

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary and Advanced Level

MARK SCHEME for the June 2005 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.

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Grade thresholds taken for Syllabus 9698 (Psychology) in the June 2005 examination.

| | maximum mark available | minimum mark required for grade: | | |
|-------------|------------------------|----------------------------------|----|----|
| | | A | B | E |
| Component 1 | 100 | 69 | 60 | 37 |

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.

JUNE 2005

GCE AS/A LEVEL

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| MARK SCHEME |
| MAXIMUM MARK: 100 |
| SYLLABUS/COMPONENT: 9698/01 PSYCHOLOGY Core Studies 1 |

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| Question | Description | Mark |
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| 1 | In the first experiment on eyewitness testimony by Loftus and Palmer: | |
| (a) | What was the independent variable? [2] | |
| | The IV was the leading word and had five conditions: smashed, collided, hit, bumped, contacted. 1 mark partial (e.g. 'verb' only no e.g.), 2 marks full (with one verb e.g. smashed). | 2 |
| (b) | What was the dependent variable? [2] | |
| | The DV was the mean speed estimate in mph. Actual data not needed. 1 mark partial (e.g. mph or estimate), 2 marks full (e.g. speed estimate). | 2 [4] |
| 2 | Deregowski refers to different types of evidence on picture perception. | |
| (a) | Briefly describe <u>one</u> piece of anecdotal evidence. [2] | |
| | Any study by Robert Laws; Mrs Fraser or 'other reports'. 1 mark partial, 2 marks full. | 2 |
| (b) | Briefly describe <u>one</u> piece of empirical evidence. [2] | |
| | Any study by Hudson: man/elephant/antelope; two-pronged trident; construct a cube/split-style. 1 mark partial, 2 marks full. | 2 [4] |
| 3 | The study by Baron-Cohen, Leslie and Frith on autism involved three groups of children. | |
| (a) | Why were Down's syndrome children used in addition to the autistic children? [2] | |
| | Most likely: to confirm that autism was not related to intelligence. Downs had similar ages but lower IQ. Downs could do test, so T of M not related to intelligence. 1 mark partial (e.g. 'as a control group', or 'to see if they have memory of mind'). 2 marks full. | 2 |
| (b) | Why were 'normal' children used in addition to the autistic children? [2] | |
| | Most likely: to confirm that autism was not related to age. Normal had similar IQ but were much younger. Normal could do test, so T of M not related to age/development. 1 mark partial, 2 marks full. NB: If repeat of above answer, no marks. | 2 [4] |
| 4 | From the study by Gardner and Gardner on Washoe: | |
| (a) | Outline <u>one</u> way in which it was decided whether or not Washoe had learned a new sign. [2] | |
| | 1 new sign reported by <u>three different observers</u> added to checklist. 2 at least 1 <u>appropriate and spontaneous occurrence per day</u> for <u>15 consecutive days</u> . 1 mark partial (if 1 only), 2 marks full. | 2 |
| (b) | To what extent was Washoe successful at learning sign language? [2] | |
| | Answer is speculative, requiring candidate's opinion. 1 mark for comment and 1 mark for supporting evidence such as Washoe had thirty signs by 22 months. | 2 [4] |
| 5 | The study by Samuel and Bryant looked at the effect of age, question format and type of material on conservation. | |
| (a) | Briefly describe the procedure for <u>one</u> type of material. [2] | |
| | Materials are liquid, plasticine/playdoh/coins. Brief description of procedure needed. 1 mark partial, 2 marks full. | 2 |

