

## **MARK SCHEME for the May/June 2006 question paper**

### **9698 PSYCHOLOGY**

**9698/01**

**Paper 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*.

The minimum marks in these components needed for various grades were previously published with these mark schemes, but are now instead included in the Report on the Examination for this session.

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

CIE is publishing the mark schemes for the May/June 2006 question papers for most IGCSE and GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



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### Section A

- 1 From the study on eyewitness testimony:**
- (a) Outline the two types of memory suggested by Loftus and Palmer.**
- Most likely: original memory, that at the time of the event. This can be modified and results in an 'after the fact' memory. **2**
- Short term and long term memory incorrect.
- 1 mark identification of one type, 2 marks description of one type.
- 2 types correctly identified 2 marks; description not necessary.
- (b) Outline how the findings of this study could be useful to police when they interview people.**
- Most likely: police should not influence witnesses by asking leading questions. Alternative – memory is not reliable. **2**
- 1 mark partial, 2 marks full.
- 2 The study by Deregowski is a review of a number of studies of picture perception in different cultures.**
- (a) Identify one cultural difference in perceptual skills.**
- Most likely: people in some cultures could not perceive 3 dimensions in 2 dimensional pictures. Any evidence can be used, either anecdotal or empirical. If no reference to pictures 1 mark maximum. **2**
- 1 mark partial, 2 marks full.
- (b) Give one problem with interpreting the results of cross-cultural studies.**
- Most likely: interpreter may have bias towards their own culture (ethnocentric); may misinterpret due to language differences. Also possible: that pictures cannot be used as a universal means of communication. **2**
- 1 mark partial, 2 marks full.
- 3 The study by Baron-Cohen, Leslie and Frith on autism involved three groups of children.**
- (a) Outline one finding that was the same between the groups of children.**
- All the children answered the naming, reality and memory question correctly. **2**
- 1 mark partial, 2 marks full.
- (b) Outline one finding that was different between the groups of children.**
- The autistic children answered the belief question incorrectly; the Down Syndrome and 'normal' children answered it correctly. 2 marks for above answer. Candidates may give numbers or percentages. This is additional. **2**
- 1 mark partial, 2 marks full.

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**4 From the study by Samuel and Bryant on conservation:**

**(a) Briefly describe one finding.**

Most likely answers: **2**

1. the older the child the more correct answers (or fewer errors);
2. conservation of mass and number easier, volume most difficult;
3. One question easier than standard Piaget two-judgement.

2 marks for a correct answer.

**(b) Suggest how one finding can be useful to teachers in a classroom.**

Most likely answer: **2**

1. teachers should be mindful of how children are asked questions.
2. teachers should teach concepts according to age (e.g. can't conserve when 5 years old).

1 mark partial, 2 marks full.

**5 Hodges and Tizard observed differences in the ex-institutional children who were restored to their biological parents and those who were adopted by new parents.**

**(a) Outline one of these differences.**

Most likely answers: restored group less attached, showed less affection and identified less to parents; difficulty with siblings. There are many differences - any acceptable. Any reference to ex-institutional or differences compared with controls = no marks. **2**

1 mark partial, 2 marks full.

**(b) Suggest one explanation for these differences.**

Most likely answers: motivation of adopted parents; financial state; fewer other children, etc. **2**

1 mark partial, 2 marks full.

**6 All studies in psychology raise ethical issues. Outline two ethical issues in the study by Sperry (split brain).**

Question is about ethical issues (not just those broken); could include confidentiality, deception, harm, right to withdraw, debriefing, etc. **2+2**

1 mark partial, 2 marks full.

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

**(a) Suggest two similarities between the experimental group and the control group.**

Three possible answers here: **1+1**

**Participants:** same sex, same age, 6 matched for schizophrenia etc.

1 mark if merely age & sex, 2 marks if state ages (34.3 yrs) or sex 39M 2F

**Procedure:** all given CPT, injection, etc.

**Results:** similarities in: temporal, cingulate, caudate, globus pallidus, midbrain & cerebellum

2 marks for identification; no description required.

