

MARK SCHEME for the May/June 2014 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 2014 series for most IGCSE, Pre-U, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.



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Section A

- 1 Loftus and Palmer conducted their research into eye witness testimony in a laboratory. Suggest one strength and one weakness of investigating eyewitness testimony in a laboratory environment.** [4]

The most likely answers are:

Strengths: high levels of control, easy to replicate.

Weaknesses: low ecological validity, difficult to replicate, difficult to control variables

Candidates must identify an appropriate strength/weakness of laboratory environments and relate this to the study of EWT.

2 × 2 marks

For each strength/weakness

1 mark – strength/weakness identified but not contextualised

2 marks – strength/weakness identified and contextualised.

- 2 The further research into autism by Golan et al made several improvements to an earlier study. Outline one of these improvements.** [2]

The improvements included the removal of distorted items, the allocation of two further foils for each voice and the removal of five items due to disagreements between authors over correct answers.

1 mark – brief/muddled answer

2 marks – clear outline of one appropriate improvement.

- 3 Briefly outline the pre-operational stage of cognitive development.** [2]

The **preoperational stage** ranges from about ages 2 to 7. Children in this stage can mentally represent events and objects, and engage in symbolic play. Their thoughts and communications are typically **egocentric**. **Egocentrism** refers to the child's inability to see a situation from another person's point of view. According to Piaget, the egocentric child assumes that other people see, hear and feel exactly the same as the child does. Another key feature which children display during this stage is **animism**: the belief that inanimate objects (such as toys and teddy bears) have human feelings and intentions.

1 mark – brief/muddled answer

2 marks – clear outline of pre-operational stage including at least two correct pieces of information.

- 4 Milgram's research into obedience has often been criticised for being unethical. Outline two arguments that would justify the research.** [4]

Likely answers include:

The value of the research in explaining social influence; the fact that participants did not experience long term negative effects; the fact that no-one was physically hurt.

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Any other appropriate answer to be credited.

2 × 2 marks

For each argument

1 mark – brief/muddled answer

2 marks – clear argument justifying the research

- 5 From the research into prison simulation conducted by Haney, Banks and Zimbardo, explain how the uniforms may have contributed to the dramatic changes seen in both guards and prisoners.** [4]

Uniforms can encourage the manifestation of depersonalisation, making it more likely that the participants would take on the role denoted by the uniform they were given. For example, guards experienced a pathology of power which was in part due to the aggressive nature of their uniform. Guards may have been further depersonalised when they wore mirrored sunglasses, which prevented their eyes from being seen. Prisoners' uniform produced feelings of insecurity, vulnerability and de-masculinisation. Prisoner numbers may be referred to here.

1–2 marks – brief answer which identifies some key features, or a good answer which only makes reference to prisoners OR guards.

3–4 marks – an increasingly detailed explanation which makes reference to both prisoners and guards.

- 6 Outline one ethical issue raised by the further research into bystander intervention by Fischer et al.** [2]

The participants' alleged task was to evaluate a cross-gender communication between a man and a woman. Suddenly, the man starts to verbally attack and grab the woman. The degree of potential emergency-related danger was manipulated by the size of the male actor who was either of small stature (representing low danger) or of large stature (representing high danger). This could potentially be seen as causing distress to participants, who were also deceived about the task they had to complete.

1 mark – brief/muddled answer or ethical issue are identified but not contextualised

2 marks – clear identification of ethical issue in context of study.

- 7 (a) Describe the sample used in the study on learning aggression by Bandura et al.** [2]

The subjects were 36 boys and 36 girls enrolled in the Stanford University Nursery School. They ranged in age from 37 to 69 months, with a mean age of 52 months. Subjects were divided into eight experimental groups of six subjects each and a control group consisting of 24 subjects.

1 mark – one appropriate piece of information

2 marks – at least two appropriate pieces of information.

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(b) Suggest one weakness of this sample. [2]

Likely answers will include: small sample size (especially when divided into experimental groups), all from one place, age range (could argue too wide or too narrow!). Candidates should go further than just identifying this and should explain that e.g. small samples are unrepresentative.

1 mark – identification of issue e.g. small sample

2 marks – clear suggestion of weakness e.g. small sample = unrepresentative.

8 Outline one conclusion that can be drawn from the study on defining abnormality by Rosenhan. [2]

Rosenhan concludes that *“It is clear that we cannot distinguish the sane from the insane in psychiatric hospitals. The hospital itself imposes a special environment in which the meanings of behavior can easily be misunderstood. The consequences to patients hospitalized in such an environment the powerlessness, depersonalization, segregation, mortification, and self labeling-seem undoubtedly counter-therapeutic”*. Any other appropriate conclusion may be credited.