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| (b) | Give <u>one</u> conclusion about the effect of type of material on conservation. [2] | | |
| | Most likely: children made most errors on the volume task and least on the number task. | 2 | [4] |
| 6 | From the study by Hodges and Tizard on social relationships, outline <u>two</u> differences between the ex-institutional children and the matched control group. [4] | | |
| | Any two from: ex-institutional were more adult orientated; ex-institutional were less likely to get on with peers; were less likely to have a special friend; were less likely to be selective in choosing a friend. 1 mark partial, 2 marks full. | 2 + 2 | [4] |
| 7 | In the article by Freud, little Hans is asked 'when the horse fell down did you think of your daddy?' | | |
| (a) | Give <u>one</u> problem with this type of questioning. [2] | | |
| | Most likely answer: it is a leading question. Other appropriate responses acceptable. 1 mark partial (e.g. 'leading question'), 2 marks full explanation/problem given. | 2 | |
| (b) | How did Freud interpret Hans' fear of horses? [2] | | |
| | Most likely: the horse was Hans' father and the father may not approve of 'love interest' in mother (Oedipus complex); father may castrate Hans – like Dr A – 1 mark partial, 2 marks full. | 2 | [4] |
| 8 | In the study by Schachter and Singer on emotion, participants were divided into four different groups. What were the <u>four</u> groups? [4] | | |
| | Epi inf, epi mis, epi ign, placebo (control). 1 mark for correct identification of each. | 1+1+1+1 | [4] |
| 9 | Dement and Kleitman studied rapid eye movement (REM) sleep and non-rapid eye movement (NREM) sleep. | | |
| (a) | How were REM and NREM sleep measured? [2] | | |
| | Measured by placing electrodes of EEG near eyes and recording electrical activity of the brain. 2 marks for correct answer. | 2 | |
| (b) | Give <u>two</u> differences between REM sleep and NREM sleep. [2] | | |
| | Any two from: REM more likely to dream; REM body relatively still; REM eyes move behind lids; REM low voltage, fast EEG. 1 mark partial, 2 marks full. | 2 | [4] |
| 10 | The study by Sperry looks at how material presented to the left and right visual fields is sent to the visual cortex of the brain. Sketch a brain marking the left and right hemispheres and the route of the visual pathways. [4] | | |
| | Drawing with left and right hemispheres (1 + 1 mark), correct route of pathways for 1 + 1 marks. Must be labelled to be credited. | 1+1+1+1 | [4] |
| 11 | In the study by Raine, Buchsbaum and LaCasse on brain scans, participants were pleading not guilty for reasons of insanity (NGRI's). | | |
| (a) | Give <u>two</u> reasons for insanity claimed by the NGRI's. [2] | | |
| | Any two from: schizophrenia, head injury, psychoactive substance abuse, affective disorder (depression), epilepsy, hyperactivity/learning disorder, paranoid personality disorder. | | |

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| (b) | What task were all participants asked to do immediately before the scan? [2] | | |
| | Participants had practice trials on a continuous performance test for 10 minutes. Then given actual test and 30 seconds later injected with 'dye'. 32 minutes later transferred to PET scanner. 1 aspect of procedure for 1 mark, 2 or more = 2 marks. | 2 | [4] |
| 12 | In the study by Haney, Banks and Zimbardo the guards were given a uniform. | | |
| (a) | Briefly describe the uniform. [2] | | |
| | Most likely: khaki shirt and trousers, whistle, wooden baton, reflecting sunglasses. Any two for maximum mark. | 2 | |
| (b) | Describe what effect the uniform had on the behaviour of the guards. [2] | | |
| | Guards adopted role fully – went beyond their role – even asked for extra duty. 1 mark partial, 2 marks full. | 2 | [4] |
| 13 | From the Piliavin, Rodin and Piliavin study of subway Samaritans: | | |
| (a) | Give <u>two</u> ways in which the 'drunk' victim behaved. [2] | | |
| | Most likely: drunk smelled of liquor and carried a brown paper bag. Stood next to pole in critical area. When passing first station, staggered forward and collapsed. 1 mark partial, 2 marks full. | 2 | |
| (b) | Describe <u>one</u> way in which the results for the 'drunk' condition differ from the results of the 'ill' condition. [2] | | |
| | Drunk helped spontaneously on 19 of 38 trials, ill helped on 62 out of 65 trials. Therefore less helping of drunk. Also drunk was more likely to be helped by a member of the same race ('black' or 'white'). 1 mark partial, two marks full. | 2 | [4] |
| 14 | All studies in psychology raise ethical issues. Outline <u>two</u> ethical issues in the study by Rosenhan (sane in insane places). [4] | | |
| | Most likely: no consent from doctors or nurses; deception of doctors and nurses. Confidentiality maintained. 1 mark partial, 2 marks full. | 2+2 | [4] |
| 15 | In the study by Thigpen and Cleckley, Eve White complained of headaches. Give <u>two</u> pieces of evidence that led them to conclude that she was suffering from multiple personality disorder. [4] | | |
| | Most likely: 1 the letter received from Eve; 2 various behaviours with no memory (e.g. shopping trip); 3 sudden changes in personality – eye movements etc. 1 mark partial, 2 marks full. | 2+2 | [4] |

