

**UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS**  
GCE Advanced Subsidiary Level and GCE Advanced Level

## **MARK SCHEME for the October/November 2007 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 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.

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 discussions or correspondence in connection with these mark schemes.

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## Section A

### 1 From the study by Loftus and Palmer (eyewitness testimony):

**(a) Briefly describe the sample of participants in experiment 1.**

Most likely: Experiment 1: 45 students divided into 5 groups. Experiment 2: 150 students divided into 3 groups. All from the Univ at which Loftus worked.

1 mark identification e.g. numbers, 2 marks description (or second aspect).

2 aspects = 2 marks

(2)

**(b) Give one problem with using a restricted sample of participants.**

Most likely: cannot generalise

1 mark identification of problem (e.g. cannot generalise), 2 marks for brief description of problem (reason why cannot generalise).

(2) [4]

### 2 From the study by Deregowski on picture perception:

**(a) Draw a split-style elephant.**

Quality of drawing unimportant. 1 mark if split-style 1 mark for including two of two different features e.g. 2 legs and 2 ears, etc. 1

(2)

**(b) Suggest why most societies do *not* prefer split style drawings.**

Most likely: can't be used for construction/by industrial draftsmen. Children are taught to perceive 'perspective style'. Perspective style is how we perceive reality. How else could we look at an elephant!

1 mark partial, 2 marks full.

(2) [4]

### 3 The study by Baron-Cohen, Leslie and Frith on autism involved measuring the intelligence levels of three groups of children.

**(a) How was intelligence measured?**

Most likely: by matching MA (mental age) with CA (chronological age) and calculating using a formula. This answer = 2 marks. MA or CA only = 1 mark. Details of specific tests not required. (but if they do, naming either test receives 2 marks. Tests = Leiter international performance scale and British Picture vocabulary test.

1 mark partial, 2 marks full.

(2)

**(b) Why were the intelligence levels of the children measured?**

Measured to determine whether theory of mind is due to intelligence.

1 mark partial, 2 marks full.

(2) [4]

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**4 From the study by Bandura, Ross and Ross on aggression:**

**(a) Briefly describe the procedure in the aggressive condition.**

Most likely answers:

Plays with Tinker toys then sat on bobo & punched in nose; hit on head with mallet; tossed in air; kicked around room. Repeated 3 times and took 10 mins. Actions supported with verbal aggression: pow, etc.

NB description of procedure could begin with potato prints etc. in room 1 and this to receive full credit as it did happen to those in aggressive condition.

1 mark partial, 2 marks full.

(2)

**(b) Suggest why it is important to standardise a procedure.**

Most likely answer:

Used as a control; same for all participants. DV more likely due to IV and not confounded

1 mark partial, 2 marks full.

(2) [4]

**5 In their study by 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?**

Most likely answers: 16 children said they had a definite special friend; 10 parents said the children had a special friend.

(2)

**(b) Give one explanation for this difference.**

Most likely answers: children may be giving a socially desirable answer, but parents may not know about a special friend.

1 mark partial, 2 marks full.

(2) [4]

**6 From the study by Schachter and Singer on emotion:**

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

Arousal or physiological component and cognitive or psychological component. 'Situation' is incorrect. It is cognitive interpretation of situation. 1 mark for each component.

(1+1)

**(b) How do Schachter and Singer suggest we experience emotion.**

Emotion is not purely physiological as first thought. Emotion is the results of interaction between physiological and psychological. 1 mark brief expansion of two factors, 2 marks reasonable explanation showing understanding.

(2) [4]

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**7 From the study by Dement and Kleitman on sleep and dreaming:**

**(a) Briefly describe how they used the self report method to gather data.**

Woke up participants and asked to recall various aspects  
1 mark brief, 2 marks detail.

(2)

**(b) Give *one* problem with self report data in this study.**

Most likely: Not accurate, subjective. P's may respond to demand characteristics; may give socially desirable responses; may just make up dream! 1 mark brief.  
2 marks detail.

(2) [4]

**8 Sperry suggests hemispheric de-connection (split brain) is like having two minds in one body. Give *two* pieces of evidence to support this suggestion.**

Any logical answer, but most likely:

Objects shown to one side of brain will not be recalled or accessed by other side. Specifically images shown to LVF cannot be verbalised. Images shown to RVF can be verbalised but not recognised by other side.

1 mark partial, 2 marks full.

(2+2) [4]

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

**(a) Identify *one* cortical region and *one* subcortical region of the brain.**

Cortical: prefrontal, parietal, temporal, occipital

Sub-cortical: corpus callosum; amygdala; medial (inc hippocampus); thalamus; caudate, putamen, globus pallidus, midbrain & cerebellum.

1 mark for naming a cortical and 1 mark for naming sub-cortical.

(1+1)

**(b) Outline what was found in *one* region of the brain?**

NGRIs, compared to controls:

Had lower glucose metabolism in prefrontal and parietal areas.

