

MARK SCHEME for the May/June 2013 series

9773 PSYCHOLOGY

9773/01

Paper 1 (Key Studies and Theories), maximum raw mark 60

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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2013 series for most IGCSE, Pre-U, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

Page 2	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

Section A

- 1 Loftus and Palmer conducted their research into eyewitness testimony using the experimental method.**

- (a) Outline one advantage of using the experimental method in this study. [2]**

The most likely answers are the high level of control that can be achieved in an experiment of this type, the ability to manipulate variables, the ability to draw cause and effect conclusions or the ability to replicate the experiment. Any other appropriate answer may be given credit.

1 mark – advantage clearly identified but not outlined in the context of the study or advantage/contextualisation required clarity.

2 marks – advantage clearly identified and outlined in the context of the study.

- (b) Outline one limitation of using the experimental method in this study. [2]**

The most likely answers are the lack of ecological validity or realism or the fact that that it is not possible to recreate the emotional context of a real accident within an experiment of this type. It is also possible that candidates may suggest the high levels of demand characteristics or social desirability effects in this study especially given that the participants were students of the lead experimenter. Any other appropriate answer may be given credit.

1 mark – limitation clearly identified but not outlined in the context of the study or limitation/contextualisation lacks clarity.

2 marks – limitation clearly identified and outlined in the context of the study.

- 2 Explain how the ‘eyes test’ used in the study by Baron-Cohen et al is a test of theory of mind. [2]**

Baron-Cohen et al describe the eyes test as a test of theory of mind as it requires the ability to attribute mental states to another which is crucial in making sense of, or predicting the behaviour of, others. Here the participants are being asked to choose the most appropriate term to describe how someone is feeling based solely on a photograph of their eyes.

1 mark – brief answer e.g. defining theory of mind with no explicit link made to eyes test.

2 marks – clear description which shows understanding of the way in which the eyes test is testing theory of mind.

Page 3	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

3 Explain why Milgram conducted his research into obedience. [2]

This question is asking candidates for their knowledge of the background to Milgram's research and may be answered in a number of ways. The most likely response will be to give information about the Holocaust or the level of obedience in Nazi Germany (the 'germans are different' hypothesis). It would also be appropriate for candidates to comment on Milgram's personal interest in this as the son of Jewish parents who had left Eastern Europe prior to the second world war. Finally a more general statement of exactly what the focus of the study was would also be appropriate, perhaps by locating the research within the context of situational factors that promote obedience.

1 mark – brief or unclear answer.

2 marks – clear answer demonstrating understanding of the background to Milgram's research.

4 Explain how Haney, Banks and Zimbardo recruited the participants for their prison simulation study. [2]

The participants were respondents to a newspaper advertisement, which asked for male volunteers to participate in a psychological study of 'prison life' in return for payment of \$15 per day.

The 75 respondents completed a questionnaire about their family background, physical and mental health, prior experiences and attitudinal tendencies with respect to psychopathology and any involvement in crime.

Based on the results of the tests 24 men were selected. These 24 were judged to be the most physically and mentally stable, most mature, and least involved in antisocial behaviours. The participants were described as "normal, healthy male college students who were predominantly middle class and white." The 24 participants did not know each other prior to the study.

1 mark – one piece of appropriate information.

2 marks – any two pieces of appropriate information e.g. newspaper advertisement, screening.

Page 4	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

5 From the study on bystander behaviour by Piliavin, Rodin and Piliavin:

(a) Explain what is meant by ‘diffusion of responsibility’. [2]

Diffusion of responsibility is the term used to describe a situation where people feel less compelled to intervene as the number of bystanders increases.

1 mark – brief or muddled explanation.

2 marks – clear explanation (no need to contextualise this although contextualisation may clarify explanation).

(b) Suggest one reason why the research into bystander behaviour by Piliavin, Rodin and Piliavin does not provide support for diffusion of responsibility. [2]

Most likely answer is that the environment (closed train carriage) did not allow people to ‘walk past’ therefore increasing the likelihood that they would intervene. It is also possible to suggest that the emergency was relatively unambiguous and the situation not particularly extreme or dangerous – all factors which might make it more likely that people would intervene. Candidates may also suggest that no deindividuation takes place. Any appropriate answer to be credited but candidates must provide an explanation rather than simply presenting data.

1 mark – brief or unclear answer.

2 marks – clear answer (contextualised).

