UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the May/June 2011 question paper

for the guidance of teachers

9698 PSYCHOLOGY

9698/11 Paper 1 (Core Studies 1), maximum raw mark 100

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 must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

UNIVERSITY of CAMBRIDGE
International Examinations

Section A

1 From the study by Loftus and Palmer on eyewitness testimony:

(a) Briefly describe the quantitative results of the first experiment. [2]

Speed estimates in mph: smashed 40.8, collided 39.3, bumped 38.1, hit 34.0, contacted 31.8.

1 mark partial (e.g. one or two speeds; one or two verbs OR a simple statement about the results), 2 marks expansion (e.g. all words and some speeds and more description such as speed estimates in mph). 1 mark if results table only with no description.

(b) Suggest <u>one</u> disadvantage of quantitative results. [2]

Most likely:
- heavy reliance on numbers taken in snapshot study
- does not gain information on *why* people behave – no explanation
- often snapshot and no in depth, rich detail or insight.

1 mark partial, 2 marks expansion. Reference to this study not needed for max.

2 From the study by Deregowski on picture perception:

(a) Suggest why it was concluded that the perception of pictures is learned. [2]

Most likely:
Because participants in particular cultures did not perceive pictures in the same way as participants from other cultures. For example, there were differences in drawing the two-pronged trident; the preference for split-style; construction of the cube.
If the perception of pictures was innate, there would be no cultural difference.

1 mark partial, 2 marks expansion.

(b) Explain what would have to be found to conclude that picture perception is inherited. [2]

Most likely:
If the perception of pictures was innate, there would be no cultural differences. In all the tests, participants would perceive the same. It would be a 'cultural universal'.

1 mark partial, 2 marks expansion.

3 From the study by Baron-Cohen, Leslie and Frith on autism:

(a) Suggest <u>two</u> reasons why the participants in the study could not give informed consent. [1 + 1]

Most likely:
- The participants were under 16 years and too young to give full informed consent.
- Because of their age the participants would not understand what informed consent was.

1 mark for each appropriate answer.

© University of Cambridge International Examinations 2011

(b) What is informed consent? [2]

Most likely:
According to the British Psychological Society's ethical guidelines, before taking part in a psychological investigation, participants should be informed of the aims of the research and any aspects of it that might reasonably influence their decision to participate.
Informed consent cannot be given by participants under 16 years of age.

1 mark partial, 2 marks expansion.

4 The study by Gardner and Gardner on Washoe was a case study done over a period of time.

(a) Give <u>one</u> disadvantage of the case study method as used in this study. [2]

Most likely:
- Only one participant so cannot generalise: only Washoe, no other.
- Longitudinal so no quick result: sign language could only be taught over a period of time.
- Ecological validity: participant studied as part of everyday life: may be less objectivity.

1 mark for advantage (as above), 1 mark for relating advantage to ***this*** study.

(b) Give <u>one</u> disadvantage of a longitudinal study. [2]

Most likely:
- Participant attrition – participants may drop out for a variety of reasons.
- Once the study has started, changes to the design cannot be made.
- Cross-generational – those from one generation cannot be compared to another generation due to the social conditions of society changing over time.
- Experimenters may become emotionally attached to participants and this may bias the outcome or results of the study.

1 mark partial, 2 marks expansion. NB does not have to be related to this study.

5 The study by Samuel and Bryant on conservation examined the work of Piaget.

(a) Outline <u>two</u> findings that were similar to those of Piaget. [2]

Most likely:
- The number of errors decreases as age increases.
- Children perform best on the number task; perform worst on the volume task.

NB Piaget did not do one judgement so that cannot be a similarity.

1 mark for each appropriate answer.

(b) Outline <u>two</u> findings that were different from those of Piaget. [2]

Most likely:
- Children performed better with one question rather than the two question (Piaget task).
- Children of five years could conserve whereas Piaget found that they could not.

1 mark for each appropriate answer.

© University of Cambridge International Examinations 2011

6 From the study by Bandura, Ross and Ross on aggression:

(a) How were the participants matched? [2]

Quote from study:
The subjects were rated on four five-point rating scales by the experimenter and a nursery school teacher, both of whom were well acquainted with the children. These scales measured the extent to which subjects displayed physical aggression, verbal aggression, aggression toward inanimate objects, and aggressive inhibition.
NB Participants were not matched on age and gender.

1 mark each for any two of the above features.

(b) Why are the participants matched in any study? [2]

Most likely:
To control as many participant and other variables as possible; to reduce/eliminate confounding variables.

1 mark partial, 2 marks full.

