Mark Scheme (Standardisation)

June 2018

Pearson Edexcel International GCE
In Psychology (WPS03)
Paper 3: Applications of Psychology

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.

- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.

- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.

- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.

- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.

- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.

- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.

- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

DEVELOPMENTAL PSYCHOLOGY

Question Number	Answer	Mark
1(a)	**AO2 (1 mark)** Credit **one** mark for accurate identification. For example: • Marianne used a cross-sectional research method. **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
1(b)	**AO1 (1 mark), AO2 (1 mark)** Credit **one** mark for accurate identification of one reason (AO1) Credit **one** mark for suggestion in relation to the scenario (AO2) For example: • Children under 12 months old are pre-linguistic (1) so Marianne would not be able to record the words spoken/grammatical accuracy as children do not use words at this age (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
1(c)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of improvement in relation to scenario (AO2) Credit **one** mark for justification of the improvement (AO3) For example: • Marianne could have used a sample of children from different villages in other areas (1) which would give her a more representative group of children to gather data from (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
2(a)	**AO2 (1 mark)** Credit **one** mark for a correct answer • 11.54% **Reject all other answers.**	**(1)**

Question Number	Answer	Mark
2(b)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of one strength and one weakness in relation to scenario (AO2) Credit **one** mark for justification of each strength and each weakness (AO3) For example: Strength • The initial questions Ling uses to ask the children about the conservation of number task can be standardised (1) which would allow her to replicate the questions for all children and increase the reliability of her data (1). Weakness • Ling may have preconceived ideas about how or why children struggle to conserve number at the age of three years old (1) so her interview questions may be biased towards eliciting desired responses from the children to meet the aim of her study (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
3(a)	**AO2 (1 mark)** Credit **one** mark for a correct answer For example: • A positive correlation (1) **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
3(b)	**AO2 (1 mark)** Credit **one** mark for a correct answer For example: - Spearman's Rank (1) **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
4	**AO1 (2 marks), AO3 (2 marks)** Credit up to **two** marks for accurate identification (AO1) Credit up to **two** marks for justification/exemplification (AO3) For example: - Mindfulness can enhance development as it includes developing listening, breathing and attention skills for children to self-regulate their cognition and attention (1) which Jha et al. (2002) found enhanced the cognitive skills such as working memory capacity, although they tested military personnel not children (1). Also, mindfulness meditation helps to supress distractions from the environment so children can concentrate on tasks (1) which Moore and Malinowski (2009) found increased participant's ability to pay attention and also increased cognitive flexibility, although young children may struggle to meditate this effectively so may not enhance development (1). **Look for other reasonable marking points.**	**(4)**

Question Number	Indicative Content	Mark
5	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Their meta-analysis used secondary data from studies into attachment undertaken by other researchers. • The data source search identified suitable studies using a strict criterion, such as excluding samples of children over 2 years old. • A large sample of 32 studies was used, including 8 different countries which in total involved 1,990 strange situations. • They planned to use Ainsworth et al. (1978) as a baseline sample distribution to measure their findings against. **AO3** • Using secondary data means that they cannot be certain that the studies were conducted reliably by the original researchers, so the data they used may be flawed. • Strict criterion increases the reliability of the data sources gathered as they could be sure that the studies were comparable. • The sample is representative of a large, cross-cultural population which increases the generalisability of the findings. • The overall distribution of attachment in the US studies did not match Ainsworth's suggestions, therefore there was no baseline measure, limiting cross-cultural comparisons. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
		AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.**
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Question Number	Indicative Content	Mark
6	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Intentional distress was caused to Little Albert when they made the loud banging noise as the stimulus for the startle/fear response. • Due to his age, consent was gained from Little Albert's mother for him to take part in the study. • Little Albert's fear response was renewed when it began to fade so they intentionally continued to cause harm. • The identity of Little Albert and his mother were kept confidential. **AO3** • Every child has the right to express their feelings and for these to be taken seriously, it could be argued that crying and showing fear represented his feelings and the research should have been stopped. • His mother had parental responsibility under Article 18 and would have considered what was best for him and believed the study was safe. • The harm caused conflicts with the UNCRC statement that the interests of the child must be a top priority, Watson and Rayner prioritised their research aims and continued to cause harm. • Under the UNCRC Article 16 children have the right to privacy and the identity of Little Albert was never made public, so in this way ethical considerations had been undertaken. **Look for other reasonable marking points.**	**(8)**