6 Discuss two ethical issues raised by the study on aggression by Bandura, Ross and Ross. [4]

Candidates may choose to discuss any appropriate ethical issues (note that the question does not specify ethical problems although this is likely to be the focus of most candidates’ answers) including deception, distress, consent, right to withdraw and confidentiality.

2 × 2 marks as follows:

1 mark for the identification of a contextualised ethical issue (no marks to be awarded for simply identifying an ethical issue).

2 marks for a brief discussion of a contextualised ethical issue. (2 + 2 = 4)

7 Identify two problems with the way that data were collected in the study by Freud. [2]

Most likely answers will include: the fact that Freud did not collect the data directly, Hans’ father collected the data and passed this to Freud, and the leading questions that were asked by the father. Any appropriate answer to be given credit.

As two problems are being asked for, candidates need only identify the problem for a mark. There is no need to contextualise or further explain the problem.

1 mark for each correctly identified problem. (1 + 1 = 2)

Page 5	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

- 8 Outline one conclusion that can be drawn from the further research conducted by Wahl into the depictions of mental illness in children's media. [2]**

From Abstract: Studies of television, films, cartoons, and other media suggest that images and references to mental illnesses are relatively common in children's media and that such images are more often negative than positive ones. The image of persons with psychiatric disorders as unattractive, violent, and criminal, for example, appears common in children's media, and references to mental illnesses are typically used to disparage and ridicule. Conclusions: Although content analyses do not establish impact, it is likely that negative stereotypes are being fostered and that children are learning to respond to people with mental illnesses in avoidant and disparaging ways. Anti-stigma efforts that do not include children and do not address the media images of mental illnesses that foster unfavorable stereotypes may permit continued development of negative attitudes toward people with psychiatric disorders.

Do not discriminate between results and conclusions when marking this.

1 mark – brief or unclear answer such as simply stating that images are negative.
2 marks – clear answer giving additional detail or elaboration.

- 9 Briefly describe one limitation of the further research conducted by Griffiths into fruit machine addiction in an adolescent female. [2]**

The most likely answer will be the limited sample as this study is a case study with a single participant, however any appropriate answer may be credited.

1 mark – brief answer, e.g. only one participant.
2 marks – clear answer, given in the context of the study.

- 10 Outline two findings from the study by Wang et al on stress. [4]**

From study: The major finding from our study is that ventral RPFC activation is specifically associated with psychological stress, and this activity persists even beyond the stress-task period. This mapping between behavioural/physiologic state and neuroanatomy is supported by the association of RPFC CBF changes with both subjective and objective measures of stress responses. Increased cognitive demand and effort accompanying the task stressors cannot explain the present finding, because our regression analyses demonstrated that difficulty or effort did not contribute to RPFC brain activation. Lasting effects of right prefrontal activation were also observed during baseline conditions without any cognitive task, excluding potential confounding effects due to cognitive differences between the two stress tasks.

For each finding:

1 mark – brief answer.

2 marks – clear outline of a finding.

(2 + 2 = 4)

Page 6	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

11 How do Rhodes et al explain the preference for symmetry that they identified in their study on facial symmetry and the perception of beauty? [2]

From original paper:

Evolutionary biologists have proposed that a preference for symmetry would also be adaptive because symmetry is a signal of health and genetic quality. Only high-quality individuals can maintain symmetric development in the face of environmental and genetic stresses. Symmetric bodies are certainly attractive to humans and many other animals but what about symmetric faces?

Biologists suggest that facial symmetry should be attractive because it may signal mate quality. High levels of facial asymmetry in individuals with chromosomal abnormalities (e.g. Down's syndrome and Trisomy 14) are consistent with this view, as is recent evidence that facial symmetry levels correlate with emotional and psychological health.

1 mark – brief or unclear answer.

2 marks – clear answer identifying at least one of the explanations above.

12 Outline two of the aims of the study by Dement and Kleitman on sleep and dreaming. [2]

The study had three aims:

1. To test for an association between REM sleep and dreaming.
2. To test for correlation between the estimate of the duration of dreams and the length of eye-movement.
3. To test for an association between the pattern of eye movement and the context of the dream.

1 mark – aims are unclear/1 aim only outlined clearly

2 mark – 2 clear aims (must state correlation or association) wording does not have to be the same as above.

Page 7	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

Section B

13 (a) Describe research into cognitive development.

[10]

Research may include background, key study, further research and explore more. Candidates do not have to include all of these to achieve full marks.

Background theory: Piaget's theory of cognitive development (stages and conservation experiments).

Key study: Samuel, J. and Bryant, P. (1984) Asking only one question in the conservation experiment. *Journal of Child Psychology and Psychiatry*. 25. 315–318.