7 The study by Hodges and Tizard on social relationships used psychometric tests. Identify <u>two</u> psychometric tests used in this study and say who they were given to. [2 + 2]

Most likely:
- The parent completed the 'A' scale questionnaire (Rutter, 1970) on the adolescent's behaviour.
- The adolescent completed the Social difficulties questionnaire (Lindsay & Lindsay).
- The Rutter B scale was given to teachers.

1 mark for identification of test and 1 mark for identification of person to whom the test was given.

8 Freud gathered self report data from little Hans and his father. Give <u>two</u> problems with the self report data gathered in this study. [2 + 2]

Most likely:
- Problem: data may be unique and not comparable to that of others, e.g. only Hans was studied so there is no comparison.
- Problem: participants may provide socially desirable responses; not give truthful answers, e.g. Hans might have said what he thought his father wanted to hear; he wanted to please his daddy.
- Problem: researchers have to be careful about use of leading questions; this could affect the validity of the data collected, e.g. both Freud and the father asked Hans leading questions "when the horse fell down did you think of your daddy".

1 mark for problem and 1 mark for applying to **this** study.

© University of Cambridge International Examinations 2011

9 From the study by Schachter and Singer on emotion:

(a) Identify <u>two</u> pieces of equipment used by the stooge in the euphoria condition. [2]

Most likely – 'scratch' paper, rubber bands, wastebasket, pen/pencil, manila folders, hula hoops.

1 mark for each piece of equipment.

(b) Suggest what effect the stooge's use of this equipment had on the participants in the epinephrine ignorant (EPI IGN) condition. [2]

Most likely:
The behaviour of the participants in the EPI IGN was to copy the behaviour of the stooge and behave in a euphoric way.

1 mark partial, 2 marks expansion.

10 The prison study by Haney, Banks and Zimbardo was a simulation.

(a) What is a simulation? [2]

Most likely:
A simulation is the imitation of some real thing, state of affairs, or process. The act of simulating something generally entails representing certain key characteristics or behaviours of a selected physical or abstract system. Virtual reality is also creditworthy.

1 mark partial/identification, 2 marks expansion.

(b) Give <u>one</u> advantage and <u>one</u> disadvantage of using a simulation. [2]

Most likely:
Advantages:
Participants can be protected from any harm that may be present in a real situation.
Experimenters can control all situational variables.
Any other appropriate point to receive credit.
Disadvantages:
Too much control of variables may mean the study is too reductionist.
The situation is not real and may lack ecological validity.
Any other appropriate point to receive credit.

1 mark for advantage and 1 mark for disadvantage.

© University of Cambridge International Examinations 2011

11 In the study by Piliavin, Rodin and Piliavin on subway Samaritans:

(a) Outline <u>one</u> way in which an ethical guideline was broken. [2]

Most likely:
Informed consent: participants did not give informed consent.
Deception: participants were deceived because the victim was a stooge and was not ill or drunk.
Psychological harm: participants may have been afraid of a drunk male; stressed by witnessing a person fall over in front of them.
Debriefing: participants were not debriefed.

1 mark for identification of relevant issue, 2 marks for elaboration of issue.

(b) Outline <u>one</u> way in which an ethical guideline was <u>not</u> broken. [2]

Most likely:
Physical harm: no participant was physically harmed.
Confidentiality: no participant was identified.

1 mark for identification of relevant issue, 2 marks for elaboration of issue.

12 From the study by Tajfel on intergroup categorisation:

(a) Describe the sample of participants. [1 + 1]

Most likely:
- All the participants were boys aged 14-15 years.
- There were 64 in experiment 1 and 48 in experiment 2.
- They were from a comprehensive school in Bristol.

1 mark for each appropriate feature.

(b) How did the participants think they were allocated to groups in experiment 1 and how did they think they were allocated to groups in experiment 2? [1 + 1]

Experiment 1: by being an over-estimator or an under-estimator of dots on a screen.
Experiment 2: artistic preference of Klee or Kandinsky.

1 mark for each correct response.

13 From the review by Gould on intelligence testing:

(a) What did Yerkes mean when he said that the tests measure 'native intellectual ability'? [2]

Most likely:
He meant innate or inherited (genetic) intelligence.

1 mark partial (e.g. mention of intelligence or inheritance), 2 marks elaboration (reference to both intelligence and inheritance).

© University of Cambridge International Examinations 2011

(b) Give <u>one</u> reason why the tests did not measure 'native intellectual ability'. [2]

Most likely:
There was bias in the questions which related to only one country.
The amount of time spent in USA was linked with better scores.

1 mark partial (e.g. tests were biased), 2 marks expansion.

14 The study by Hraba and Grant on doll choice looked at racial identification.

(a) How did Hraba and Grant measure racial identification? [2]

There is only one racial identification question: give me the doll that looks like you.

2 marks for correct answer, 1 mark for a partial response.