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Question Number	Answer	Mark
7	**AO1 (1 mark)** Credit **one** mark for accurate statement. For example: • Media/news reports about the defendant/crime/victim published before the trial. **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
8(a)	**AO2 (2 marks)** Credit up to **two** marks for accurate description in relation to scenario. For example: • Weapon focus means Francesco was concentrating on the robbers' guns (1) so his attention was diverted from the features of the robbers themselves (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
8(b)	**AO2 (4 marks)** Credit up to **four** marks for accurate description in relation to scenario. For example: • The police would ask Francesco about features of the shop to encourage him to revisit what he was doing (1). They could ask Francesco about what he thinks the employees might have seen from their perspective (1). He could describe the robbery sequence backwards starting from when they drove off (1) which may reduce the influence of Francesco's schema/prior knowledge on the sequence of events during the robbery (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
9	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each reason in relation to scenario (AO2) Credit **one** mark for exemplification/justification of each reason (AO3) For example: • Factors, such as drug withdrawal, that are most likely to increase the risk of further violent assaults by the offender will be specified in the psychological (case) formulation (1) so Mollie should be able to prevent escalations of violence in order to maintain the safety of the prison staff (1). • Understanding the offender's specific problems, such as separation from his mother, can aid understanding possible risk behaviours he may have (1) which is supported by Moore and Drennan (2013) who found benefits in anticipating and managing adverse outcomes in offenders (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
10(a)	**AO2 (3 marks)** Credit **one** mark for appropriate **title**. Credit **one** mark for appropriate **labelling of axes**. Credit **one** mark for correct **plots**. For example; **A bar chart to show the mean scores (out of 15) for positive and negative thinking before and after CBT** **Look for other reasonable marking points.**	**(3)**

Question Number	Answer	Mark
10(b)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of improvement in relation to scenario (AO2) Credit **one** mark for justification of the improvement (AO3) For example; • Charlie could use open-ended questions to enable the offenders to explain the changes they've experienced in their thinking (1) which increases validity as it would give him personal, real life accounts of how well offenders felt the CBT programme worked (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Indicative Content	Mark
11	**AO1 (4 marks), AO3 (4 marks)**	**(8)**
	AO1	
	45 participants in the study were shown films clips on video, each involving a traffic accident. - The seven video clips were shown to participants in succession. - The participants had a questionnaire to complete at the end of each film they watched. - Leading questions elicited higher speed estimates, 'smashed' resulted in 40.5mph compared to 'hit' which was 34.0mph.	
	AO3	
	- Using a large sample of participants gives the findings strong generalisability to the likely recall of witnesses in real life, so can be applied to actual eyewitness memory. - Demand characteristics from repeating the task may mean participants guessed the aim, so it is an unreliable test of eyewitness memory in real-life where a crime would be seen once. - Eyewitnesses to crimes are not usually questioned using a pre-prepared questionnaires, therefore this lacks task validity so their results may not apply to real life crime. - The results indicate leading questions can alter recall which should be applied to interviewing eyewitnesses to ensure accuracy.	
	Look for other reasonable marking points.	

Level	Mark	Descriptor
		AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer.**
	0	No rewardable material.
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Question Number	Indicative Content	Mark
12	**AO1 (4 marks), AO3 (4 marks)** **AO1** • When witnessing a real-life crime, it is likely that cortisol production will be heightened which could increase reliability of memory due to selective attention. • If a crime is particularly stressful, arousal may be too high to focus on the detail of the crime and reliability of memory will be reduced. • Reliability of eyewitness memory may be strongest in the cases of giving specific details of a traumatic event. • Emotions which result in fixation may reduce the reliability of eyewitness memory as peripheral details are less well recalled. **AO3** • Al'Absi et al. (2002) measured cortisol levels at times of stress and concluded that cortisol disrupts working memory but enhances selective attention. • According to Yerkes and Dodson (1908) there is an optimal level of arousal where attention will peak. • Kramer et al. (1991) exposed subjects to images of murder victims as a traumatic stimulus finding overall memory was poorer, so elevated levels of stress reduce recall accuracy. • Christianson (1992) claimed when the main event is emotional witnesses fixate faster, more often, and for longer on stimulus. **Look for other reasonable marking points.**	**(8)**

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Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1)
		Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

