

# UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary and Advanced Level

## MARK SCHEME for the November 2004 question paper

### 9698 PSYCHOLOGY

**9698/01 Paper 1 (Core Studies 1), maximum raw mark 100**

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

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

CIE is publishing the mark schemes for the November 2004 question papers for most IGCSE and GCE Advanced Level syllabuses.



**Grade thresholds** taken for Syllabus 9698 (Psychology) in the November 2004 examination.

	maximum mark available	minimum mark required for grade:		
		A	B	E
Component 1	100	74	64	38

The thresholds (minimum marks) for Grades C and D are normally set by dividing the mark range between the B and the E thresholds into three. For example, if the difference between the B and the E threshold is 24 marks, the C threshold is set 8 marks below the B threshold and the D threshold is set another 8 marks down. If dividing the interval by three results in a fraction of a mark, then the threshold is normally rounded down.

November 2004

**GCE AS/A LEVEL**

MARK SCHEME

MAXIMUM MARK: 100

SYLLABUS/COMPONENT: 9698/01

PSYCHOLOGY

Core Studies 1

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### Section A

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

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

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 description of study only, 2 marks study plus finding. **[2]**

**(b) Say whether this finding supports either the nature or the nurture point of view and explain why.**

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 full. **[2] [Total 4]**

**2 In the study by Baron-Cohen, Leslie and Frith on autism, give four features that can be used to identify autism.**

Most likely answers:

No theory of mind;  
 Poor verbal and non-verbal communication;  
 Repetitive behaviour;  
 Like routine; etc.

1 mark for each.

No credit for naming question etc. **[4 x 1] [Total 4]**

**3 In project Washoe by Gardner and Gardner one aspect of Washoe's signing was her ability to show transfer.**

**(a) In this study what is meant by transfer?**

Transfer: the use of one sign for all variations. From the text "...transfer her signs spontaneously to new members of each class of referents". E.g. sign for flower transferred to all flowers whether indoor, outdoor or in pictures.

1 mark for partial definition/explanation.

2 marks for full explanation. **[2]**

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(b) Give one example of Washoe's signing that showed transfer.

One is sign for flower as flowers occur indoors, outdoors and in pictures.

Second is dog - sign used when dog barks.

Third is 'key' sign which was used for all keys and locks.

1 mark for naming (e.g. flower)

2 marks for example and explanation.

[2] [Total 4]

4 From the study by Hodges and Tizard on social relationships, the ex-institutional children were matched with a comparison group:

(a) Name two ways in which the children were matched.

Ex-institutional and comparison groups matched on: age, sex, one-or two-parent family, occupational classification of main breadwinner, position in family. Name only required.

1 mark for each.

[1+1]

(b) In any psychological study, why are participants matched?

To control as many participant and other variables as possible.

1 mark partial, 2 marks full.

[2] [Total 4]

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

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

Any two from:

imitative physical;  
 imitative verbal;  
 imitative non-aggressive verbal;  
 mallet aggression;  
 sits on bobo;  
 punches bobo;  
 non-imitative aggression;  
 aggressive gun play.

Identification only for name only required

1 mark for each.

No marks for non-response categories e.g. 'physical aggression' [1+1]

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

Reliability checked by inter-rater reliability - two observers were used.  
Correlation .89 between ratings. (coefficient not needed for 2 marks)

1 mark=partial; 2 marks=full with detail/understanding [2] [Total 4]

- 6 Freud is often criticised for the methods he used to gather evidence for his theories. Using examples from the case study of Little Hans, give one strength of Freud's methods and one weakness.

Any one strength from: richness of data; any aspect  
Any one weakness: Hans abnormal? subjectivity of interpretation

Any appropriate answer to receive credit

1 mark strength or weakness not related to study

OR

point about study not related to question

2 marks strength and weakness and related [2+2] [Total 4]

- 7 In the study by Schachter and Singer on emotion:

- (a) What are the two factors in their two-factor theory of emotion?

Arousal/physiological component and cognitive/psychological component.

Name only required, 1 mark for each [1+1]

- (b) How was each factor manipulated in the study?

Arousal manipulated by injection; cognition manipulated by angry or euphoric situation.

1 mark partial, 2 marks full [2] [Total 4]

- 8 The study by Sperry involves presenting images to the left visual field (LVF). These images are transmitted through visual pathways to the brain.

- (a) On what side of the brain would an image presented to the LVF be received?

Information presented to the LVF goes to the right hemisphere.

2 marks for naming [2]

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- (b) How did participants respond when asked what object had been presented to the LVF?

Participants could not name the object (no language function in right hemisphere and could not transfer to left hemisphere).