Partial/full answer

| | |
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| 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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| 16 | Psychological research is often carried out in laboratories. Some people would argue that this is the best place to conduct research but others would suggest it has a number of limitations. | |
| | Bandura, Ross and Ross (aggression) Milgram (obedience) Tajfel (intergroup categorisation) | |
| (a) | Briefly describe the procedure of your chosen study. | |
| | Bandura: children matched; either aggressive or non-aggressive group. Both play with toys then observe a model either aggressive or not. Milgram: teacher and learner ask questions and if incorrect give 'electric shock'. Tajfel: two experiments. Put into groups then allocate points on matrix. | |
| | No answer or incorrect answer | 0 |
| | Anecdotal evidence, general statements, minimal detail, minimal focus | 1-3 |
| | Attempt to outline 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. Description is clear, focused and well expressed. | 7-10 |
| | Max mark | [10] |
| (b) | Describe how being in a laboratory helped the experimenter to control variables in your chosen study. | |
| | Bandura: 1; controlled environment; same items for all children; observe model for fixed time period; standardised observation (one-way mirror). Milgram: control lots; equipment (generator) standard; two rooms with teacher and learner; scientific environment. Tajfel: control dots on screen; all boys same procedure; matrices standard. No external influences on boys. | |
| | No answer or incorrect answer. | 0 |
| | Anecdotal description of controls, brief detail, minimal focus. | 1-3 |
| | Appropriate controls identified, description shows some understanding. Some detail and expansion of generalisations. | 4-6 |
| | Appropriate controls identified. Description is clear, has good understanding, is focused and well expressed. Good detail, each control explained fully. | 7-10 |
| | Max mark | [10] |
| (c) | What are the advantages and disadvantages of using a laboratory to conduct your chosen study? | |
| | Advantage – control means IV more likely to cause DV – reduces confounding. Advantage – allows control over extraneous variables – distractions etc. Gives credibility to study. Advantage – patients in lab volunteer – more likely to behave appropriately. Disadvantage – in lab so demand characteristics more likely. Disadvantage – study may be low in ecological validity. Disadvantage – controlling too many variables is reductionist and not realistic. | |
| | No answer or incorrect answer. | 0 |
| | Anecdotal description, brief detail, minimal focus. Very limited range. Description may be inaccurate, incomplete or muddled. | 1-3 |
| | One or two advantages or disadvantages but basic, lacking in detail or explanation. Some understanding. Advantages <u>or</u> disadvantages 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 |