Further research: Moore, C. and Frye, D. (1986) The effect of experimenter's intention on the child's understanding of conservation. *Cognition*, 22, 283–298.

It is likely that candidates will focus on Piaget's theory and the two studies listed above and summaries of these two studies have been reproduced below. However, candidates should be credited for any appropriate content.

Key study: Samuel, J. and Bryant, P. (1984) Asking only one question in the conservation experiment. *Journal of Child Psychology and Psychiatry*. 25. 315–318.

The original study has no abstract.

Aim: to test the hypothesis that asking only one question in the conservation task will lead to more correct answers.

Participants: 252 boys and girls from a variety of schools and pre-schools in Devon. Divided into four groups. Each group had 63 children and the mean age for each group was 5 years and 3 months, 6 years and 3 months, 7 years and 3 months and 8 years and 3 months.

Method: Laboratory experiment as the main independent variable (which condition the child tested in) was manipulated by the experimenter. There were three experimental conditions.

1. Standard. Asked before and after transformation as in Piagetian research.
2. One-judgement. Asked question only after transformation has taken place.
3. Fixed-array (control) child only shown the post-transformational display and then asked the question.

21 children from each group were tested in each condition making a total of 84 children in each condition. This allows age differences to be compared as well.

Children were only tested in one of the above conditions but were all tested using three different materials – counters for number, Plasticine for mass and liquid in a glass for volume. The type of material is also an independent variable in the study.

Results: Children make fewer errors as they get older, showing that their ability to conserve increases with age. The mean number of errors is lowest for the one-judgement condition. This is where children see the transformation but are only asked one question. Highest number of errors in the fixed array condition. Number conservation appears to develop first, followed by mass and finally volume.

Page 8	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

Conclusion: This study provides some evidence that children can conserve earlier than Piaget thought they could and that the way that Piaget questioned children could well have confused them. However the results also support Piaget's finding that conservation skills increase with age.

Further research: Moore, C. and Frye, D. (1986) The effect of experimenter's intention on the child's understanding of conservation. *Cognition*, 22, 283–298.

McGarrigle & Donaldson (1974) used 'Naughty Teddy' in an attempt to overcome the problem of the child believing he is to change his answer to the second question. It is 'Naughty Teddy' that mischievously rearranges a row of counters and in so doing, 'confuses' the experimenter. This allows the experimenter to use the second question without inferring that a change of answer is required. Light et al (1979) criticise 'Naughty Teddy' for additionally distracting the child away from attending to the transformation. Moore and Frye (1986) found that children were not detecting changes in the number of counters whilst 'Naughty Teddy' was about his business; thus supporting Light et al's criticism.

Definition of terms is accurate and use of psychological terminology is comprehensive. Description of knowledge (theories/studies) is accurate, coherent and detailed. Understanding (such as elaboration, use of example, quality of description) is very good. The answer is competently structured and organised (global structure introduced at start and followed throughout). Quality of written communication is very good.	8–10 marks
Maximum mark for those candidates who only describe one piece of research (e.g. key study only with no mention of background theory, further research etc.). Definition of terms is mainly accurate and use of psychological terminology is competent. Description of knowledge (theories/studies) is mainly accurate, coherent and detailed. Understanding (such as elaboration, use of example, quality of description) is good. The answer has adequate structure and organisation. Quality of written communication is good.	6–7 marks
Definition of terms is basic and the use of psychological terminology is adequate. Description of knowledge (theories/studies) is often accurate, generally coherent and has some detail. Understanding (such as elaboration, use of example, quality of description) is reasonable. The answer has some structure or organisation. Quality of written communication is good.	4–5 marks
Definition of terms and use of psychological terminology is occasional or absent. Description of knowledge (theories/studies) is sometimes accurate, sometimes coherent and has some detail. Understanding (such as elaboration, use of example, quality of description) is occasionally evident. The answer has minimal structure or organisation. Quality of written communication is adequate.	1–3 marks
No answer or irrelevant answer.	0 marks

Page 9	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

(b) Evaluate research into cognitive development.

[12]

Candidates may use a variety of evaluation issues in their response (most likely will be issues relating to studies with children, the reliability and validity of conclusions, usefulness and applications etc.) but should also focus on the contribution made to the wider area of cognitive development in order to access top band marks. This is most likely to be achieved through a discussion (even a brief one) of how this research has developed from work that was conducted before this and how later research has built on this.

