UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the May/June 2010 question paper

for the guidance of teachers

9698 PSYCHOLOGY

9698/21 Paper 21 (Core Studies 2), maximum raw mark 50

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.

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UNIVERSITY of CAMBRIDGE
International Examinations

1 The study by Deregowski is a review of studies on picture perception in different cultures.

(a) Describe a finding of *one* cross-cultural study included in the Deregowski review. [2]

Any study (anecdotal or empirical) included in the Deregowski review. Includes reports by: Robert Laws; Mrs Fraser, 'other reports'; Hudson's studies on antelope/elephant/man, 'two-pronged trident', cube construction; preference for split-style.
1 mark partial, 2 marks full.

(b) Explain whether this finding supports the nature or the nurture point of view. [2]

All findings support the nurture viewpoint as all show that aspects had to be learned before they could be perceived.
1 mark partial, 2 marks explanation.

2 The study by Samuel and Bryant on conservation is a snapshot study.

(a) Explain why Samuel and Bryant used a snapshot study rather than a longitudinal study. [2]

Most likely: studying children over a period of time (aged 5 to 8) would take four years as a minimum. Snapshot study of different age groups much more efficient.
1 mark partial explanation, 2 marks expansion.

(b) Give *one* disadvantage of Samuel and Bryant's use of a snapshot study. [2]

Most likely:
- does not track developmental changes of any individual over time;
- children may perform differently from usual at the time of the study;
- cannot conclude specifically when a stage transition occurs.

1 mark partial description of study, 2 marks expansion.

3 From the study by Bandura, Ross and Ross on the imitation of aggression:

(a) Give *two* of the types of behaviour (the response categories) that the observers looked for when they observed the children. [2]

Any from: imitative (physical) aggression; imitative (verbal) aggression; imitative non-aggressive verbal; mallet aggression; sits on bobo; punches bobo; non-imitative aggression; aggressive gun play.
1 mark partial e.g. 'Physical aggression' even if not full answer.

(b) Describe how Bandura, Ross and Ross checked the reliability of their observations. [2]

Reliability checked by inter-rater reliability – two observers were used. In this study correlation .89 between ratings (coefficient not needed or reference to this study for 2 marks).
1 mark partial e.g. 'by inter-rater reliability'; 2 marks expansion, such as explanation of inter-rater reliability.]

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4 Piliavin, Rodin and Piliavin (subway Samaritans) used a field experiment rather than a laboratory experiment.

(a) Give *one* reason why diffusion of responsibility has been found in laboratory experiments but was not found in the Piliavin, Rodin and Piliavin field experiment. [2]

Most likely answers:
- participants knew they were taking part in a lab study;
- participants were not in same room as victim;
- participants were not face-to-face with victim.

1 mark partial description, 2 marks expansion.

(b) Suggest *one* problem with conducting social psychological research in a laboratory. [2]

Most likely answers:
- social psychology is complex, reducing to laboratory difficult;
- controlling variables makes the study artificial;
- creating realistic situation may not be possible;
- participants know they are taking part in a laboratory experiment.

1 mark partial description, 2 marks expansion.

5 Psychiatrists have to make decisions about sanity and insanity in their everyday working life. In the study by Rosenhan the psychiatrists admitted the pseudo-patients to hospital with an incorrect diagnosis of schizophrenia.

(a) Give *one* reason why the psychiatrists made this mistake. [2]

Most likely:
- psychiatrists were uncertain of sanity or insanity so made a type two error (safe than sorry);
- psychiatrists are incompetent (incorrect but implied in study, therefore credit).

1 mark partial description, 2 marks expansion.

(b) Explain why it may be an advantage for psychiatrists to risk making this kind of mistake in their everyday work. [2]

Most likely:
- it ensures no insane person is released 'onto the streets' before being assessed over time;
- psychiatrists play safe making type two errors rather than type one errors; no-one can accuse of malpractice.

  1 mark partial, 2 marks explanation.

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6 Psychological studies carried out in a laboratory do not often relate to everyday life.

Using the studies in the list below, answer the questions which follow.

Milgram (obedience)
Haney, Banks and Zimbardo (prison simulation)
Loftus and Palmer (eyewitness testimony)
Tajfel (intergroup categorisation)

(a) How was each of the studies different from everyday life? [10]

Emphasis on study. Answers must focus specifically on study. Only one comment from each study required.