No difference in temporal areas

Less activity in the corpus callosum

Abnormal asymmetry in the amygdala, thalamus and hippocampus: less activity in the left and more activity in the right.

Cingulate, Caudate, Putamen, Globus Pallidus, Midbrain and cerebellum – no significant differences.

(2) [4]

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

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

Most likely: “it is the psychological mechanism which links individual action to political purpose, the dispositional cement which binds men to systems of authority.”

Any attempt at this = 2 marks. Any reasonable explanation = 2 marks even if above is not mentioned. Partial explanation = 1 mark. (2)

**(b) Suggest *one* reason why obedience in society is desirable.**

Most likely: any reasonable suggestion – not breaking laws eg traffic lights on red; obeying teaching in classroom; police, etc.

2 marks for reasonable suggestion with a touch of detail. 1 mark bland, basic attempt. (2) [4]

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

**(a) What is meant by the term ‘diffusion of responsibility’?**

Most likely: where people perceive responsibility to be shared amongst all those present and so are less likely to help.

1 mark partial, 2 marks full. (2)

**(b) Briefly describe the context (the real-life event) that led to research on ‘diffusion of responsibility’.**

Most likely: murder of Kitty Genovese where 38 witnesses did not call the police or intervene.

1 mark partial, 2 marks full. (2) [4]

**12 All studies in psychology raise ethical issues. Outline *two* ethical issues raised in the study by Tajfel on intergroup discrimination.**

Most likely:

deception – the way the boys were put into groups; study of visual judgements/artistic preference.

confidentiality – none of the boys were named

harm – none of the boys were physically or psychologically harmed

consent – not full, informed consent

1 mark identification of issue, 2 marks description/example of issue. (2+2) [4]

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**13 From the study on intelligence testing by Gould:**

**(a) Give one example of discrimination in the tests.**

Any example from the study. Most likely:

1. test items preferable for those who had experience of the USA;
2. test items preferring those who could read and/or write;
3. lighter skins being rated as more intelligent than darker skins

1 mark for brief, 2 marks for detailed example.

(2)

**(b) Give one example of social control that followed the testing.**

Any example from the study. Most likely:

1. immigration restriction act of 1924 allowing 2% entry;
2. first restriction act of 1921 allowing 3% entry from any nation
3. Jewish refugees and others during 1930s barred from entry

(2) [4]

**14 In their study Haba and Grant give four explanations for the doll preference of the black children. Outline two of these explanations.**

1. "times may be changing" – negroes are becoming blacks proud of their race.
2. "30 years ago black children in Lincoln, unlike other cities, would choose black dolls"
3. "The 'black movement' ..campaign..directed at children"
4. "interracial contact may engender black pride".

(2+2) [4]

**15 Thigpen and Cleckley believed that Eve had multiple personality disorder.**

**(a) Give one piece of evidence that supports the view that Eve had multiple personality disorder.**

Most likely: the 'ambiguous' letter received; loss of memory for events (shopping trip); black-outs; appearance of new personalities.

1 mark for partial description, 2 marks for more.

(2)

**(b) Give one piece of evidence that does not support the view that Eve had multiple personality disorder.**

Most likely: deception by Eve – good actress; similarity of IQ scores 110 to 104.

Any other logical query.

1 mark for partial description, 2 marks for more.

(2) [4]

**Partial/full answer**

<b>0 marks</b>	No answer <b>or</b> incorrect answer.
<b>1 mark</b>	Partially correct answer <b>or</b> correct but incomplete lacking sufficient detail or explanation to demonstrate clear understanding.
<b>2 marks</b>	Correct answer with sufficient detail/explanation to demonstrate clear understanding.

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## Section B

Q	Description	Mark
16	One of the ethical issues that causes concern when carrying out psychological investigations is whether participants are physically or emotionally harmed by the research.	
(a)	Describe the procedure of your chosen study.	
	Gardner and Gardner (project Washoe) Rosenhan (sane in insane places) Haney, Banks and Zimbardo (prison simulation)	
	<i>Emphasis on study. Answers must be related to named studies. One point from each study.</i> <b>Indicative content:</b> most likely answers ( <b>any appropriate answer receives credit</b> ): <b>Gardner:</b> captured, taught sign language via successive approximations and imitation. Rewards given. <b>Rosenhan:</b> Calls institution claims to hear voices. Admitted. Life on ward. <b>Haney:</b> sample selected, allocated as prisoner or guard. Arrested at home, taken to police station then mock prison. De-loused, stripped etc.	
	<b>For each point up to a maximum of FOUR points</b>	
	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 findings.	7-10
	<b>Max mark</b>	<b>10</b>

