UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the October/November 2010 question paper for the guidance of teachers

9698 PSYCHOLOGY

9698/12 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.

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

CIE is publishing the mark schemes for the October/November 2010 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

UNIVERSITY of CAMBRIDGE
International Examinations

1 Suggest <u>two</u> reasons why Loftus and Palmer, in their study of eyewitness testimony, used a laboratory experiment rather than a field experiment.

Most likely:
- control of variables, such as film clips
- no actual car crash takes place
- study is ethical

1 mark partial (e.g. it is ethical), 2 marks expansion (e.g. why it is ethical) for each reason.

(2 + 2) [4]

2 The study by Deregowski is a review of picture perception in different cultures.

(a) Give <u>one</u> problem the participants may have had when looking at the pictures.

Most likely:
- participants had never seen pencil drawings or a cinema screen
- participants could not relate pictures to real life
- participants could not understand the questions they were being asked
- participants could not perceive in depth

1 mark partial (e.g. they were confused), 2 marks expansion (e.g. why they were confused).

(2)

(b) Give <u>one</u> problem the researchers may have had when recording the results.

Most likely:
- they make false assumptions about what they are being asked
- they misinterpret what is being said

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

(2) [4]

3 Baron-Cohen, Leslie and Frith conclude that theory of mind is a feature of autism.

(a) What do they conclude about autism and development/age?

There is only one conclusion: that autism is not related to development/age.

1 mark partial (e.g. it is not related), 2 marks expansion (e.g. reason why it is not related).

(2)

(b) What do they conclude about autism and intelligence?

There is only one conclusion: that autism is not related to intelligence.

1 mark partial (e.g. it is not related), 2 marks expansion (e.g. reason why it is not related).

(2) [4]

© UCLES 2010

4 All studies in psychology raise ethical issues. Outline <u>two</u> ethical issues in the study on Washoe by Gardner and Gardner.

Most likely:
- confidentiality: Washoe was named
- deception: no deception?
- harm: removal from natural environment (including parents and siblings); treated like human infant; forced to learn sign language
- consent: no consent
- withdrawal: right to withdraw denied

NB question wants two **issues**. Two examples of the *same* issue, credit best.
NB ethics of animals should apply but candidates may not be familiar with these. Credit as if Washoe is human, giving benefit of doubt.

1 mark identification of issue, 2 marks identification and example. (2 + 2) [4]

5 When studying little Hans, Freud gathered qualitative data.

(a) Briefly describe how qualitative data were gathered in this study.

Most likely:
Father and Freud observed little Hans and recorded conversations over a period of at least two years.

1 mark partial description (e.g. by observing Hans), 2 marks expansion. (2)

(b) Suggest <u>one</u> strength of qualitative data.

Most likely:
- can give in-depth information, rich in detail, insightful and therefore not reductionist
- can help us understand **why** people behave in a particular way

1 mark partial description (e.g. gives lots of detail), 2 marks expansion. (2) [4]

6 From the study by Schachter and Singer on emotion:

(a) Briefly describe how quantitative data were gathered.

Two types of quantitative data were gathered:
- observations: 4 categories for euphoria, e.g. 'joins in activity', and 6 for anger, e.g. 'agrees'. Two observers with 88% agreement overall.
- self reports (of mood and physical condition). Irritated, angry or annoyed on a five-point scale and 'How good or happy' on a five-point scale.

Answers must refer to data; answers describing procedure 1 mark max.

1 mark partial (e.g. through observations), 2 marks elaboration (e.g. the nature of the data). (2)

© UCLES 2010

(b) Suggest <u>one</u> disadvantage of quantitative methods.

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 information, rich detail or insight

1 mark partial suggestion, 2 marks expansion. (2) [4]

7 From the study by Dement and Kleitman on sleep and dreaming:

(a) Suggest <u>two</u> ways in which the study was true to real life.

Most likely, participant:
- reports to lab at normal bed time
- is in a bed
- goes to sleep
- goes through normal cycles of sleep
- consumes no alcohol

1 mark for each appropriate answer to 2 max. (2)

(b) Suggest <u>two</u> ways in which the study was <u>not</u> true to real life.