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**(b) Why are control groups used in experimental research?**

Most likely: manipulate IV control variables and observe DV: cause and effect more likely. **2**

1 mark partial, 2 marks full.

**8 In the study by Milgram on obedience:**

**(a) How was the dependent variable measured?**

The DV was the level of shock intensity i.e. voltage. **2**

2 marks for correct identification of DV.

**(b) To what extent did the results of the study support Milgram's hypothesis?**

It didn't! Milgram expected that the 'Germans would be different'. He discovered that they were not, that 1960's American participants also obeyed authority. Also asked people beforehand - also thought no shocks. **2**

1 mark for yes or no answer, 2 marks for explanation.

**9 In the study by Haney, Banks and Zimbardo the guards and prisoners were given a uniform.**

**(a) Identify two features of the guard uniform.**

Any two from (one mark for each): plain khaki shirt and trousers; whistle, wooden baton, reflecting sunglasses. **1+1**

2 marks for 2 identifiers; no description required.

**(b) Identify two features of the prisoner uniform.**

Any two from (one mark for each): muslin smock, identification number on front and back, no underclothes, light chain & lock on one ankle, rubber sandals, nylon stocking cap. **1+1**

2 marks for 2 identifiers; no description required or effect (emasculatation).

**10 In the study by Piliavin, Rodin and Piliavin (subway Samaritans):**

**(a) Describe one dependent measure that was observed.**

Most likely: DV = frequency of helping; speed of responding; race of helper. **2**

1 mark partial (number helping), 2 marks full (i.e. DV as above).

No credit for IV (drunk and ill etc.)

**(b) Describe the results of one dependent measure.**

Most likely: frequency of helping: cane spontaneous help 62/65 trials; 2 drunk 19/38 trials.

Race of helper: same race helping.

Speed: before 70 seconds v after 70 seconds.

1 mark partial, 2 marks full.

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**11 From the study by Tajfel on intergroup discrimination:**

**(a) What is meant by the term ‘discrimination’?**

Specifically “discrimination is a direct function of the objective social situation, which sometimes does and sometimes does not facilitate the expression of attitudes”. More likely, candidates should be clear that discrimination (behaviour) is different from prejudice (attitude/cognition). **2**

1 mark partial (prejudice), 2 marks full.

**(b) How did the participants in the study show discrimination?**

Most likely: by allocating points to the out-group; by showing out-group discrimination; by choosing maximum difference. **2**

1 mark partial, 2 marks full.

**12 In the study on intelligence testing by Gould, some army recruits were given the army alpha test. Briefly describe two types of question from the army alpha test giving an example of each.**

Army alpha had eight parts: **2+2**

1. analogies (Washington is to Adams as first is to)
2. filling in the next number in sequence 2, 4, 6...
3. multi-choice (Crisco is....)

1 mark for type, 1 mark for example. Twice.

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

**(a) Describe two features of the sample used by Hraba and Grant.**

Any two from: 4-8 years old; five public schools; all from Lincoln, Nebraska; 160 children, 89 black & 71 white; randomly chosen. **1+1**

1 mark for identification.

**(b) State two of the questions the participants were asked by the researchers.**

There were 8 questions: All begin ‘Give me the doll that’: **1+1**

You want to play with; is a nice doll; looks bad; is a nice colour; looks like a white child; looks like a coloured child; looks like a negro child; looks like you.

1 mark for each.

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**14 In the study by Rosenhan (sane in insane places):**

- (a) Give one example of how staff interpreted the behaviour of the pseudo-patients.**

1 mark for interpretation, 1 mark for example. **2**

Most likely: staff thought the patients were insane because they were labelled as such and in a mental institution. Situation determines behaviour. Many examples: note taking – ‘don’t need to write it down’ = part of problem; queuing for food etc.