1 mark – brief/muddled conclusion

2 marks – clear outline of an appropriate conclusion.

9 Briefly outline one strength of the case study method used in the further research on gambling by Griffiths. [2]

The strengths of case studies include the depth and detail that can be achieved in studying only one individual as well as the possible therapeutic benefits. Candidates must contextualise their answer for 2 marks.

1 mark – brief/muddled answer OR appropriate strength without contextualisation

2 marks – appropriate strength given in context of the study.

10 Outline one difference found between the BDD sufferers and the controls in the study of Body Dysmorphic disorder (BDD) by Veale and Riley. [2]

Veale and Riley identify many differences between the sufferers of BDD and the controls. These include: BDD sufferers using a variety of reflective surfaces, more likely to use mirror when depressed, more likely to compare reflection to an idealised image in their mind and more likely to try and see something different in the mirror. Any other appropriate answer can be credited.

1 mark – brief/muddled answer

2 marks – clear outline of an appropriate difference.

11 Explain how the evolutionary perspective would explain a preference for facial symmetry over asymmetry. [2]

From an evolutionary perspective, symmetry is considered to indicate mate quality and thus would be considered more attractive than asymmetry.

1 mark – brief/muddled answer

2 marks – clear explanation.

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12 Outline one way in which the study on sleep and dreaming by Dement and Kleitman has ecological validity. [2]

The most likely answer is that the participants slept in a bed and went to bed at their normal bed times. Candidates may also argue that the use of a doorbell to wake participants up would give the study ecological validity. Any other appropriate answer to be credited.

1 mark – brief/muddled answer

2 marks- clear outline of one appropriate way in which the study has ecological validity.

Section B

Answer either question 13 or question 14. Your answer should be in relation to the research that you have studied (research may include background, key study, further research and 'explore more').

13 (a) Describe research into romantic love as attachment.

Answers may include a description of the background, key study, further research and may explore more. Candidates do not have to include all of these points to achieve full marks. Outlines of the key study and further research have been reproduced below but candidates should be credited for any appropriate content.

Background theory: Bowlby's maternal deprivation hypothesis; Ainsworth's attachment styles.

Key study: Hazan, C. and Shaver, P. (1987) Romantic Love Conceptualized as an Attachment Process.

Journal of Personality and Social Psychology, 52, 511–524.

Full text: <http://psychology.ucdavis.edu/labs/Shaver/PWT/index.cfm?Section=3#1987>

Further research: Bartholomew, K. and Horowitz, L.M. (1991) Attachment styles among young adults:

A test of a four category model. Journal of Personality and Social Psychology, 61, 226–244.

Full text: <http://www.sfu.ca/psyc/faculty/bartholomew/research/publications/bh1991.pdf>

Key study brief outline: This study explored the hypothesis that romantic love is an attachment process and can be related to the attachment processes in early infancy. The authors devised adult versions of the three key attachment styles; namely secure, avoidant and anxious/ambivalent. The authors conducted two questionnaire studies; one presented as a 'love quiz' printed in a local newspaper (of which 620 responses were analysed) and the second sampling 108 undergraduate students. Results suggested that the relative prevalence of the three attachment styles was roughly the same in adulthood as in infancy, that the three types of adults differ predictably in the way that they experience romantic love and that attachment style is related in theoretically meaningful ways to mental models of self and social relationships and to relationship experiences with parents.

Further research: A new 4-group model of attachment styles in adulthood is proposed. Four prototypic attachment patterns are defined using combinations of a person's self-image (positive or negative) and their image of others (positive or negative). In Study 1, an interview was developed to yield continuous and categorical ratings of the 4 attachment styles.

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Intercorrelations of the attachment ratings were consistent with the proposed model. Attachment ratings were validated by self-report measures of self-concept and interpersonal functioning. Each style was associated with a distinct profile of interpersonal problems, according to both self- and friend-reports. In Study 2, attachment styles within the family of origin and with peers were assessed independently. Results of Study 1 were replicated. The proposed model was shown to be applicable to representations of family relations; Ss' attachment styles with peers were correlated with family attachment ratings.