1 mark partial, 2 marks full [2] [Total 4]

- 9 In the study by Raine, Buchsbaum and LaCasse (brain scans), although the correlational data suggests brain dysfunction *may* be responsible for the subjects committing murder, the authors have concerns about the implications of the findings. Outline two of these concerns.

Five possibilities to choose from:

Cannot assume cause and effect;  
Does not show that NGRI's are responsible for their actions;  
Does not say anything about the causes of brain differences;  
Cannot generalise from NGRI's to other types of offenders;  
Cannot generalise to other types of crime.

1 mark if concern is procedure, 2 marks full [2+2] [Total 4]

- 10 In the study by Milgram on obedience to authority:

- (a) Outline one ethical guideline that was broken.

One from:

No informed consent (study on learning and memory);  
Lots of deception (allocation not random, shocks not real);  
Lots of harm;  
Reduced right to withdraw.

1 mark naming, 2 marks explanation of what name means [2]

- (b) Outline one ethical guideline that was not broken.

One from:

Confidentiality (no-one named);  
Debriefing (all participants were debriefed after the study).

1 mark naming, 2 marks explanation of what name means [2] [Total 4]

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- 11 The study by Haney, Banks and Zimbardo was stopped early because of the negative reactions of the prisoners due to *pathological prisoner syndrome*. Briefly describe two features of pathological prisoner syndrome.

Pathological prisoner syndrome includes perceived loss of identity (name, dress, etc.) and arbitrary control of their lives (invasion of privacy, constant surveillance and atmosphere of oppression)

1 mark partial, 2 marks full for each [2+2] [Total 4]

- 12 In Tajfel's study on intergroup discrimination:

- (a) Briefly describe the participants

Sample: 64 boys, aged 14-15 years old from one school in Bristol, England. Taken to laboratory in groups of eight; all knew each other.

1 mark for each feature, up to 2 marks maximum [2]

- (b) Outline one way in which the participants were put into groups.

Categorised by:

under- or over-estimation of dots;  
artistic preference;  
allocated randomly.

2 marks [2] [Total 4]

- 13 The following questions are taken from the IQ test described in the study by Gould:

Washington is to Adams as first is to.....;  
Crisco is a: patent medicine, disinfectant, toothpaste, food product;  
Christy Mathewson is famous as a: writer, artist, baseball player, comedian.

- (a) Identify two groups of people who scored badly on the tests.

Most likely: any two groups of immigrants or those who could not read

1 mark for naming each of two groups. [2]

- (b) Explain one example of cultural bias in the questions.

Any appropriate comment about needing experience in the US in order to know what the questions are about.

1 mark partial, 2 marks full [2] [Total 4]



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**14 The study by Hrabá and Grant on doll choice in 1969 repeated the study by Clark and Clark in 1939.**

**(a) Outline one finding that was different.**

Most likely:

In 1939 black children preferred white dolls;  
 In 1969 black children preferred black dolls.  
 In 1939 lighter skinned children were more likely to see themselves as white;  
 In 1969 they saw themselves as white.

Differences on items 1-4.

1 mark partial, 2 marks full.

**[2]**

**(b) Outline one finding that was the same.**

Most likely:

Both black and white children correctly identified white and 'coloured' dolls (question items 5 and 6) and item 7 correct identification was comparable. White children always preferred white dolls.

1 mark partial, 2 marks full.

**[2] [Total 4]**

**15 In the study on multiple personality disorder, Thigpen and Cleckley carried out a number of tests. Briefly describe the findings of two of these tests.**

Tests:

IQ test [white 110; black 104];  
 Memory test [black= same as IQ; white = far above IQ];  
 Rorschach [white = anxiety and obsessive/compulsive traits and repression,  
 black = hysterical tendency and regression];  
 EEG [black = 12.5 cps, white 11cps].

1 mark partial, 2 marks full.

No credit for mere identification of test.

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

**[2+2] [Total 4]**

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### Section B

- 16 Some studies in psychology describe behaviour and experience using numbers and statistics. This is the quantitative approach.

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

**Loftus and Palmer (eyewitness testimony)**

**Samuel and Bryant (conservation)**

**Dement and Kleitman (sleep and dreaming)**

- (a) Outline the procedure of your chosen study.

**Loftus:**

Study 1 p's watch video clip then receive one of five words.

Study 2 asked Q then return one week later. Asked 'Did you see broken glass?'

**Samuel:**

Children presented with two question formats and fixed array control, using volume mass and number for pre-transformation, transformation and post-transformation.

**Dement:**

Electrodes attached, p's woken during REM and asked to recall dream. Several variations involving estimated length of dream and words used.

No answer or incorrect answer

[0]

Anecdotal evidence, general statements, minimal detail, minimal focus.

[1-3]

Attempt to outline some of main findings though with omission of detail or lack of clarity (comment with some comprehension).

