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

9698/13 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 October/November 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 (60 marks)

Answer all the questions in this section.

1 The study by Loftus and Palmer on eyewitness testimony used an independent groups design.

(a) What is an independent groups design and what is a repeated measures design? [2]

Most likely:
An independent groups design is where participants perform in different conditions of the independent variable.
A repeated measures design is where the same participant performs in all the conditions of the independent variable.

1 mark for each correct answer.

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

Most likely:
- The participant would realise the nature of the study and not behave naively.
- The participant might give the same answer for each condition.
- The participant may become bored doing the study too many times.

1 mark partial, 2 marks expansion.

2 The study by Baron-Cohen, Leslie and Frith on autism involved a number of controls. Outline two controls that were applied in this study. [4]

Most likely:
A control to ensure as much is standardised as possible for all participants.
- Sally and Anne were used for all the children.
- The procedure was the same for all the children.
- All children were asked the naming question/memory question/reality question.
- The equipment (marble, basket) was always the same.

1 mark partial, 2 marks full.

3 The study by Gardner and Gardner on Washoe was conducted in a laboratory.

(a) Suggest why the study was not done as a field experiment. [2]

Most likely:
- It would have been impossible to teach Washoe sign language in a natural environment.
- The Gardners would not have been able to control Washoe's behaviour (she might bring her friend for tea).
- The Gardners would not have been able to record Washoe's signing accurately.
- Washoe might have decided not to participate in the study and 'wandered off'.

1 mark partial, 2 marks elaboration.

© University of Cambridge International Examinations 2011

(b) Suggest <u>one</u> problem with studying animals in a laboratory. [2]

Most likely:
- The behaviour of the animal will change because it is not in a natural environment.
- The animal will be required to perform some task that is not part of a natural routine.
- The animal will be isolated from other members of its species/its family.
- Any other appropriate answer credited.

1 mark partial, 2 marks elaboration.

4 Bandura, Ross and Ross were behaviourists conducting the study on aggression to support one of their assumptions about *all* behaviour.

(a) Give <u>one</u> assumption made by Bandura, Ross and Ross about all behaviour. [2]

Most likely:
- that all behaviour is learned and not inherited;
- that a child at birth is like a blank slate;
- any other behaviourist assumption.

1 mark partial (all behaviour is learned), 2 marks expansion (and no behaviour is inherited).

NB no marks for hypotheses or aims from the study.

(b) To what extent did the findings of the study support this assumption? [2]

Most likely:
The findings did support the assumption (1 mark) because… (for 1 more mark)
The behaviour of the children generally copied that of the model. Specific examples could be given by candidates.

5 In their study, Hodges and Tizard interviewed the ex-institutional children and their parents.

(a) What was the difference between what the children said and what their parents said about having a special friend? [2]

Most likely:
- 16 children said they had a definite special friend (they may not have);
- 10 parents said the children had a special friend.

1 mark partial, 2 marks expansion.

(b) Give <u>one</u> explanation for this difference. [2]

Most likely:
- children may be giving a socially desirable answer (they may not actually have a special friend);
- parents may not know about a special friend.

1 mark partial, 2 marks expansion.

© University of Cambridge International Examinations 2011

6 The study by Dement and Kleitman on sleep and dreaming involved an electroencephalogram (EEG).

(a) What did Dement and Kleitman use the electroencephalogram to measure? [2]

An EEG usually measures the electrical activity of the brain.
Dement and Kleitman used the EEG to measure eye movements.
Dement and Kleitman used the EEG to measure the electrical activity of the brain/REM and NREM.

1 mark partial, 2 marks expansion.

(b) Suggest <u>one</u> advantage of using scientific equipment in psychological experiments. [2]

Most likely:
allows precise and accurate measurements not otherwise possible;
allows quantitative data and so replication, comparison;
recordings are reliable.

1 mark partial, 2 marks expansion.

7 The study by Sperry involved split brain patients.

(a) Why were the experiments performed by Sperry not true to real life? [2]

Most likely:
All the experiments were artificial because the experiments isolated eyes and isolated visual fields.
Any other appropriate answer with elaboration. (2 marks)
They were performed in a laboratory. (1 mark)

(b) Explain how split brain patients would behave in real life. [2]

Most likely:
They would have no problems at all because participants could look at any object with both eyes and therefore with both visual fields and so name, recall and draw all items.

1 mark partial, 2 marks expansion.

8 From the study by Schachter and Singer on emotion:

(a) Suggest <u>one</u> generalisation that we can make about emotion for *all* people. [2]

Most likely:
- Emotion consists of a physiological component and a cognitive component.
- If we have physiological arousal we will seek a reason to explain that arousal.
- Credit any other appropriate answer.