<p>Definition of terms is accurate and use of psychological terminology is comprehensive.</p> <p>Description of knowledge (theories/studies) is accurate, coherent and detailed.</p> <p>Understanding (such as elaboration, use of example, quality of description) is very good.</p> <p>The answer is competently structured and organised (global structure introduced at start and followed throughout).</p> <p>Quality of written communication is very good.</p>	8 – 10 marks
<p>Definition of terms is mainly accurate and use of psychological terminology is competent.</p> <p>Description of knowledge (theories/studies) is mainly accurate, coherent and detailed.</p> <p>Understanding (such as elaboration, use of example, quality of description) is good.</p> <p>The answer has adequate structure and organisation.</p> <p>Quality of written communication is good.</p>	6 – 7 marks
<p>Definition of terms is basic and the use of psychological terminology is adequate.</p> <p>Description of knowledge (theories/studies) is often accurate, generally coherent and has some detail.</p> <p>Understanding (such as elaboration, use of example, quality of description) is reasonable.</p> <p>The answer has some structure or organisation.</p> <p>Quality of written communication is good.</p>	4 – 5 marks
<p>Definition of terms and use of psychological terminology is occasional or absent.</p> <p>Description of knowledge (theories/studies) is sometimes accurate, sometimes coherent and has some detail.</p> <p>Understanding (such as elaboration, use of example, quality of description) is occasionally evident.</p> <p>The answer has minimal structure or organisation.</p> <p>Quality of written communication is adequate.</p>	1 – 3 marks
No answer or irrelevant answer.	0 marks

- 13 (b)** Evaluate the contribution that the Key Study by Hazan and Shaver has made to our understanding of romantic love as attachment.

Candidates may use a variety of evaluation issues in their response (most likely will be issues relating to self report studies, the self selecting nature of the sample for the first study, the student sample for the second study), but answers should also focus on the contribution made to the wider area of romantic love as attachment in order to access top band marks.

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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 these earlier findings.

<p>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. <i>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.</i> Effective use of supporting examples from unit content. Quality of argument (or comment) arising from points is clear and well developed. Analysis (valid conclusions that effectively summarises issues and arguments) is evident. Evaluation is detailed and understanding is thorough.</p>	10 – 12 marks
<p>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.</p>	8 – 9 marks
<p>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.</p>	6 – 7 marks
<p>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.</p>	4 – 5 marks

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<p>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.</p>	1 – 3 marks
No answer or irrelevant answer.	0 marks

- 13 (c)** Suggest an alternative study that could be conducted and explain how this would extend our understanding of romantic love as attachment.

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.

<p>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.</p>	5 – 6 marks
<p>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.</p>	3 – 4 marks
<p>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.</p>	1 – 2 marks
No or inappropriate suggestion.	0 marks

- 14 (a)** Describe research into stress. [10]

Research may include background, key study, further research and explore more. Candidates do not have to include all of these points to achieve full marks. The abstracts for the key study and further research have been reproduced below but candidates should be credited for any appropriate content.

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Stress

Overview: We all experience the physiological effects of stress and we can measure adrenaline production. In the key study by Wang et al. (2005) we can go beyond 'traditional' measures and look at how stress can be measured using the fMRI brain scanning technique. How to manage stress is important and the further research introduces cognitive behaviour therapy.

Background theory: Physiology of stress: the Selye GAS model, and physiological measures. Psychological measures (questionnaires), stress management techniques.

Key study: Wang, J., Rao, H., Wetmore, G. S., Furlan, P. M., Korczykowski, M., Dinges, D. F. and Detre, J. A. (2005) Perfusion functional MRI reveals cerebral blood flow pattern under psychological stress.

Despite the prevalence of stress in everyday life and its impact on happiness, health, and cognition, little is known about the neural substrate of the experience of everyday stress in humans. We use a quantitative and non-invasive neuroimaging technique, arterial spin-labeling perfusion MRI, to measure cerebral blood flow (CBF) changes associated with mild to moderate stress induced by a mental arithmetic task with performance monitoring. Elicitation of stress was verified by self-report of stress and emotional state and measures of heart rate and salivary-cortisol level. The change in CBF induced by the stress task was positively correlated with subjective stress rating in the ventral right prefrontal cortex (RPFC) and the left insulaputamen area. The ventral RPFC along with right insulaputamen and anterior cingulate showed sustained activation after task completion in subjects reporting a high stress level during arithmetic tasks. Additionally, variations of baseline CBF in the ventral RPFC and right orbitofrontal cortex were found to correlate with changes in salivary-cortisol level and heart rate caused by undergoing stress tasks. We further demonstrated that the observed right prefrontal activation could not be attributed to increased cognitive demand accompanying stress tasks and extended beyond neural pathways associated with negative emotions. Our results provide neuroimaging evidence that psychological stress induces negative emotion and vigilance and that the ventral RPFC plays a key role in the central stress response.

Further research: Harvey, A. G., Bryant, R. A. and Tarrier, N. Cognitive behaviour therapy for post-traumatic stress disorder.

Following considerable empirical scrutiny, cognitive behaviour therapy (CBT) has proven to be a safe and effective treatment for post-traumatic stress disorder (PTSD). This article overviews the general principles of treatment and describes the components that comprise CBT for PTSD. We then move on to review the efficacy of CBT for the treatment of PTSD caused by various traumas, including assault, road traffic accident (RTA), combat, and terrorism. Recent advances in early intervention and in the treatment of disorders that are comorbid with PTSD are reviewed. Finally, future directions are discussed. In particular, it is proposed that randomised controlled trials (RCT) of CBT for PTSD must be conducted with enhanced methodological rigour and public health relevance.