Most likely answers (any appropriate answer receives credit):
Milgram: giving electric shocks in a laboratory different from real life obedience.
Haney: prison simulation is not a real prison; participants are not real prisoners.
Loftus: watching film clips of accidents unlike watching real car crash. No emotion, different panorama.
Tajfel: giving point to boys via matrices in a laboratory different from real life discrimination.

For each study:

No answer or incorrect answer.	[0]
Identification of point (e.g. a sentence) relevant to question but unrelated to study OR comment from study but unrelated to question.	[1]
Brief description of point relevant to question but with no analysis (comment with no comprehension).	[2]
Description of point relevant to question with analysis (comment with comprehension).	[3]

[max 10]

(b) Describe the problems psychologists may have if they study behaviour in everyday settings. [10]

Emphasis on problem. Answers to be supported with examples from any combination of studies.

Most likely answers (any appropriate answer receives credit):
Problem: one variable cannot be isolated and so cause and effect less likely to be determined.
Problem: control of extraneous variables is very difficult.
Problem: recording of behaviour may be difficult – e.g. obstructions.
Problem: ethical problems: participants are not giving consent, they may be deceived, they do not have the right to withdraw, there may be no debrief.

For each problem up to a maximum of FOUR problems:

No answer or incorrect answer.	[0]
Identification of problem relevant to question with NO supporting example from studies OR a general problem with a study.	[1]
Description of problem (with reference to supporting example from studies).	[2]
Description of problem **with** supporting example from studies applied effectively.	[3]

[max 10]

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(c) 'Studies conducted in the laboratory can tell us far more about behaviour and experience than studies carried out in everyday settings.' To what extent do you agree with this statement? [10]

Emphasis on comment. Answers supported with named (or other) studies/evidence.

No answer or incorrect answer.	[0]
One or two general statements which may be inaccurate, incomplete or muddled.	[1–2]
a. One or two general comments which are focused on question but are basic and lacking in detail. b. Comments have sparse explanation or supporting statements and are lacking in detail and understanding. c. There may be no supporting psychological evidence for three marks or vague reference for four marks. d. There may be no arguments or evaluation for three marks or for four marks arguments are superficial and evaluation is sparse or generalised.	[3–4]
a. A number of points are made each of which is focused on question and is generally accurate. b. Points have some explanation and/or supporting comment. There is reasonable detail and understanding. Explanation may not be consistent. c. Psychological evidence is referred to occasionally but it is not developed. d. There may be one or two arguments (or more but which are superficial) and evaluative comments may be basic or generalised and lack coherence. There may be an imbalance in arguments presented. OR as 7–8 marks but with only 2 points.	[5–6]
a. A range of different points (best four) is made each of which is focused on question and is accurate. b. Detailed and clear explanation with understanding good throughout. c. Effective psychological evidence is frequent. d. Each point has some argument and evaluative comment. However, there is a lack of consistent argument. There may be an imbalance in arguments presented.	[7–8]
a. A range of different points (best four) is made each of which is focused on question and is accurate. b. Detailed answer where clarity of explanation is very good throughout and understanding extends beyond specific studies. c. Psychological evidence is used effectively throughout the answer. d. There is a consistent argument, evaluative comments are well considered and there is a balance of arguments. There may well be a consideration of the implications and effects.	[9–10]

[max 10]

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7 Psychometric measurement attempts to give some insight into human behaviour and experience (for example intelligence and personality) through the use of reliable and standardised tests.

Using the studies in the list below, answer the questions which follow.

Baron-Cohen, Leslie and Frith (autism)
Hodges and Tizard (social relationships)
Gould (intelligence testing)
Thigpen and Cleckley (multiple personality disorder)

(a) How was psychometric measurement used in each of the studies? [10]

Emphasis on study. Answers must focus specifically on study. Only one comment from each study required.

Most likely answers (any appropriate answer receives credit):
Baron-Cohen: IQ test to determine intelligence levels of each group. Lack of theory of mind not due to intelligence.
Hodges and Tizard: used standardised Rutter scales both A & B.
Gould: 'intelligence' test to categorise recruits.
Thigpen & Cleckley: IQ test, results of 110 and 104.

For each study:

No answer or incorrect answer.	[0]
Identification of point (e.g. a sentence) relevant to question but unrelated to study OR comment from study but unrelated to question.	[1]
Brief description of point relevant to question but with no analysis (comment with no comprehension).	[2]
Description of point relevant to question with analysis (comment with comprehension).	[3]

[max 10]

(b) What problems may psychologists have when they investigate behaviour using psychometric measurement? [10]

Emphasis on problem. Answers to be supported with examples from any combination of studies.