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| | detail and expansion of key features. | |
| | 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] |
| (d) | Suggest <u>one</u> way in which data could have been gathered outside a laboratory for your chosen study and say how you think this might affect the results. | |
| | No answer or incorrect answer. | 0 |
| | Anecdotal suggestion, brief detail, minimal reference to question. Description may be inaccurate, incomplete or muddled. No or minimal reference to implication of change or effect on results. | 1-3 |
| | An appropriate suggestion is made. Description shows some understanding. Some detail and expansion. Implications of change may be basic. Effect on actual result is mentioned but not developed. *Suggestion only max 5 marks. | 4-6 |
| | An appropriate suggestion is made. Description is detailed with good understanding and clear expression. Implications of change are considered. Effect on actual result is considered. | 7-10 |
| | Max mark | [10] |
| 17 | A number of studies in psychology look at individual differences and cultural diversity. These are the qualities that make one individual different from another and one society different from another. | |
| | Deregowski (perception) Gould (IQ testing) Hraba and Grant (doll choice) | |
| (a) | Describe the procedure of your chosen study. | |
| | Deregowski: procedure of Hudson's work most likely such as man/elephant/antelope or cube construction or two-pronged trident. Anecdotal procedure is also acceptable. Gould: tested for alpha of beta. Test details/examples of questions. If fail go for interview. Hraba: ask children series of questions about doll choice. | |
| | No answer or incorrect answer. | 0 |
| | Anecdotal evidence, general statements, minimal detail, minimal focus. | 1-3 |
| | Attempt to outline 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. Description is clear, focused and well expressed. | 7-10 |
| | Max mark | [10] |

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| (b) | Outline what your chosen study tells us about individual differences. | |
| | <p>Deregowski: that people in different parts of the world perceive pictures in different ways. That perception is culturally based and learned rather than inherited. That some people are ethnocentric and assume some cultures are inferior because they are different. That pictures cannot be used as a universal means of communication.</p> <p>Gould: that people (Eugenicists) believe in superiority of certain types, particularly skin colour. That individual differences cannot easily be measured and certainly not used as a way of comparing cultures.</p> <p>Hraba: that children prefer their own race – in 1969 children were ethnocentric (but that this is good! Black children no longer saw white as superior). That individual differences are culturally determined – society changes so beliefs change.</p> | |
| | No answer or incorrect answer. | 0 |
| | Anecdotal description of individual differences, brief detail, minimal focus. | 1-3 |
| | Appropriate individual differences identified, description shows some understanding. Some detail and expansion of individual differences. | 4-6 |
| | Appropriate aspect identified. Description is clear, has good understanding, is focused and well expressed. Good detail with each individual difference explained fully. | 7-10 |
| | Max mark | [10] |
| (c) | Using your chosen study as an example, what are the advantages and problems of studying diverse groups of people in psychological studies? | |
| | <p>Advantage – allows us to discover that not all people are the same – variety across cultures.</p> <p>Advantage – may allow us to discover the causes of prejudice.</p> <p>Advantage – may allow us to discover what is learned and what is inherited.</p> <p>Problem – sample – may be too small or even just one culture!</p> <p>Problem – researchers speak a different language so problems understanding.</p> <p>Problem – behaviours change over time and some cultures develop faster than others.</p> | |
| | No answer or incorrect answer. | 0 |
| | Anecdotal description, brief detail, minimal focus. Very limited range. Description may be inaccurate, incomplete or muddled. | 1-3 |
| | One or two advantages or disadvantages but basic, lacking in detail or explanation. Some understanding. Advantages or disadvantages 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 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 an alternative way of gathering data for your chosen study and what effect, if any, this would have on the results. | |
| | No answer or incorrect answer. | 0 |
| | Anecdotal description, brief detail, minimal reference to question. Description may be inaccurate, incomplete or muddled. No or minimal reference to implication of change or effect on results. | 1-3 |
| | An appropriate suggestion is made. Description shows some understanding. Some detail and expansion. Implications of change may be basic. Effect on actual result is mentioned but not developed. *Suggestion only max 5 marks. | 4-6 |
| | An appropriate suggestion is made. Description is detailed with good understanding and clear expression. Implications of change are considered. Effect on actual result is considered. | 7-10 |
| | Max mark | [10] |

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