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<p>Definition of terms is accurate and use of psychological terminology is comprehensive.</p> <p>Description of knowledge (theories/studies) is accurate, coherent and detailed.</p> <p>Understanding (such as elaboration, use of example, quality of description) is very good.</p> <p>The answer is competently structured and organised (global structure introduced at start and followed throughout).</p> <p>Quality of written communication is very good.</p>	8 – 10 marks
<p>Definition of terms is mainly accurate and use of psychological terminology is competent.</p> <p>Description of knowledge (theories/studies) is mainly accurate, coherent and detailed.</p> <p>Understanding (such as elaboration, use of example, quality of description) is good.</p> <p>The answer has adequate structure and organisation.</p> <p>Quality of written communication is good.</p>	6 – 7 marks
<p>Definition of terms is basic and the use of psychological terminology is adequate.</p> <p>Description of knowledge (theories/studies) is often accurate, generally coherent and has some detail.</p> <p>Understanding (such as elaboration, use of example, quality of description) is reasonable.</p> <p>The answer has some structure or organisation.</p> <p>Quality of written communication is good.</p>	4 – 5 marks
<p>Definition of terms and use of psychological terminology is occasional or absent.</p> <p>Description of knowledge (theories/studies) is sometimes accurate, sometimes coherent and has some detail.</p> <p>Understanding (such as elaboration, use of example, quality of description) is occasionally evident.</p> <p>The answer has minimal structure or organisation.</p> <p>Quality of written communication is adequate.</p>	1 – 3 marks
No answer or irrelevant answer.	0 marks

14 (b) Evaluate research into stress.

[12]

Candidates may use a variety of evaluation issues in their response (most likely will be issues relating to experimental design, the reliability and validity of measurements, usefulness and applications etc) but should also focus on the contribution made to the wider area of stress 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 these findings.

<p>Discussion is comprehensive.</p> <p>Range of points is balanced.</p> <p>Points are competently organised.</p> <p>Selection of points is explicitly related to the assessment request and</p>	10 – 12 marks
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<p>demonstrates impressive psychological knowledge. <i>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.</i></p> <p>Effective use of supporting examples from unit content.</p> <p>Quality of argument (or comment) arising from points is clear and well developed.</p> <p>Analysis (valid conclusions that effectively summarises issues and arguments) is evident.</p> <p>Evaluation is detailed and understanding is thorough.</p>	
<p>Discussion is very good.</p> <p>Range of points is good and is balanced.</p> <p>Points are well organised.</p> <p>Selection of points is related to the assessment request and demonstrates competent psychological knowledge.</p> <p>Good use of supporting examples from unit content.</p> <p>Quality of argument arising from points is often clear and well developed.</p> <p>Analysis (key points and valid generalisations) is often evident.</p> <p>Evaluation is quite detailed and understanding is good.</p>	8 – 9 marks
<p>Discussion is good.</p> <p>Range of points is limited and may be imbalanced.</p> <p>Points are organised.</p> <p>Selection of points is often related to the assessment request and demonstrates good psychological knowledge.</p> <p>Limited use of supporting examples from unit content.</p> <p>Quality of argument arising from points is limited.</p> <p>Analysis (key points and valid generalisations) is sometimes evident.</p> <p>Evaluation is detailed and understanding is limited.</p>	6 – 7 marks
<p>Discussion is sufficient.</p> <p>Range of points is partial (may be positive or negative only).</p> <p>Points are occasionally organised into issues/debates, methods or approaches.</p> <p>Selection of points is sometimes related to the assessment request and demonstrates basic psychological knowledge.</p> <p>Partial use of supporting examples from unit content.</p> <p>Argument arising from points is acceptable</p> <p>Analysis (key points and valid generalisations) is occasionally evident.</p> <p>Evaluation has adequate detail and understanding is acceptable.</p>	4 – 5 marks
<p>Discussion is basic.</p> <p>Some points are evident and may be either positive or negative.</p> <p>Points are not always organised into issues/debates, methods or approaches.</p> <p>Selection of points may be peripherally relevant to the assessment request and psychological knowledge is occasionally evident.</p> <p>Some or no use of supporting examples from unit content.</p> <p>Argument arising from points is discernible or not present.</p> <p>Analysis (key points and valid generalisations) is rare or not present.</p> <p>Evaluation has meagre detail and understanding may not be evident.</p>	1 – 3 marks
No answer or irrelevant answer.	0 marks

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14 (c) Explain how you would conduct a study which would extend our understanding of stress. [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