16b	Describe how participants may have been harmed in your chosen study.	
	<b>Gardner:</b> Washoe captured from wild; kept in captivity; taught alien language; not released after study. NB candidates who believe Washoe was released/returned to wild score no marks. <b>Rosenhan:</b> no consent from participants; damage to reputations. Pseudopatients are also 'participants' in the general sense and could have been harmed by drugs or physical beatings or by depersonalisation (even though they were confederates of experimenter) <b>Haney:</b> concerns pathology of power – participants depersonalisation etc. – study stopped early.	
	No answer or incorrect answer.	0
	Anecdotal description of harm, brief detail, minimal focus.	1-3
	Appropriate aspects of harm identified, description shows some understanding. Some detail and expansion of instance(s).	4-6
	Appropriate aspects of harm identified. Description is clear, has good understanding, is focused and well expressed. Good detail each aspect explained fully.	7-10
	<b>Max mark</b>	<b>10</b>

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<b>16c</b>	<b>Using your chosen study as an example, give arguments for and against causing harm to participants when carrying out research.</b>	
	<b>Indicative content:</b> most likely answers (any appropriate answer receives credit): <b>for:</b> it may be to simulate a realistic situation. <b>for:</b> Ends justify means... <b>against:</b> Something may go seriously wrong... <b>against:</b> Discourages future participation in psychological research. <b>against:</b> Lowers the status of psychology – a “crackpot” subject?	
	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>
	Arguments for and against which are focused on the question, are psychologically informed but lack detail, elaboration or example.	<b>4-5</b>
	Arguments for and against 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	<b>6-7</b>
	Range of arguments for and against (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.	<b>8-10</b>
	<b>Max mark</b>	<b>10</b>

<b>16d</b>	<b>Suggest one other way of gathering data in your chosen study that would not cause harm and say how this would affect the results of the study.</b>	
	No answer or incorrect answer.	<b>0</b>
	Anecdotal suggestion, brief detail, minimal reference to question. Description may be inaccurate, incomplete or muddled. There may be no reference to effect on results.	<b>1-3</b>
	Some appropriate suggestions which 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.	<b>4-6</b>
	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 is appropriate.	<b>7-10</b>
	<b>Max mark</b>	<b>10</b>



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Q	Description	Mark
17	<b>A number of studies take a developmental approach which looks at human behaviour and experience in different ages of people and attempts to describe how thoughts, feelings and behaviour develop.</b>	
(a)	<b>Describe the findings of your chosen study.</b>	
	<b>Samuel and Bryant</b> (conservation) <b>Hodges and Tizard</b> (social relationships) <b>Freud</b> (little Hans)	
	<i>Emphasis on study. Answers must be related to named studies. One point from each study.</i> <b>Samuel:</b> one question v two question; number easier than mass then volume. Conservation improves with age. <b>Hodges:</b> ex-institutional more adult oriented, do not have special friend, etc. <b>Freud:</b> findings support theory: Hans in phallic stage and Oedipus complex. Evidence of this credited as findings e.g. giraffe episode etc.	
	<b>For each point up to a maximum of FOUR points</b>	
	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 aspects of 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 aspects of findings.	<b>7-10</b>
	<b>Max mark</b>	<b>10</b>

17b	<b>Describe what your chosen study tells us about development.</b>	
	<b>Samuel:</b> conservation (and all aspects) improves with age. <b>Hodges:</b> effects of early experience cannot be reversed. <b>Freud:</b> children progress through stages.	
	No answer or incorrect answer.	<b>0</b>
	Anecdotal description of development, brief detail, minimal focus.	<b>1-3</b>
	Appropriate aspects of development identified, description shows some understanding. Some detail and expansion.	<b>4-6</b>
	Appropriate aspects of development identified. Description is clear, has good understanding, is focused and well expressed. Good detail each aspect of development explained fully.	<b>7-10</b>
	<b>Max mark</b>	<b>10</b>

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17c	<b>Using your chosen study as an example, what are the advantages and disadvantages of studying development?</b>	
	<b>Indicative content:</b> Most likely answers: <b>(any appropriate answer receives credit):</b> <b>Adv:</b> changes in development over time can be recorded (whole life-span). <b>Adv:</b> can determine how best to educate children. <b>Adv:</b> lots of detailed data can be collected. <b>Disadv:</b> Children are children and not adults – we can't generalise from their behaviour. We should not assume that what they do as children will be what they do as an adult. <b>Disadv:</b> Children cannot communicate their thoughts and feelings clearly. They may become confused and may misinterpret what is required. E.g. asking only one question <b>Disadv:</b> May be problems of interpretation. Experimenters may also misinterpret what a child intends. E.g. Hans' father and/or Freud <b>Disadv:</b> children cannot give informed consent. They may well be studied even though they do not wish to be. They will also not understand that they have the right to withdraw. E.g. Bandura <b>Disadv:</b> Studies on development take time – one way to study development over time is to do a longitudinal study but this takes time or snapshot studies are done comparing one child with another and the children may be different.	
	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
	<b>Max mark</b>	<b>10</b>

17d	<b>Suggest a different way of gathering data for your chosen study and say what effect, if any, this would have on the results.</b>	
	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
	Some appropriate suggestions which 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
	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 is appropriate.	7-10
	<b>Max mark</b>	<b>10</b>