UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the October/November 2011 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.

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Section A (60 marks)

Answer all the questions in this section.

1 The study by Loftus and Palmer on eyewitness testimony involved leading questions.

(a) Suggest an implication the findings have for real life. [2]

Most likely:
- Leading questions should not be used in courts of law.
- Leading questions should not be used by the police when interviewing witnesses/suspects.
- Leading questions should not be used in psychological research.
- Any other appropriate answer to receive credit.

1 mark partial, 2 marks expansion.

(b) Give one example from another core study that may have included leading questions. [2]

Most likely:
- the study by Freud on little Hans;
- the study by Deregowski on picture perception;
- the study by Schachter and Singer on emotion;
- any other appropriate answer to receive credit.

1 mark partial, 2 marks expansion.

2 The study by Baron-Cohen, Leslie and Frith used an independent groups design.

(a) Suggest why a repeated measures design was not used in this study. [2]

Most likely:
A child cannot be autistic, have Down's syndrome and be 'normal' at the same time.

A more challenging question, so 2 marks for a basic correct answer.

(b) Suggest one problem with an independent groups design. [2]

Most likely:
Participant variables cannot be controlled.

A more challenging question, so 2 marks for a basic correct answer.

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3 The study by Gardner and Gardner involved an animal named Washoe.

(a) Suggest <u>one</u> ethical issue that applies to Washoe in this study. [2]

Most likely:
- confidentiality: Washoe was named;
- 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 credit 'human' guidelines even though they may not apply to animals.

1 mark identification of issue or example, 2 marks elaboration (e.g. issue and details of how it applies to Washoe).

(b) Suggest why psychologists have ethical guidelines for animals. [2]

Most likely:
- Animals have rights too.
- Animals should not be harmed, either physically or psychologically.

1 mark partial, 2 marks expansion.

4 From the study on conservation by Samuel and Bryant:

(a) Give <u>one</u> reason why they conducted the study. [2]

Most likely:
- people were beginning to challenge the methodology used by Piaget;
- Rose and Blank had raised questions about asking one question rather than two;
- to see if pre-operational children (youngest age) could conserve;
- to see which type of material children find easiest/hardest.

1 mark partial, 2 marks full.

(b) Describe <u>one</u> finding that justified the reason for conducting the study. [2]

Most likely:
- Children found asking one question easier than two.
- 5-year-old children could conserve.
- Volume was found to be harder than mass and number.

1 mark partial or if finding is different from reason, 2 marks full.

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5 The study by Hodges and Tizard on social relationships collected qualitative data.

(a) Give <u>one</u> advantage of collecting qualitative data in this study. [2]

Most likely answers:
- **Advantage:** In-depth, rich in detail, insightful and therefore not reductionist.
- **Example:** Specific questions can be asked by Hodges and Tizard and detailed answers given by adolescents.
- **Advantage:** Can help us understand why people behave in a particular way.
- **Example:** Adolescents can tell Hodges and Tizard about their lives, experiences, etc.

1 mark for advantage and 1 mark for relating the advantage to this study.

(b) Give <u>one</u> disadvantage of collecting qualitative data in this study. [2]

Most likely answers:
Disadvantage: There may be problems of interpretation. Words and descriptions are more subjective than numbers and are more open to bias and misinterpretation by participants.
Example: The adolescents may have misunderstood what Hodges and Tizard were asking.
Disadvantage: Researchers may be more prone to bias as they can select the information that best fits their hypothesis. Researchers may misinterpret what is being said to them.
Example: Hodges and Tizard may have misunderstood what the adolescents were saying.
Disadvantage: Participants may give socially desirable answers. Participants want to look good.
Example: The adolescents may not have been telling Hodges and Tizard the truth.

1 mark for advantage and 1 mark for relating the disadvantage to this study.

6 From the study by Freud (little Hans):

(a) Describe the participant. [2]

Any two features from:
- male;
- between 3 and 5 years;
- Hans was not a normal child (according to Freud);
- any other appropriate answer to receive credit.

1 mark for each appropriate feature up to 2 max.

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

Most likely:
- may not be representative of wider population;
- generalising does not take into account individual differences;
- original sample may be different from those in wider population;
- any other appropriate answer to receive credit.

1 mark partial, 2 marks full.

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7 In the study by Dement and Kleitman (sleep and dreaming) it is suggested that rapid eye movements (REM) only occur during dreaming and not during non rapid eye movement (NREM) sleep.

(a) Give <u>one</u> piece of evidence which supports this. [2]

Supporting:
REM sleep awakenings: 152/191 instances of dream recall.
NREM sleep awakenings: 11/160 instances of dream recall.

1 mark partial (related to REM only), 2 marks full (related to REM and NREM).

(b) Give <u>one</u> piece of evidence which challenges this. [2]

Challenging:
REM sleep awakenings: 39/191 instances of no dream recall.
NREM sleep awakenings: 149/160 instances of no dream recall.

1 mark partial (related to NREM only), 2 marks full (related to REM and NREM).

8 The study by Sperry involves split brain patients sometimes being blindfolded over one eye and an image being presented to <u>one</u> visual field of the other eye.