- (b) How did the real patients interpret the behaviour of the pseudo-patients?**

Most likely: you’re not crazy, a journalist, a professor, checking up on the hospital. 35 of 118 patients. **2**

1 mark partial, 2 marks for correct answer.

**15 In their study on multiple personality disorder Thigpen and Cleckley describe the appearance of Jane.**

- (a) Briefly describe Jane’s personality.**

Most likely: lacks Eve Black’s obvious faults and inadequacies, far more mature, vivid, boldly capable and interesting than Eve White. **2**

1 mark for one feature, 2 marks for more.

- (b) What test was given to Jane and what did this test reveal?**

EEG test: Eve White and Jane are “clearly normal”; Eve Black restless and muscle tension. Eve W 11 cps; Jane 11 cps; Eve B 12.5 cps. **2**

1 mark naming test; 1 mark finding.

No other test given to Jane.

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

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### Section B

**16 A number of core studies use the case study method which collects detailed information about a participant.**

**(a) Briefly describe the main findings of your chosen study.**

**Gardner & Gardner** (project Washoe)

**Freud** (little Hans)

**Thigpen & Cleckley** (multiple personality)

**Gardner:** Washoe learns many signs. Has many attributes: differentiation, combinations, etc. Is there sufficient to claim she has language?

**Freud:** Hans in phallic stage and evidence of Oedipus complex. Explanations for phobia provided.

**Thigpen:** T&C claim she does have MPD. Many tests inc: psychometric, projective and physiological. Self reports/observations of T&C too.

No answer or incorrect answer.	<b>0</b>
Anecdotal evidence, general statements, minimal detail, minimal focus.	<b>1-3</b>
Attempt to outline some of main findings though with omission of detail or lack of clarity (comment with some comprehension).	<b>4-6</b>
Main findings identified and described in good detail. Outline is clear, focused and well expressed. Good selection of findings.	<b>7-10</b>
<b>max mark 10</b>	

**(b) Describe how the case study was carried out in your chosen study.**

**Gardner:** Washoe taught ASL using behaviour shaping and observational learning. 'Lived' with G&G.

**Freud:** Hans observed and interviewed by father; reported to Freud who interprets reports of father.

**Thigpen:** T&C have 100 hours of interviews over 14 months.

No answer or incorrect answer.	<b>0</b>
Anecdotal description of case study, brief detail, minimal focus.	<b>1-3</b>
Appropriate aspect identified, description shows some understanding. Some detail and expansion of case study.	<b>4-6</b>
Appropriate aspect identified.	
Description is clear, has good understanding, is focused and well expressed. Good detail, each aspect explained fully.	<b>7-10</b>
<b>max mark 10</b>	

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**(c) Using your chosen study as an example, what are the strengths and weaknesses of the case study method?**

Strength: lots of detailed data 'rich' can be gathered;

Strength: ecological validity likely to be high;

Strength: participant likely to be studied over long period of time.

Weakness: participant may be 'abnormal' or unique in some way;

Weakness: only one participant so can't generalise;

Weakness: Researchers may become attached to participant and may be bias;

No answer or incorrect answer.	<b>0</b>
Anecdotal description, brief detail, minimal focus. Very limited range. Description may be inaccurate, incomplete or muddled.	<b>1-3</b>
Some strengths and weaknesses are identified but these are basic and lack clarity. Supporting examples are minimal or absent. OR One strength and one weakness with supporting examples. OR Strengths only with examples of weaknesses only with examples.	<b>4-5</b>
Two or more strengths and weaknesses which are focused on question. Description is good with some expansion and reasonable understanding. Some use of examples supporting strengths and weaknesses. Some detail and expansion of key features.	<b>6-7</b>
Balance of strengths and weaknesses which are focused on question. Description is detailed with good understanding and clear expression. Good use of examples supporting strengths and weaknesses. The arguments are well considered and reflect understanding which extends beyond the specific study.	<b>8-10</b>

**max mark 10**

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(d) Suggest how one other psychological method could be used to investigate your chosen study and say how this would affect the result of the study.