Discussion is comprehensive. Range of points is balanced. Points are competently organised. Selection of points is explicitly related to the assessment request and demonstrates impressive psychological knowledge. Candidates who do not make explicit reference to the contribution of this study to the wider area will not be able to be awarded marks in this band. Effective use of supporting examples from unit content. Quality of argument (or comment) arising from points is clear and well developed. Analysis (valid conclusion that effectively summarises issues and arguments) is evident. Evaluation is detailed and understanding is thorough.	10–12 marks
Discussion is very good. Range of points is good and is balanced. Points are well organised. Selection of points is related to the assessment request and demonstrates competent psychological knowledge. Good use of supporting examples from unit content. Quality of argument arising from points is often clear and well developed. Analysis (key points and valid generalisations) is often evident. Evaluation is quite detailed and understanding is good.	8–9 marks
Discussion is good. Range of points is limited and may be imbalanced. Points are organised. Selection of points is often related to the assessment request and demonstrates good psychological knowledge. Limited use of supporting examples from unit content. Quality of argument arising from points is limited. Analysis (key points and valid generalisations) is sometimes evident. Evaluation is detailed and understanding is limited.	6–7 marks
Discussion is sufficient. Range of points is partial (may be positive or negative only). Points are occasionally organised into issues/debates, methods or approaches. Selection of points is sometimes related to the assessment request and demonstrates basic psychological knowledge. Partial use of supporting examples from unit content. Argument arising from points is acceptable Analysis (key points and valid generalisations) is occasionally evident. Evaluation has adequate detail and understanding is acceptable.	4–5 marks

Page 10	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

Discussion is basic. Some points are evident and may be either positive or negative. Points are not always organised into issues/debates, methods or approaches. Selection of points may be peripherally relevant to the assessment request and psychological knowledge is occasionally evident. Some or no use of supporting examples from unit content. Argument arising from points is discernible or not present. Analysis (key points and valid generalisations) is rare or not present. Evaluation has meagre detail and understanding may not be evident.	1–3 marks
No answer or irrelevant answer.	0 marks

(c) Explain how you would conduct a study which would extend our understanding of cognitive development. [6]

The alternative could be based entirely on the ‘further research’ identified on the specification or it could be based on that and/or any research from the ‘explore more’ section or it could be based on any relevant research surrounding this area that the candidate has explored. It could even be suggestions that the candidates themselves make based on their knowledge of the key study and theory in this area.

Suggestion of alternative is appropriate and shows insight. Explanation of how this would extend our understanding is clear and detailed. Understanding of the possible effects of this alternative of the wider topic area is impressive.	5–6 marks
Suggestion is appropriate. Explanation of how this would extend our understanding is reasonably clear and detailed. Understanding of the possible effects of this alternative of the wider topic area is good.	3–4 marks
Suggestion is reasonably appropriate although may have only peripheral relevance. Explanation of how this would extend our understanding is basic. Understanding of the possible effects of this alternative of the wider topic area is basic.	1–2 marks
No or inappropriate suggestion.	0 marks

Page 11	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

14 (a) Describe research into body dysmorphic disorder. [10]

Research may include background, key study, further research and explore more. Candidates do not have to include all of these to achieve full marks.

Overview: Body dysmorphic disorder is a preoccupation with an imagined defect in physical appearance. The key study by Veale and Riley (2000) focuses on a major preoccupation of those with BDD, that of mirror gazing. The further research by Veale (2000) considers tragic cases where people with BDD attempted to change their image using DIY surgery.

Background theory: Clinical features and types of body dysmorphic disorder. Physical (surgical) and psychological treatments.

Key study: Veale, D. and Riley, S. (2001) Mirror, mirror on the wall, who is the ugliest of them all?

The psychopathology of mirror gazing in body dysmorphic disorder. Behaviour Research and Therapy. 39. pp 1381–1393. <http://bdd-info.nl/Mirror-gazing-in-BDD.pdf>

Further research: Phillips, K. A., McElroy, S. L., Keck, P. E. Jr, et al. (1993) Body dysmorphic disorder: 30 cases of imagined ugliness. American Journal of Psychiatry, 150:302–308. <http://ajp.psychiatryonline.org/cgi/content/abstract/150/2/302>