[4-6]

Main findings identified and described in good detail. Outline is clear, focused and well expressed. Good selection of findings.

[7-10]

[max mark 10]

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**(b) Describe the quantitative results of your chosen study.**

**Loftus:**

Study 1: p's with word 'smashed' = estimated speed at 40.8 mph, decreasing trend to contacted with 31.8 mph

Study 2: lots of p's said they saw broken glass that did not exist. Specific numbers in study >> tables, graphs and statistics.

**Samuel:**

Age: children of 5 and 6 years could conserve.

Material: number easiest; volume saw most errors.

Question: one question fewer errors than two question. FA control most errors.

Specific numbers in study >> tables, graphs and statistics.

**Dement:**

152 p's report dream from REM, 39 do not; 11 dream in NREM, 149 no dream from NREM. Also significant correlations between REM duration and number of words in dream narrative. Also 45 of those woken after 5 minutes said 5 minutes but 6 said 15 minutes; 47 woken after 15 minutes said 15 minutes, 13 said 5 minutes >> tables, graphs and statistics.

No answer or incorrect answer. **[0]**

Anecdotal description of generalisations, brief detail, minimal focus. **[1-3]**

Appropriate generalisations identified, description shows some understanding.

Some detail and expansion of generalisations. **[4-6]**

Appropriate generalisations identified.

Description is clear, has good understanding, is focused and well expressed.

Good detail each generalisation explained fully. **[7-10]**

**[max mark 10]**

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- (c) Using your chosen study as an example, what are the advantages and disadvantages of using the quantitative approach.

**Advantages:**

Use of numbers and statistics allows direct comparison  
Is objective/scientific data. Possible replication

**Disadvantages:**

Heavy reliance on numbers taken in snapshot study  
Does not gain information on why people behave - no explanation

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 or disadvantages only which are focused on the question.

For 4 marks as for 6-7 mark band.  
For 5 marks as for 8-10 mark band. **[4-5]**

Several advantages and disadvantages which are focused on the 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 mark 10]**

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**(d) Suggest a different approach for your chosen study and say what effect, if any, this would have on the results.**

Most likely suggestion will be use of qualitative data, but any alternative acceptable.

Effect on results must be considered.

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. **[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. **[7-10]**

**[max mark 10]**

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- 17 Psychologists sometimes gather data about behaviour and experience by observing the ways in which people behave. Such observations may be done in a laboratory or in a natural environment.

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

**Rosenhan (sane in insane places)**  
**Piliavin, Rodin and Piliavin (subway samaritans)**  
**Bandura (aggression)**

- (a) Describe how observational data was gathered in your chosen study.

**Rosenhan:**

Pseudopatients gain access to mental institutions then as participant observers record the behaviour of ward staff.

**Piliavin, Rodin and Piliavin:**

On train, victim becomes ill or drunk. Observers in carriage record behaviour of passengers on train.

**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 main findings though with omission of detail or lack of clarity (comment with some comprehension).

**[4-6]**

Main findings identified and described in good detail. Outline is clear, focused and well expressed. Good selection of findings.

**[7-10]**

**[max mark 10]**

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**(b) Describe the results of the observations in your chosen study.**

**Rosenhan:**

Staff ignored patients, particularly nurses and attendants on wards. Behaviour recorded when pseudopatients try to talk to staff.

**Piliavin, Rodin and Piliavin:**

Different figures obtained for ill and drunk, black and white. Model not needed as participants helped, showing no diffusion of responsibility.

**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 of consent, brief detail, minimal focus. **[1-3]**

Appropriate aspect identified, description shows some understanding. Some detail and expansion of consent. **[4-6]**

Appropriate aspect identified. Description is clear, has good understanding, is focused and well expressed. Good detail each aspect explained fully. **[7-10]**

**[max mark 10]**

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- (c) Using examples from your chosen study, what are the advantages and disadvantages of observing behaviour?

**Advantages:**

Those being observed behave naturally - high ecological validity  
 Behaviour has no demand characteristics - no ethics problems  
 Detailed and in-depth knowledge can be gained  
 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 or disadvantages only which are focused on question.

For 4 marks as for 6-7 mark band.  
 For 5 marks as for 8-10 mark band. **[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. **[8-10]**

Description is detailed with good understanding and clear expression.  
 The arguments are well considered and reflect understanding which extends beyond the specific study.

**[max mark 10]**



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- (d) Suggest one other way that could be used to gather data in your chosen study, and say how you think this might affect the results of the study.

Most likely suggestion will be use of another method - interview, questionnaire, laboratory experiment, etc., but any alternative acceptable. Effect on results must be considered.

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, with consideration of 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 of appropriate. **[7-10]**

**[max mark 10]**