No answer or incorrect answer. 0

Anecdotal suggestion, brief detail, minimal reference to question. 1-3

Description may be inaccurate, incomplete or muddled.

Appropriate suggestion with increased detail which is focused on question. 4-6

Description shows some understanding.

Some detail and expansion of aspects, with consideration of effect on results.

\* Max 5 marks if there is no consideration of effect on results.

Appropriate suggestion with good detail which is focused on question.

Description shows good understanding with clear expression.

The changes are well considered and reflect understanding of the area in question. 7-10

max mark 10

17 When carrying out experimental research, one of the most important factors that psychologists have to consider is which variables need to be controlled and how that control is to be achieved.

(a) Describe the procedure of your chosen study.

**Bandura, Ross and Ross** (aggression)

**Schachter and Singer** (emotion)

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

**Bandura:** children taken to room; settle in then observe model behaving aggressively or not. Taken to another room. Will imitate or not?

**Schachter:** Given injection of epinephrine or not; given false instructions, then exposed to stooge behaving angrily or euphorically.

**Dement:** sleep in lab with electrodes attached. EEGs of eye movements and brain waves. Woken when in REM or NREM and asked questions.

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 mark 10

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**(b) Outline the controls that were used in your chosen study.**

**Bandura:** same items in all rooms. Exposure to model for same time. Design balanced for male/female children/models. Aggression matched initially. Same observation categories.

**Schachter:** epinephrine and placebo groups. Differing information groups, differing stooges who perform same routine.

**Dement:** all sleep in lab with electrodes attached. Controlled environment. All asked same questions. All no caffeine, etc.

No answer or incorrect answer.	<b>0</b>
Anecdotal description of controls, brief detail, minimal focus.	<b>1-3</b>
Appropriate controls identified, description shows some understanding. Some detail and expansion of control.	<b>4-6</b>
Appropriate controls identified.	<b>7-10</b>
Description is clear, has good understanding, is focused and well expressed. Good detail, each control explained fully.	
<b>max mark 10</b>	

**(c) Using your chosen study as an example, what are the advantages and disadvantages of applying controls in psychological studies?**

Adv: lab = reduction of irrelevant variables, controlled environment.

Adv: control of materials/procedure ensures equality across participants

Disadv: often behaviour is in lab and not natural; may affect behaviour

Disadv: is reductionist; may isolate variables from other influencing factors.

No answer or incorrect answer.	<b>0</b>
Anecdotal description, brief detail, minimal focus. Very limited range. Description may be inaccurate, incomplete or muddled.	<b>1-3</b>
Some strengths and weaknesses are identified but these are basic and lack clarity. Supporting examples are minimal or absent. OR One strength and one weakness with supporting examples. OR Strengths only with examples or weaknesses only with examples.	<b>4-5</b>
Two or more strengths and weaknesses which are focused on question. Description is good with some expansion and reasonable understanding. Some use of examples supporting strengths and weaknesses. Some detail and expansion of key features.	<b>6-7</b>
Balance of strengths and weaknesses which are focused on question. Description is detailed with good understanding and clear expression. Good use of examples supporting strengths and weaknesses. The arguments are well considered and reflect understanding which extends beyond the specific study.	<b>8-10</b>
<b>max mark 10</b>	

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

No answer or incorrect answer.	<b>0</b>
Anecdotal suggestion, brief detail, minimal reference to question. Description may be inaccurate, incomplete or muddled.	<b>1-3</b>
Appropriate suggestion with increased detail which is focused on question. Description shows some understanding. Some detail and expansion of aspects, with consideration of effect on results. *Max 5 marks if there is no consideration of effect on results.	<b>4-6</b>
Appropriate suggestion with good detail which is focused on question. Description shows good understanding with clear expression. The changes are well considered and reflect understanding of the area in question.	<b>7-10</b>

**max mark 10**