(a) Suggest what would happen if the image was presented to both visual fields. [2]

Most likely:
If the image were presented to both visual fields, it would be seen by both hemispheres and so the image would be correctly identified.

1 mark partial (e.g. it would be correctly identified), 2 marks explanation rather than identification.

(b) Suggest what would happen if the image was presented to both eyes. [2]

Most likely:
If the image were presented to both eyes, it would be seen by both visual fields, so it would be seen by both hemispheres and so the image would be correctly identified.

NB a challenging question as the answer is the same as for **Question 8(a)**.

1 mark partial (e.g. it would be correctly identified), 2 marks explanation rather than identification. 1 mark if candidate writes 'same as **(a)**'.

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9 From the study by Raine, Buchsbaum and LaCasse on brain scans:

(a) What was the overall conclusion drawn from this study? [2]

Most likely:
The preliminary conclusions suggest there is a network of abnormal cortical and sub-cortical brain processes that may predispose murderers pleading 'not guilty by reason of insanity' to violence.

1 mark partial or, if finding is given, 2 marks elaboration.

(b) Give <u>one</u> reason why we should not assume cause and effect in relation to the overall conclusion. [2]

Most likely:
- It may be the murder that has caused the abnormal brain processes.
- It may be some other factor that has caused the abnormal brain processes (time on remand?).
- We should not generalise from the findings of one study, limited sample size, etc.
- Any other appropriate answer to receive credit.

1 mark partial, 2 marks elaboration.

10 The study by Milgram on obedience is a snapshot study.

(a) Why would Milgram's study be described as snapshot rather than longitudinal? [2]

Most likely:
- For each participant the study lasts for 'no more than an hour of your time'. Some participants will be involved for significantly less than this.
- It is not a longitudinal study because it does not track the development of any individual over a period of time.

1 mark for snapshot and 1 mark for longitudinal components.

(b) Give <u>two</u> disadvantages of snapshot studies. [2]

Most likely:
Disadvantage: It is not possible to study how behaviour may change over time (development); cannot see long-term effectiveness/impact of a treatment/exposure to certain stimuli.
Disadvantage: Behaviour recorded is limited to that time, place and culture.
Disadvantage: Data is likely to be quantitative (numbers) and reasons to explain why a participant behaved in a particular way will not be known.
Disadvantage: Cannot see effects of societal changes on people's psychology.

1 mark for each appropriate disadvantage up to 2 max.

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

(a) Give <u>two</u> examples of high ecological validity in this study. [2]

Most likely:
- The study was conducted on a real subway train.
- The victim carried a cane/smelled of alcohol.
- Participants were not aware they were being observed/a study was being conducted.
- Any other appropriate answer to receive credit.

1 mark for each appropriate disadvantage up to 2 max.

(b) Give <u>two</u> examples of the way in which the study was unethical. [2]

Most likely:
- participants did not give consent to be part of a study;
- were deceived as the victim was not really ill or drunk;
- were not debriefed;
- did not have the right to withdraw;
- may have been psychologically harmed (distress of witnessing a person fall over);
- any other appropriate answer to receive credit.

1 mark for each appropriate disadvantage up to 2 max.

12 In the second experiment by Tajfel on intergroup categorisation, there were three choices of response for the participants: 'maximum joint profit', 'maximum in-group profit' and 'maximum difference'.

(a) Describe what is meant by 'maximum joint profit' and 'maximum in-group profit'. [2]

Maximum joint profit: if the two groups of boys joined together they could gain most profit from the experiment(er) as a whole.
Maximum in-group profit: the boys could choose the greatest amount but the out-group boys would receive quite a high amount too.

Just for info (no marks): **Maximum difference:** the boys choose a lesser amount which maximises the difference between them and the out-group.

1 mark for each correct answer.

(b) Of the three choices, which did the boys make and what does this choice tell us about the behaviour of the boys? [2]

The boys chose the maximum difference option.

1 mark for correct answer.

What this tells us: they show in-group favouritism and out-group discrimination and prefer to maximise difference between groups even though they could have had a greater reward.

1 mark for maximum difference and 1 mark for explanation.

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13 From the study by Hraba and Grant on doll choice:

(a) What were Hraba and Grant trying to measure with the questions they asked? [2]

Most likely:
Racial preference, racial awareness or knowledge, and self-identification.

1 mark for each correct identification up to 2 max, or 2 marks for one identification in detail.

(b) How did Hraba and Grant measure the children's everyday 'behavioural consequences of racial preference and identification'? [2]

Hraba and Grant asked the children to name their best friends and to indicate each friend's race. The teachers were also asked to provide the same information for each child.

1 mark for 'friends', 1 mark for 'teachers', 2 marks for elaboration of either.

14 The study by Rosenhan (sane in insane places) produced some interesting findings.

(a) Suggest why Rosenhan did not use a self report interview or questionnaire to gather data. [2]

Most likely:
- If an interview or questionnaire were used then the participants would know they were taking part in a study and may respond to demand characteristics.
- The answers given would be that they would be able to spot pseudo-patients.
- This would result in false results and the study would not measure what it was claiming to measure.