Most likely, participant:
- consumes no alcohol or caffeine
- is not in their own bed or bedroom
- has electrodes attached to their head
- is woken up by a bell and reports dream into tape recorder

1 mark for each appropriate answer to 2 max. (2) [4]

© UCLES 2010

8 The study by Sperry (split brain) involved various pieces of equipment.

(a) Describe the equipment needed to conduct one of the experiments.

Most likely:
Actual apparatus



1 mark for identification of **any** appropriate aspect. 2 max.
Drawing not needed by candidates. Drawing easier than describing apparatus. Drawing is for one variation. Others possible. (2)

(b) Suggest why the same equipment is used for each participant.

Most likely answer:
- used as a control; same for all participants
- dependent variable more likely due to independent variable and not confounded

1 mark partial, 2 marks full. (2) [4]

9 The study by Raine, Buchsbaum and LaCasse on brain scans lists five 'potential confounds'.

(a) What is a confounding variable?

Most likely:
Confounding is when it is not known whether the result is due to the independent variable or some extraneous variable. It is a type of bias threatening the internal validity of studies.

1 mark partial, 2 marks expansion. (2)

© UCLES 2010

(b) Give <u>one</u> reason why Raine, Buchsbaum and LaCasse do not believe their study is confounded.

Five potential confounds mentioned by Raine, Buchsbaum and LaCasse:

- their sample size of 41 in each group is larger than that used in other studies of violent populations using PET and other imaging techniques
- the mean effect size was 0.55, with a range of 0.36 to 0.80, which is classed as medium
- they chose which areas to analyse following earlier theoretical work and only one of these areas did not show significant effects
- they used overall MANOVAs and two-tailed tests throughout the study in order to eliminate type 1 errors as far as possible
- they found no differences between the murderers and non-murderers in areas of the brain linked to various mental disorders but not linked to violence (e.g. caudate, putamen, globus pallidus, midbrain, cerebellum)

1 mark partial (e.g. gist of **one** of the above), 2 marks expansion.

(2) [4]

10 The study by Milgram on obedience broke some ethical guidelines.

(a) Explain why we should conduct studies which are unethical.

Most likely:

- the ends justify the means
- we should study 'negative' behaviour, however unpalatable
- we discover things about the true nature of human beings
- participants are not really harmed in any study

1 mark partial; 2 marks expansion. (2)

(b) Suggest <u>one</u> way in which the Milgram study was ethical.

Most likely:

- confidentiality was maintained: no-one was identified
- any other appropriate response

1 mark partial (e.g. confidentiality), 2 marks expansion (e.g. explanation of what confidentiality means). (2) [4]

© UCLES 2010

11 From the study by Haney, Banks and Zimbardo (prison simulation):

(a) Briefly describe the sample of participants.

Most likely:
- males who reply to newspaper advert
- payment $15 per day
- screened and 24 selected
- randomly allocated prisoner and guard
- all students, male and mainly white from USA

1 aspect for 1 mark up to 2 max (even "male students"). (2)

(b) Give <u>one</u> advantage of using a restricted sample of participants.

Most likely:
- reduces participant variables
- may allow generalisation to that sample type
- good for pilot study before further investigation
- participants often volunteer – more likely to behave 'appropriately'

1 mark partial, 2 marks expansion. (2) [4]

12 The subway Samaritan study by Piliavin, Rodin and Piliavin used a stooge.

(a) What is a stooge for?

Most likely:
- a stooge keeps a participant naïve about the nature of the study
- a stooge may act as a stimulus or may suggest to a participant how he or she may behave
- without the stooge, a study may not have been possible

1 mark partial (e.g. someone working for the experimenter), 2 marks for elaboration (e.g. purpose of a stooge). (2)

(b) Give <u>one</u> problem with the use of a stooge in psychological research.

Most likely:
- use of a stooge is unethical as it is deception
- the participant thinks the stooge is another participant when the stooge has a specific brief and is working for the experimenter
- participants may behave in ways in which they would not normally

1 mark partial, 2 marks elaboration. (2) [4]

© UCLES 2010

13 In Tajfel's study of intergroup categorisation a number of terms were used:

(a) Explain what is meant by the term 'social norm'.

Most likely:
- how an individual thinks others expect them to behave and how that individual expects other people to behave in a particular social situation

1 mark partial, 2 marks expansion. Quote not needed for 2 marks. (2)

(b) How does prejudice differ from discrimination?