Definition of terms is accurate and use of psychological terminology is comprehensive. Description of knowledge (theories/studies) is accurate, coherent and detailed. Understanding (such as elaboration, use of example, quality of description) is very good. The answer is competently structured and organised (global structure introduced at start and followed throughout). Quality of written communication is very good.	8–10 marks
Maximum mark for those candidates who only describe one piece of research (e.g. key study only with no mention of background theory, further research etc.). Definition of terms is mainly accurate and use of psychological terminology is competent. Description of knowledge (theories/studies) is mainly accurate, coherent and detailed. Understanding (such as elaboration, use of example, quality of description) is good. The answer has adequate structure and organisation. Quality of written communication is good.	6–7 marks
Definition of terms is basic and the use of psychological terminology is adequate. Description of knowledge (theories/studies) is often accurate, generally coherent and has some detail. Understanding (such as elaboration, use of example, quality of description) is reasonable. The answer has some structure or organisation. Quality of written communication is good.	4–5 marks

Page 12	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

Definition of terms and use of psychological terminology is occasional or absent. Description of knowledge (theories/studies) is sometimes accurate, sometimes coherent and has some detail. Understanding (such as elaboration, use of example, quality of description) is occasionally evident. The answer has minimal structure or organisation. Quality of written communication is adequate.	1–3 marks
No answer or irrelevant answer.	0 marks

(b) Evaluate research into body dysmorphic disorder.

[12]

Candidates may use a variety of evaluation issues in their response (most likely will be issues relating to strengths and weaknesses of methods, sample, etc.) but should also focus on the contribution made to the wider area of BDD in order to access top band marks. This is most likely to be achieved through a discussion (even a brief one) of how this research has developed and how later research has built on this.

Discussion is comprehensive. Range of points is balanced. Points are competently organised. Selection of points is explicitly related to the assessment request and demonstrates impressive psychological knowledge. Candidates who do not make explicit reference to the contribution of this study to the wider area will not be able to be awarded marks in this band. Effective use of supporting examples from unit content. Quality of argument (or comment) arising from points is clear and well developed. Analysis (valid conclusion that effectively summarises issues and arguments) is evident. Evaluation is detailed and understanding is thorough.	10–12 marks
Discussion is very good. Range of points is good and is balanced. Points are well organised. Selection of points is related to the assessment request and demonstrates competent psychological knowledge. Good use of supporting examples from unit content. Quality of argument arising from points is often clear and well developed. Analysis (key points and valid generalisations) is often evident. Evaluation is quite detailed and understanding is good.	8–9 marks
Discussion is good. Range of points is limited and may be imbalanced. Points are organised. Selection of points is often related to the assessment request and demonstrates good psychological knowledge. Limited use of supporting examples from unit content. Quality of argument arising from points is limited. Analysis (key points and valid generalisations) is sometimes evident. Evaluation is detailed and understanding is limited.	6–7 marks

Page 13	Mark Scheme	Syllabus	Paper
	Pre-U – May/June 2013	9773	01

Discussion is sufficient. Range of points is partial (may be positive or negative only). Points are occasionally organised into issues/debates, methods or approaches. Selection of points is sometimes related to the assessment request and demonstrates basic psychological knowledge. Partial use of supporting examples from unit content. Argument arising from points is acceptable. Analysis (key points and valid generalisations) is occasionally evident. Evaluation has adequate detail and understanding is acceptable.	4–5 marks
Discussion is basic. Some points are evident and may be either positive or negative. Points are not always organised into issues/debates, methods or approaches. Selection of points may be peripherally relevant to the assessment request and psychological knowledge is occasionally evident. Some or no use of supporting examples from unit content. Argument arising from points is discernible or not present. Analysis (key points and valid generalisations) is rare or not present. Evaluation has meagre detail and understanding may not be evident.	1–3 marks
No answer or irrelevant answer.	0 marks

(c) Explain how you would conduct a study which would extend our understanding of body dysmorphic disorder. [6]

The alternative could be based entirely on the ‘further research’ identified in the syllabus or it could be based on that and/or any research from the ‘explore more’ section or it could be based on any relevant research surrounding this area that the candidate has explored. It could even be suggestions that the candidates themselves make based on their knowledge of the key study and theory in this area.

Suggestion of alternative is appropriate and shows insight. Explanation of how this would extend our understanding is clear and detailed. Understanding of the possible effects of this alternative of the wider topic area is impressive.	5–6 marks
Suggestion is appropriate. Explanation of how this would extend our understanding is reasonably clear and detailed. Understanding of the possible effects of this alternative of the wider topic area is good.	3–4 marks
Suggestion is reasonably appropriate although may have only peripheral relevance. Explanation of how this would extend our understanding is basic. Understanding of the possible effects of this alternative of the wider topic area is basic.	1–2 marks
No or inappropriate suggestion.	0 marks