HEALTH PSYCHOLOGY

Question Number	Answer	Mark
13	**AO1 (1 mark)** Credit **one** mark for accurate statement. For example; • Where a group of people are asked their thoughts/opinions about a health-related topic. **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
14(a)	**AO2 (2 marks)** Credit up to **two** marks for accurate description in relation to scenario. For example; • Cortisol weakens the immune system which is why Francesco has illnesses (1) and it is also involved in glucose metabolism and insulin regulation which could result in Francesco's high blood sugar levels (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
14(b)	**AO2 (4 marks)** Credit up to **four** marks for accurate description in relation to scenario. For example; • The hippocampus becomes overwhelmed with stress hormones which could result in Francesco's memory recall problems (1). His sleep disruption could increase his stress due to circadian disruption effects on the prefrontal cortex disrupting executive functioning and cognitive flexibility (1). Francesco's high blood pressure could be a result of increased amygdala activity which is related to white blood cell production (1) which can also cause plaques in arteries reducing blood circulation (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
15	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each benefit in relation to scenario (AO2) Credit **one** mark for justification / exemplification of each benefit (AO3) For example; • As he is nervous around people, the SSRIs will help him reduce his symptoms quickly without the need for him to attend therapy sessions as they are tablets taken at home (1) so they are a more practical treatment he can begin immediately to reduce anxiety around people before attending any further therapy (1). • The patient's symptoms of anxiety attacks are severe and SSRI drug treatment can reduce these so he can return to his day to day life, such as his job (1). Soomro (2009) found that SSRIs reduce the severity of anxiety symptoms so they are benefit in helping the patient with the increasing severity of anxiety (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
16(a)	**AO2 (3 marks)** Credit **one** mark for appropriate **title**. Credit **one** mark for appropriate **labelling of axes**. Credit **one** mark for correct **plots**. For example; **A bar chart to show the mean scores (out of 15) for positive and negative thinking before and after CBT** Mean score (out of 15) 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0 **Positive Negative** **Thinking before CBT** **Positive Negative** **Thinking after CBT** **Look for other reasonable marking points.**	**(3)**

Question Number	Answer	Mark
16(b)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of improvement in relation to scenario (AO2) Credit **one** mark for justification of the improvement (AO3) For example; • Charlie could use open-ended questions to enable the patients to explain the changes they've experienced in their thinking (1) which increases validity as it would give him personal, real life accounts of how well patients felt the CBT programme worked (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Indicative Content	Mark
17	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Brady (1958) tested 8 rhesus monkeys in pairs by subjecting one to a stressor. • Each executive monkey was responsible for pressing a lever and was shocked if this was not completed on time. • The creation of stress in the executive monkey was the psychological stress of decision responsibility. • The conditioned monkeys from all four pairs of monkeys died between 9 and 48 days of the experiment due to developing ulcers from the stress. **AO3** • Rhesus monkeys may not represent people as their physiology/brain functioning differs, so is not generalisable to effects of human stress. • Humans do not usually receive electric shocks for not completing tasks, lowering task validity to human experiences of stress. • Michie (2002) found human stress can result from responsibility so Brady's findings may be generalisable to effects in the human population. • Selye (1951) claimed stress also results in stomach ulcers in the human population, so Brady's (1958) study is supporting evidence for the effects of stress in the human population. **Look for other reasonable marking points.**	**(8)**

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Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the

Question Number	Indicative Content	Mark
	significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)	
18	**AO1 (4 marks), AO3 (4 marks)** **AO1** - Social support can include friends, family and community, such as religion/church. - Stress is a physiological response to a stressor which can result in the increase of hormones such as cortisol or HPA axis arousal. - Social support can be associated with venting emotions or planning strategies. - The use of social support acts as a buffer to moderate the impact of life events on mental health. **AO3** - Nakonz and Shik (2009) found that religious coping strategies helped emotional adjustment to stressful situations. - Fleming et al. (1982) found social support did little to limit the effects of physiological arousal, so it may be limited to stress prevention rather than management. - Carver et al. (1989) found venting of emotions to be a dysfunctional tendency, so seeking social support may lead to negative coping strategies. - Reduction in psychological and behavioural effects of stress was found by Fleming et al. (1982), suggesting social support can aid someone's ability to cope with some effects of stress. **Look for other reasonable marking points.**	**(8)**

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| Level 4 | 7-8 Marks | Demonstrates accurate and thorough knowledge and understanding. (AO1) |
| | | Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3) |