Most likely: candidates should be clear that discrimination (behaviour) is different from prejudice (attitude/cognition)

1 mark partial, 2 marks full. (2) [4]

14 Rosenhan says it should be a 'simple matter' to distinguish the sane from the insane.

(a) According to Rosenhan what distinguishes the sane from the insane?

Most likely:
- Bleuler, Kretchmer and editors of Diagnostic and Statistical Manual of the American Psychiatric Association maintain that categorisation of patients' symptoms distinguishes the sane from the insane.
- When categorising a patient's symptoms, it's important to distinguish between characteristics found within the patient themselves and those located in the environment or context in which the patient is being observed.

1 mark partial, 2 marks expansion. (2)

(b) Outline how Rosenhan tested whether psychiatrists could distinguish the sane from the insane.

Most likely:
- inviting people to be pseudo-patients who fake hearing voices
- pseudo-patients report hearing voices to psychiatrist
- pseudo-patients contact hospital for appointment

1 mark partial, 2 marks expansion. (2) [4]

© UCLES 2010

15 The study by Thigpen and Cleckley on multiple personality disorder used self reports.

(a) Describe <u>one</u> advantage of using the self report method to gather data.

Most likely:
- participants are given the opportunity to express a range of feelings and to explain their behaviour
- may be the only way to access people's attitudes and emotions, i.e. non-observable phenomena
- data obtained may be 'rich' and often very detailed
- data is often qualitative, but can also be quantitative
- relatively large numbers of participants can be handled relatively quickly

1 mark partial, 2 marks expansion. (2)

(b) Give <u>one</u> problem with using self report data in this study.

Most likely:
- data may be unique and not comparable with that of others
- participants may provide socially desirable responses, not give truthful answers
- researchers have to be careful about use of leading questions; this could affect the validity of the data collected
- participants may respond to demand characteristics

1 mark for problem; 1 further mark for relating to ***this*** study. (2) [4]

Partial/full answer
0 marks no answer **or** incorrect answer
1 mark partially correct answer **or** correct but incomplete, lacking sufficient detail or explanation to demonstrate clear understanding
2 marks correct answer with sufficient detail/explanation to demonstrate clear understanding

© UCLES 2010

16 Some studies are described as snapshot because they take only hours or minutes to complete. Other studies are longitudinal, where behaviour is observed over weeks, months or years.

(a) Outline the main findings of your chosen study.
Hraba and Grant (doll choice)
Baron-Cohen, Leslie and Frith (autism)
Gould (intelligence testing)

Most likely answers (any appropriate answer receives credit):
Hraba: 1939 & 1969: white children preferred white dolls on both occasions. In 1939 black children had negative self-image and preferred white dolls. In 1969 this perception had changed.
Baron-Cohen: all children answer naming, reality and memory questions correctly. Autistic children have no theory of mind. 16/20 answer belief question incorrectly. It is not related to age or development.
Gould: the three 'facts':
1. The average mental age of white American adults stood just above the edge of moronity at a shocking and meagre 13.
2. The average man of many nations was a moron. The darker people of southern Europe and the Slavs of Eastern Europe were less intelligent than the fair people of Western and Northern Europe. The average Russian had a mental age of 11.34; the Italian, 11.01, the Pole, 10.74.
3. The Negro lay at the bottom of the scale – average mental age 10.41.

No answer or incorrect answer. [0]

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

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

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

[max 10]

(b) Describe the procedure of your chosen study explaining how it is a snapshot study.

Hraba: study done in very short time. Children presented with dolls and asked questions about them.
Baron-Cohen: children sat in room with experimenter. Shown items: Sally, Anne, basket, box and marble. Whole study takes a few minutes.
Gould: recruits arrive, are tested in large numbers. Alpha or beta may take 1 hour. Interviews (if done) would take even less time.

No answer or incorrect answer. [0]

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

Appropriate aspects of snapshot procedure identified, description shows some understanding. Some detail and expansion of instance(s). [4–6]

Appropriate aspects of snapshot procedure identified. Description is clear, has good understanding, is focused and well expressed. Good detail with each aspect explained fully. [7–10]

[max 10]

© UCLES 2010

(c) Using your chosen study as an example, what are the advantages and disadvantages of using snapshot studies in psychological research?