(b) Why did Hraba and Grant ask this control question? [2]

Most likely: if the child did not know what colour they were then they cannot correctly answer any of the other questions.

2 marks for correct answer, 1 mark for a partial response.

15 The case study by Thigpen and Cleckley involved just one participant.

(a) Give <u>two</u> advantages of the case study method. [1 + 1]

Most likely:
Richness and detail of the data gathered. Often longitudinal.
Ecological validity: participant may be studied as part of everyday life.
Rare or unique behaviours can be studied in detail.
Sample *may* be self selecting.

1 mark for each advantage.

(b) Give <u>one</u> limitation when generalising from a small sample of participants. [2]

Most likely:
A generalisation applies to most people, most of the time. It does not apply to all the people all of the time. If small sample size participant(s) may not represent *most* people.

1 mark partial, 2 marks expansion.

© University of Cambridge International Examinations 2011

Section B

16 Psychologists sometimes gather data about behaviour and experience by observing the ways in which people behave. Choose any <u>one</u> of the studies from the list below and answer the questions which follow.

Rosenhan (sane in insane places)
Dement and Kleitman (sleep and dreaming)
Bandura, Ross and Ross (aggression)

(a) Describe how observational data were gathered in your chosen study. [10]

Most likely answers (any appropriate answer receives credit):
Rosenhan: pseudo-patients gain access to mental institutions then, as participants, observers record the behaviour of ward staff.
Dement: participants sleep in laboratory. Observers watch EEG and when participant is in REM or NREM they wake up the participant. Also vertical, horizontal etc. eye movements observed.
Bandura: children observed through one-way mirror in controlled observation. Behaviour recorded and inter-rater reliability applied.

No answer or incorrect answer. [0]

Anecdotal evidence, general statements, minimal detail, minimal focus. [1–3]

Attempt to outline some of the main aspects though with omission of detail or lack of clarity (comment with some comprehension). [4–6]

Main aspects identified and described in good detail. Description is clear, focused and well expressed. [7–10]

[max 10]

(b) Describe the results of the observations in your chosen study. [10]

Rosenhan: staff ignored patients, particularly nurses and attendants on wards. Behaviour recorded when pseudo-patient tries to talk to staff.
Dement: most participants woken up in REM sleep recalled a dream whereas most participants woken in NREM sleep did not. Participants could estimate length of dream; eye movement generally relates to dream content.
Bandura: children exposed to aggressive model were more aggressive. Boys more physically aggressive. Some opposite sex inhibition.

No answer or incorrect answer. [0]

Anecdotal description, brief detail, minimal focus. [1–3]

Appropriate aspects identified. Description shows some understanding. Some detail and expansion. [4–6]

Appropriate aspects described. Description is clear, has good understanding, is focused and well expressed. Good detail and fully explained. [7–10]

[max 10]

© University of Cambridge International Examinations 2011

(c) Using examples from your chosen study, what are the advantages and disadvantages of observations? [10]

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

Advantages:
Those being observed behave naturally – high ecological validity.
Behaviour has no demand characteristics – no ethics problems.
If controlled then can replicate and have reliability and validity.
Disadvantages:
Observed behaviour may not be repeated/behaviour being observed may not happen.
Lack of control may mean replication is difficult.
Observer bias/reliability of recording (resolved via inter-rater reliability).
Gaining access to participant(s) and situations.
Observing without consent/other ethical issues.

No answer or incorrect answer. [0]

Anecdotal description, brief detail, minimal focus. Very limited range. Description may be inaccurate, incomplete or muddled. [1–3]

Advantages and disadvantages which are focused on the question, are psychologically informed, but lack detail, elaboration or example. [4–5]

Advantages and disadvantages which are focused on the question and are psychologically informed. There is reasonable detail with some elaboration or examples. Discussion becoming clear and shows some understanding. Half marks for advantages or disadvantages only. [6–7]

Range of advantages and disadvantages (4 or more) which are focused on the question and are psychologically informed. There is good detail with elaboration and examples. Discussion is good and shows understanding. Half marks for advantages or disadvantages only. [8–10]

[max 10]

(d) Suggest <u>one</u> other way of gathering data in your chosen study, and say how you think this might affect the results of the study. [10]

No answer or incorrect answer. [0]

Anecdotal suggestion, brief detail, minimal reference to question.
Description may be inaccurate, incomplete or muddled.
There may be no reference to effect on results. [1–3]

Appropriate suggestion(s) which is/are focused on question. Description shows some understanding.
Some detail and expansion of aspects, with some consideration of effect on results.
Max mark of 6 if no effect on results. [4–6]

Appropriate suggestion/range of, which is/are focused on question.
Description is detailed with good understanding and clear expression.
The changes are well considered and reflect understanding of the area in question.
Consideration of effect on results is appropriate. [7–10]

[max 10]

© University of Cambridge International Examinations 2011

17 Psychologists often want to make statements about how most people behave or experience the world. These statements are called generalisations. Choose any <u>one</u> of the studies from the list below and answer the questions which follow.