1 mark partial, 2 marks elaboration.

© University of Cambridge International Examinations 2011

(b) Suggest why generalisations about physiological processes are more likely to be true than generalisations about social behaviour. [2]

Most likely:
Physiological processes happen in all people, except for rare abnormalities. Basic physiological processes are inherited. Social processes are often learned, so there is much more cultural variation.

1 mark partial, 2 marks elaboration.

9 All studies in psychology raise ethical issues. Outline <u>two</u> ethical issues in the study by Raine, Buchsbaum and LaCasse on brain scans. [4]

Most likely:
- Confidentiality: no participant was identified.
- Deception: no participant was deceived.
- Harm: no participant was harmed in any way.
- Consent: the controls would give their full informed consent. The murderers would give their consent if it helped them get off the murder charge. But what if they were insane?
- Withdrawal: all participants would have the right to withdraw.
- Debrief: all participants would have been debriefed.

1 mark partial, 2 marks elaboration.

10 In the study by Milgram on obedience to authority, of the 40 participants 14 stopped at 300 volts or before, whilst 26 participants continued to 450 volts.

(a) Give <u>one</u> reason why some participants continued to 450 volts. [2]

Most likely:
- pressure of situation (laboratory, university, received payment);
- pressure of experimenter (scientist, authority figure, giving prods);
- pressure to contribute to scientific knowledge.

1 mark partial, 2 marks full.

(b) Give <u>one</u> reason why some participants stopped before 450 volts. [2]

Most likely:
- moral conflict too strong, despite pressures: ingrained tendency not to harm other people;
- costs outweigh benefits: it wasn't worth taking a life just for the gain in knowledge.

1 mark partial, 2 marks full.

© University of Cambridge International Examinations 2011

11 In the prison simulation study by Haney, Banks and Zimbardo:

(a) What was the dispositional hypothesis that was proposed? [2]

The dispositional (within people) hypothesis states that the terrible state of the penal system, in particular its dehumanising effect on both prisoners and guards, is determined by the nature of the prisoners and guards themselves. The prison itself is not to blame (situational attribution).

1 mark partial, 2 marks elaboration.

(b) To what extent did the results of the study support the dispositional hypothesis? [2]

No, the dispositional hypothesis was not supported. 'Normal' participants (the prisoners and guards) behaved as they did because of the **situation** they were in.

1 mark partial, 2 marks elaboration.

12 The study by Piliavin, Rodin and Piliavin on subway Samaritans is a snapshot study.

(a) Give <u>one</u> advantage of snapshot studies using this study as an example. [2]

Most likely:
Advantage: a quick way to collect data, especially if long-term development is not relevant.
Example: data could be recorded every 7.5 minutes.

Advantage: usually collect quantitative and objective data.
Example: observers recorded frequency of helping, speed of helping, etc.

Advantage: can be good to get preliminary evidence before getting locked into expensive and time-consuming longitudinal work.
Example: supported the arousal/cost-benefit explanation of emergencies.

1 mark advantage, 1 mark example.

(b) Give <u>one</u> disadvantage of snapshot studies using this study as an example. [2]

Most likely:
Disadvantage: usually collect only quantitative data. They may ignore reasons why behaviour is performed.
Example: no one was asked why they helped or did not help.

Disadvantage: they isolate behaviour from wider social context; they are reductionist.
Example: people may behave differently in different social situations.

Disadvantage: they sample behaviour at that time only – result may depend on mood at time.
Example: participant may or may not have helped at that moment; may behave differently at another time.

1 mark disadvantage, 1 mark example.

© University of Cambridge International Examinations 2011

13 In the study on intelligence testing by Gould, some army recruits were given the army beta test. Briefly describe <u>two</u> types of question from the army beta test giving an example of each. [4]

Army beta test had seven parts (but not all identified in the study):
Test 1: run a maze
Test 2: count the number of cubes
Test 3: find the next in the series
Test 4: translate the numerals into symbols
Test 5: identify what is missing.

1 mark for identification of test, 1 mark for example.

14 The study by Rosenhan (sane in insane places) involved observation.

(a) Outline <u>one</u> advantage of using observation to gather data in this study. [2]

Most likely:
- Participant observation was used and the participants did not know they were being observed, assuming the 'participant' was one of them.
- The observation was naturalistic as it was in a real-life setting and the participants did not know they were being observed.

1 mark partial, 2 marks elaboration.