Most likely answers (any appropriate answer receives credit):
Adv: quick, and not time-consuming for participant
Adv: result and findings may be determined quickly
Adv: gives a starting point for generalisations
Disadv: it isolates behaviour; is reductionist?
Disadv: is behaviour at that time only – result may depend on mood at time
Disadv: may ignore reasons why behaviour is performed

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

Advantages and disadvantages 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 how a longitudinal method could be used for your chosen study and say what effect, if any, this would have on the results.

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]

Some appropriate suggestions which 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]

Range of appropriate suggestions which 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]

© UCLES 2010

17 Psychologists sometimes carry out studies on children.

(a) Outline the procedure of your chosen study.
Bandura, Ross and Ross (aggression)
Hodges and Tizard (social relationships)
Samuel and Bryant (conservation)

Most likely answers (any appropriate answer receives credit):
Bandura: children into groups. Stage 1: some observe aggressive model, some passive model. Stage 2: mild arousal/frustration-aggression. Stage 3: test room. Some observe nothing (control group).
Hodges: children either ex-institutional or comparison and restored or adopted. Development tracked. At 16 years tested via interviews and questionnaires.
Samuel: children put into various groups for age and whether they would receive a one- or a two-question task. Given conservation task to perform.

No answer or incorrect answer. [0]

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

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

Main aspects of procedure identified and described in good detail. Outline is clear, focused and well expressed. Good selection of aspects of procedure. [7–10]

[max 10]

(b) Describe what your chosen study tells us about children.

Bandura: if behaviour is observed it does tend to be copied; if behaviour is not observed, it will tend not to be displayed. Boys are more predisposed to aggression than girls; children will tend to copy same-sex model.
Hodges: effects of early experience cannot be reversed; children may give socially desirable answers.
Samuel: conservation (and all aspects) improves with age; children under 7 years can conserve, but fewer errors the older the child. Materials: best on number, better on mass and most errors on volume. Question type: children get confused when asked the same question twice.

No answer or incorrect answer. [0]

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

Appropriate aspects of 'children' identified, description shows some understanding. Some detail and expansion of 'children'. [4–6]

Appropriate aspects of 'children' identified. Description is clear, has good understanding, is focused and well expressed. Good detail with each aspect of 'children' explained fully. [7–10]

[max 10]

© UCLES 2010

(c) Using your chosen study as an example, what are the advantages and disadvantages of studying children in psychological research?

Most likely answers (any appropriate answer receives credit):
Adv: changes in development over time can be recorded
Adv: can determine how children think and so how best to educate
Adv: can gain understanding of how children behave in studies
Disadv: children are children and not adults – we can't generalise from their behaviour. We should not assume that what they do as children will be what they do as an adult.
Disadv: children cannot communicate their thoughts and feelings clearly. They may become confused and may misinterpret what is required.
Disadv: may be problems of interpretation. Experimenters may also misinterpret what a child intends.
Disadv: children cannot give informed consent. They may well be studied even though they do not wish to be. They will also not understand that they have the right to withdraw. E.g. Bandura.
Disadv: studies on development take time – one way to study development over time is to do a longitudinal study but this takes time, or snapshot studies are done comparing one child with another and the children may be different.

No answer or incorrect answer. [0]

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

Increased range but basic. Some understanding, some focus. OR advantages or disadvantages only which are focused on question. Max mark of 5 if only advantages or disadvantages. [4–5]

Several advantages and disadvantages which are focused on question. Description is good with reasonable understanding. Some detail and expansion of key features. [6–7]

Balance of advantages and disadvantages which are focused on question. Description is detailed with good understanding and clear expression. The arguments are well considered and reflect understanding which extends beyond the specific study. [8–10]

[max 10]

(d) Suggest <u>one</u> other way of gathering data in your chosen study and say what effect, if any, this would have on the results.

No answer or incorrect answer. [0]

Anecdotal suggestion, brief detail, minimal reference to question. Description may be inaccurate, incomplete or muddled. [1–3]

Some appropriate suggestions which are focused on question. Description shows some understanding. Some detail and expansion of aspects allowing generalisation. Max mark of 6 if effect on results not considered. [4–6]

Range of appropriate suggestions which 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]

© UCLES 2010