1 mark partial, 2 marks elaboration.

(b) Suggest <u>one</u> advantage of the method Rosenhan did use to gather data. [2]

Most likely:
- observation gathers objective data;
- the participants did not know they were being observed;
- the observation was conducted in a real-life setting.

1 mark partial (e.g. it is unethical), 2 marks elaboration (e.g. specific ethical issue with detail).

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15 All studies raise some ethical issues. Outline <u>two</u> ethical issues raised by the study of multiple personality disorder by Thigpen and Cleckley. [4]

Most likely:

- Confidentiality: no participant was identified by Thigpen and Cleckley. Christine Sizemore later identified herself.
- Deception: no participant was deceived, but were Thigpen and Cleckley?
- Harm: no participant was harmed in any way.
- Consent: the participant gave consent.
- Withdrawal: the participant would have the right to withdraw.

NB 'moral issues' also credited, such as debate between Eve as patient or participant.

1 mark partial (e.g. issues identified), 2 marks elaboration (related to study).

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Section B (40 marks)

Answer either Question 16 or Question 17 in this section.

16 Psychologists often make statements about how most people behave most of the time. These statements are called generalisations.

Choose any one of the studies from the list below and answer the questions which follow.

Deregowski (picture perception)
Haney, Banks and Zimbardo (prison simulation)
Gould (intelligence testing)

(a) Describe the procedure of your chosen study. [10]

Deregowski: various procedures. Anecdotal evidence from Robert Laws, Mrs Fraser and 'Other'. Empirical evidence from Hudson: man/antelope/elephant, construct cube, draw two-pronged trident. Also split-style.
Haney: sample selected, allocated as prisoner or guard. Arrested at home, taken to police station then mock prison. Deloused, stripped etc.
Gould: literate army recruits given army alpha test, illiterate given army beta test. Failures on alpha test given beta test. Interviews for some failures.

No answer or incorrect answer. [0]

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

Attempt to outline some of 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]

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

Deregowski: picture perception is inherited. 2-dimensional perceivers prefer split-style.
Haney: explanation is situational rather than dispositional. People will adopt roles.
Gould: intelligence is learned. People will try to impose prejudices on others.

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]

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

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]

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(d) Suggest changes to your chosen study that would allow generalisations about human behaviour and experience to be made and say what these generalisations are. [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 suggestions, 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]

17 One way of carrying out research in psychology is to use the experimental method.

Choose any <u>one</u> of the studies from the list below and answer the questions which follow.

Bandura, Ross and Ross (aggression)
Piliavin, Rodin and Piliavin (subway Samaritans)
Schachter and Singer (emotion)

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

Bandura: Children do imitate. Boys more physically aggressive; girls more verbally aggressive. Evidence of same sex modelling.
Piliavin: Frequency of helping: help given spontaneously 62 times out of 65 for ill and 19 times out of 38 for drunk. Speed of helping: median helping time 5 secs for ill, 109 secs for drunk. Race of helper: 45% black and 55% white for ill. Same race helping for drunk. Sex of helper: men much more likely to help than women.
Schachter: Epinephrine-misinformed and epinephrine-ignorant copied behaviour of stooge. Epinephrine-informed and control group did not.

No answer or incorrect answer. [0]

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

Attempt to outline some of 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]

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(b) Describe the procedure of your chosen study, explaining how the experimental method was used. [10]

Bandura: Had independent variable, dependent variable, controls and study performed in a laboratory.
Piliavin: Had independent variable, dependent variable, controls and study performed in the field.
Schachter: Had independent variable, dependent variable, controls and study performed in a laboratory.

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. **NB** Max 6 marks if no explanation of how experimental method used. [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]

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(c) Using your chosen study as an example, what are the strengths and weaknesses of the experimental method? [10]

Most likely answers (any appropriate answer receives credit):
Advantages:
The manipulation of one variable (independent variable) whilst controlling irrelevant variables means that cause and effect are much more likely to be shown.
The controlling of extraneous variables means results are more valid (measure more likely to measure what it claims) and reliable (can replicate same variables again).
The experimental method is much more likely to produce quantitative data – statistics can be applied, etc. (see quantitative data sheets).
Controlling variables is reductionist – it is unlikely that any behaviour would exist in isolation from others.
Disadvantages:
The task participants are required to perform may not be true to real life. The task would lack ecological validity. As the study is conducted in a laboratory then the setting is low in ecological validity too.
The setting in which the study is performed (usually a laboratory) may result in demand characteristics where the participants know they are involved in a study and behave in ways to please or 'mess up' the experiment.
In order for the independent variable to be isolated, participants may be deceived about the true nature of the study. There may be other ethical issues involved.
Due to the nature of the method, it is more likely that the data will be snapshot (rather than longitudinal).
The experimental method is much less likely to produce qualitative data. Any explanation of why a participant behaved in a particular way may not be known.

No answer or incorrect answer. [0]

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

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

Strengths and weaknesses, 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 strengths and weaknesses (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]

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(d) Suggest an alternative way of gathering data for your chosen study and say what effect, if any, this would have on the results. [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 suggestions, 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]

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