Most likely answers (any appropriate answer receives credit):
Problem: people often generalise, may misinterpret results and/or make ethnocentric assumptions based on test results.
Problem: the measure may not be valid. What does an intelligence test measure?
Problem: a test may not be culture fair. Not all people may be familiar with the tests or test items.
Problem: response bias.
Problem: familiarity with test improves score.

For each problem up to a maximum of FOUR problems:

No answer or incorrect answer.	[0]
Identification of problem relevant to question with NO supporting example from studies.	[1]
Description of problem (with reference to supporting example from studies).	[2]
Description of problem **with** supporting example from studies applied effectively.	[3]

[max 10]

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(c) How useful is psychometric measurement? Give reasons for your answer. [10]

Emphasis on comment. Answers supported with named (or other) studies/evidence.

No answer or incorrect answer.	[0]
One or two general statements which may be inaccurate, incomplete or muddled.	[1–2]
a. One or two general comments which are focused on question but are basic and lacking in detail. b. Comments have sparse explanation or supporting statements and are lacking in detail and understanding. c. There may be no supporting psychological evidence for three marks or vague reference for four marks. d. There may be no arguments or evaluation for three marks or for four marks arguments are superficial and evaluation is sparse or generalised.	[3–4]
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a. A range of different points (best four) is made each of which is focused on question and is accurate. b. Detailed and clear explanation with understanding good throughout. c. Effective psychological evidence is frequent. d. Each point has some argument and evaluative comment. However, there is a lack of consistent argument. There may be an imbalance in arguments presented.	[7–8]
a. A range of different points (best four) is made each of which is focused on question and is accurate. b. Detailed answer where clarity of explanation is very good throughout and understanding extends beyond specific studies. c. Psychological evidence is used effectively throughout the answer. d. There is a consistent argument, evaluative comments are well considered and there is a balance of arguments. There may well be a consideration of the implications and effects.	[9–10]

[max 10]

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8 Some of the core studies take a physiological approach to human behaviour and experience. This approach considers how our hormones, nervous system and functions of the brain interact to determine our behaviour.

Using the studies in the list below, answer the questions which follow.

Schachter and Singer (emotion)
Sperry (split brain)
Dement and Kleitman (sleep and dreaming)
Raine, Buchsbaum and LaCasse (brain scans)

(a) Describe what each study tells us about physiological psychology. [10]

Emphasis on study. Answers must focus specifically on study. Only one comment from each study required.

Most likely answers (any appropriate answer receives credit):
Schachter and Singer: emotion has physiological and psychological component.
Sperry: behaviour determined by interaction of hemispheres. Localisation of function.
Dement and Kleitman: process of dreaming, REM, NREM, etc.
Raine, Buchsbaum and LaCasse: functions of areas of brain.
NB Question states 'tells us about physiological psychology', and there must be some reference to this in answer to gain max mark of 3.

For each study:

No answer or incorrect answer.	[0]
Identification of point (e.g. a sentence) relevant to question but unrelated to study OR comment from study but unrelated to question.	[1]
Brief description of point relevant to question but with no analysis (comment with no comprehension).	[2]
Description of point relevant to question with analysis (comment with comprehension).	[3]

[max 10]

(b) What are the strengths and weaknesses of the physiological approach? [10]

Emphasis on problem. Answers to be supported with examples from any combination of studies.

Most likely answers (any appropriate answer receives credit):
Strength: can be more 'scientific'.
Strength: can use objective recording measures e.g. EEG.
Strength: can generalise to all.
Weakness: can be reductionist: behaviour is more than just physiology.
Weakness: subjective data equally important.

For each problem up to a maximum of FOUR problems:

No answer or incorrect answer.	[0]
Identification of strength/weakness relevant to question with NO supporting example from studies OR a general problem with the study.	[1]
Description of strength/weakness (with reference to supporting example from studies).	[2]
Description of problem **with** supporting example from studies applied effectively.	[3]

[max 10]

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(c) 'All behaviour is caused by physiological processes.' To what extent do you agree with this statement? [10]

Emphasis on comment. Answers supported with named (or other) studies/evidence.

No answer or incorrect answer.	[0]
One or two general statements which may be inaccurate, incomplete or muddled.	[1–2]
a. One or two general comments which are focused on question but are basic and lacking in detail. b. Comments have sparse explanation or supporting statements and are lacking in detail and understanding. c. There may be no supporting psychological evidence for three marks or vague reference for four marks. d. There may be no arguments or evaluation for three marks or for four marks arguments are superficial and evaluation is sparse or generalised.	[3–4]
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[max 10]

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