Raine, Buchsbaum and LaCasse (brain scans)
Milgram (obedience)
Sperry (split brain)

(a) Outline the main findings of your chosen study. [10]

Raine: these preliminary findings provide initial indications of a network of abnormal cortical and sub-cortical brain processes that may predispose to violence in murderers pleading NGRI. Specific findings for particular brain structures may be given. NGRIs, compared to controls: had lower glucose metabolism in prefrontal, parietal areas and corpus callosum. No difference in temporal areas. Higher in occipital.
Greater activity on right in thalamus. Amygdala and hippocampus: less activity in the left and more activity in the right. Cingulate, caudate, putamen, globus pallidus, midbrain and cerebellum – no significant differences.
Milgram: participants obeyed authority. Differed from what was expected. Specific numbers could be given: no one stopped before 300 volts. 14 stopped between 300 and 374 and 26 went to 450 volts. Also found signs of extreme tension.
Sperry: many studies show that in effect there are two minds in one body; that language function is located in the left hemisphere. Main: those presented with image to one half of visual field could only recognise it if it was presented to same visual field. If presented to opposite, participants respond as if it has never been seen.

No answer or incorrect answer. [0]

Anecdotal evidence, general statements, minimal detail, minimal focus. [1–3]

Attempt to outline some of the main aspects though with omission of detail or lack of clarity (comment with some comprehension). [4–6]

Main aspects identified and described in good detail. Description is clear, focused and well expressed. [7–10]

[max 10]

(b) What generalisations can be made about human behaviour and experience from the findings of your chosen study? [10]

Raine: brain abnormalities cause murder, murder causes brain abnormalities.
Milgram: people will obey authority if they are pressured to do so. The 'Germans are not different'.
Sperry: that the corpus callosum allows the two hemispheres to communicate; that language function is in the left hemisphere.

No answer or incorrect answer. [0]

Anecdotal description, brief detail, minimal focus. [1–3]

Appropriate aspects identified. Description shows some understanding. Some detail and expansion. [4–6]

Appropriate aspects described. Description is clear, has good understanding, is focused and well expressed. Good detail and fully explained. [7–10]

[max 10]

© University of Cambridge International Examinations 2011

(c) Using your chosen study as an example, what are the advantages and disadvantages of making generalisations about human behaviour and experience? [10]

Indicative content: most likely answers (any appropriate answer receives credit):
Advantages:
It means we can predict how *many* people might behave i.e. gives us a rule-based approach to human behaviour (i.e. nomothetic).
If research is true of a large number of people in a large number of situations, then research may actually be *useful* to a large number of people.
Making generalisations may simplify complex behaviour.
Disadvantages:
Sample size of original study may be very small; sample may not be representative (all male; all students, etc).
Findings of studies performed in one country cannot be generalised to all countries. To do this would be ethnocentric.
Original study may be performed in a laboratory and so may not apply to a real life situation. The original study may involve some artificial task and so may not apply to real life behaviour. This is ecological validity.
Assumes a *nomothetic* approach i.e. one concerned with rules and predictability and disregards important individual differences.

No answer or incorrect answer. [0]

Anecdotal description, brief detail, minimal focus. Very limited range. Description may be inaccurate, incomplete or muddled. [1–3]

Advantages and disadvantages which are focused on the question, are psychologically informed, but lack detail, elaboration or example. [4–5]

Advantages and disadvantages which are focused on the question and are psychologically informed. There is reasonable detail with some elaboration or examples. Discussion becoming clear and shows some understanding. Half marks for advantages or disadvantages only. [6–7]

Range of advantages and disadvantages (4 or more) which are focused on the question and are psychologically informed. There is good detail with elaboration and examples. Discussion is good and shows understanding. Half marks for advantages or disadvantages only. [8–10]

[max 10]

(d) Suggest <u>one</u> other way of gathering data in your chosen study, and say how you think this might affect the results of the study. [10]

No answer or incorrect answer. [0]

Anecdotal suggestion, brief detail, minimal reference to question.
Description may be inaccurate, incomplete or muddled.
There may be no reference to effect on results. [1–3]

Appropriate suggestion(s) which is/are focused on question. Description shows some understanding.
Some detail and expansion of aspects, with some consideration of effect on results.
Max mark of 6 if no effect on results. [4–6]

Appropriate suggestion/range of, which is/are focused on question.
Description is detailed with good understanding and clear expression.
The changes are well considered and reflect understanding of the area in question.
Consideration of effect on results is appropriate. [7–10]

[max 10]

© University of Cambridge International Examinations 2011