(b) Outline <u>one</u> disadvantage of using observation to gather data in this study. [2]

Most likely:
- Although Rosenhan took notes, there would not be the usual response categories.
- Rosenhan could not record all behaviours all the time, only partially.
- The observation was unethical as the participants were being deceived.

1 mark partial, 2 marks elaboration.

© University of Cambridge International Examinations 2011

15 Thigpen and Cleckley (multiple personality disorder) used a number of tests:

(a) Identify <u>one</u> psychometric test and <u>one</u> projective test that were used in the study. [2]

Psychometric:
- IQ test: Wechsler-Bellevue Intelligence Scale [white 110, black 104];
- Wechsler memory test [black= same as IQ, white = far above IQ].

Projective:
- Rorschach;
- drawings of human figures.

NB EEG test is neither psychometric nor projective.

1 mark identification of each test.

(b) Describe the findings of <u>either</u> the psychometric <u>or</u> the projective test. [2]

Most likely:
- IQ test [white 110, black 104];
- Wechsler memory test [black = same as IQ, white = far above IQ];
- Projective: repression in Eve White, regression in Eve Black. The **Rorschach** record of Miss Black is far healthier than that of Mrs White. Miss Black has a hysterical tendency, while Mrs White's shows anxiety, obsessive-compulsive traits, rigidity and an inability to deal with her hostility.

1 mark partial, 2 marks elaboration (e.g. for IQ, White = 110, Black = 104 scores 2/2).

© University of Cambridge International Examinations 2011

Section B (40 marks)

Answer either Question 16 or Question 17 in this section.

16 Self report measures usually involve obtaining data from participants either by interview, questionnaire or sometimes a combination of both.

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

Hraba and Grant (doll choice)
Freud (little Hans)
Deregowski (picture perception)

(a) Describe the self report measures used in your chosen study. [10]

Most likely answers (any appropriate answer receives credit):
Hraba: Children given 8 questions to determine racial awareness, identification and preference. Use of 4 dolls identically dressed. Children forced to choose a doll in response to the question.
Freud: Conversations between Hans and his father and then father with Freud.
Deregowski: Participants asked questions about various pictures.

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]

© University of Cambridge International Examinations 2011

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

Hraba: 1939 and 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.
Freud: Findings support theory: Hans in phallic stage and Oedipus complex. Evidence of this credited as findings, e.g. giraffe episode etc.
Deregowski: Participants perceived pictures differently from 'Westerners'. Sometimes tasks were completed better (two-pronged trident), sometimes differently (cube) and sometimes they were wrong (man spearing elephant).

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 using self report measures? [10]

Most likely answers (any appropriate answer receives credit):
Advantages:
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.
The data obtained may be 'rich' and often very detailed. Data is often qualitative but may also be quantitative depending on the type of question.
Relatively large numbers of participants can be handled relatively quickly.
Disadvantages:
Data may be unique and not comparable with that from other studies.
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.

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 a different method 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]

© University of Cambridge International Examinations 2011

17 When carrying out research, psychologists manipulate the independent variable and try to control as many irrelevant variables as possible.

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

Tajfel (intergroup categorisation)
Samuel and Bryant (conservation)
Loftus and Palmer (eyewitness testimony)

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

Tajfel: Boys chose maximum difference rather than maximum joint profit or maximum in-group profit.
Samuel: Age: children under 7 years can conserve, but fewer errors the older the child.
Question: fewer errors with one question compared with two questions.
Materials: best on number, better on mass and most errors on volume.
Loftus: Experiment 1: smashed 40.8, collided 39.3, bumped 38.1, hit 34.0, contacted 31.8.
Experiment 2: smashed 16/50, hit 7/50, control 6/50 saw broken glass that did not exist.

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]

(b) Outline the controls that were used in your chosen study. [10]

Tajfel: Presentation of dots or Klee/Kandinsky same. Instructions and experimenters and matrices.
Samuel: All children follow same procedure for all materials and question type.
Loftus: All participants watch same videotapes (lots of aspects here). No actual accident. All in same environment. All get same questions about accident.

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 applying controls in psychological studies? [10]

Most likely answers (any appropriate answer receives credit):
Advantages:
More control over extraneous variables, more likely dependent variable is due to independent variable.
Participants behave in predictable ways; fewer demand characteristics.
Disadvantages:
Isolates behaviour from real life where many other variables will exist (is reductionist and lowers ecological validity).
Participants' behaviour is less likely to be natural.
More extraneous variables, confounding more likely.

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 a different method 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]

© University of Cambridge International Examinations 2011