to make suggestions for **therapy**

1 mark partial (brief explanation), 2 marks full (one expanded explanation or two brief)

(b) To what extent was mirror gazing like the compulsive checking of a patient with obsessive-compulsive disorder (OCD)? [2]

it is more complex in BDD
as it is a 'safety' behaviour
not just for anxiety reduction

1 mark partial (brief explanation), 2 marks full (expanded explanation)

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16 Evaluate <u>one</u> of the studies listed below in terms of its contribution to the debate about reductionism in psychology.

Bandura et al. (aggression)
Maguire et al. (taxi drivers)
Demattè et al. (smells and facial attractiveness) **[10]**

No marks for description of study.

Comment	Mark
No answer or incorrect answer.	0
Anecdotal evaluation, brief detail, minimal focus. Very limited range. Evaluation may be inaccurate, incomplete or muddled.	1–3
Points illustrating the contribution of the study to the reductionism debate lack depth and/or breadth. The answer may be general rather than focused on study. Shows some understanding.	4–5
Points illustrating the contribution of the study to the reductionism debate are focused on the study although the evaluation may be imbalanced in terms of quality and/or depth. The answer shows reasonable understanding.	6–7
Balance of points illustrating the contribution of the study to the reductionism debate and these are focused on the study. Evaluation is detailed with good understanding and clear expression.	8–10

Examples of possible evaluation points:

Bandura et al.
- *reductionist* because focus is on single cause (imitation)
- so excludes other factors both social (e.g. reinforcement, punishment by peers/adults) and nonsocial (e.g. personality, genes)
- because experiment was so controlled, e.g. assessing prior levels of aggression and allocating to reduce influence
- *not reductionist* because assessing prior levels of aggression recognises that other factors are at work
- cannot conclude whether effects of same sex models are inherently biological or social

Maguire et al.
- *reductionist* because looking at activation of individual brain areas
- so limiting differences to those observable at a biochemical level
- and minute structural level when mapped onto MRIs
- not looking at real world navigation so perhaps not able to draw holistic conclusions about actual navigation
- *not reductionist* because deliberately considering navigation in relation to other tasks similar in a range of ways (sequential or not, topographical or not)
- looking at activation caused by talking, which we do actually do when we are navigating

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Demattè et al.

- *reductionist* because focus is just a few smells and in the real world there are lots
- and they are in combination, not isolated or separated by puffs of clean air
- and smell is not the only thing that determines attractiveness
- considering only attraction of females to males, not vice versa or same-sex attraction
- and only faces not whole body / person
- *not reductionist* because both nice and nasty smells were considered, and more than one of each
- not aiming to explain all of attractiveness but extent to which odour modulates other attractiveness factors

17 Use <u>one</u> of the studies listed below to discuss ethics in psychology.

Haney, Banks and Zimbardo (prison simulation)
Langlois et al. (infant facial preference)
Veale and Riley (mirror gazing) **[10]**

No marks for description of study.

Comment	Mark
No answer or incorrect answer.	0
Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled.	1–3
Either points are limited to illustrating ethical strengths or weaknesses without reference to the study or lack of depth and/or breadth. The answer shows some understanding.	4–5
Both ethical strengths and weaknesses are considered and are focused on the study although they may be imbalanced in terms of quality or quantity. The answer shows good discussion with reasonable understanding.	6–7
Balance of detail between ethical strengths and weaknesses and both are focused on the study. Discussion is detailed with good understanding and clear expression.	8–10

Examples of possible discussion points:

Haney, Banks and Zimbardo

- *ethical* because participants knew it was a study of prison life and that they might be guards or prisoners
- had right to withdraw throughout
- no physical abuse was allowed
- stopped after 6 days instead of 14
- *not ethical* because
- effects were much greater than anticipated and it was not stopped when participants began to suffer psychological and physical symptoms of stress
- Participants felt as though they could not withdraw

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Langlois et al.

- *ethical* because infants were given a 5–10 minute break after eight trial blocks to alleviate fatigue
- also because infants sat with mother, so neither mother nor baby likely to be distressed
- as mothers were present they would have been able to consent / withdraw
- whole procedure was quite quick (less than 6 minutes of testing)
- *not ethical* because although the data from fussy infants those most likely to be distressed and were excluded, this wasn't until after they had been through the experiment
- mothers may have been distressed by their baby fussing

Veale and Riley

- *ethical* because participants were volunteers, both BDD and controls
- the aim was to find out more so that the BDD patients could be helped more effectively through therapy
- and to generate better hypotheses for the development of a cognitive behavioural model to understand BDD better
- *not ethical* because the questions asked were very personal, so potentially invasive
- they were also potentially stressful to answer
- the BDD participants may have felt obliged to answer because they were diagnosed with BDD

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