Cambridge Assessment International Education

# Cambridge International AS & A Level

**PSYCHOLOGY** **9990/12**

Paper 1 Approaches, Issues and Debates **March 2020**

MARK SCHEME

Maximum Mark: 60

**Published**

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.

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**[Turn over**

## Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

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| Question | Answer | Marks |
|---|---|---|
| 1(a) | **From the study by Andrade (doodling):**<br><br>**State the experimental design used in this study. Include a reason for your answer.**<br><br>Independent groups/independent measures/between subjects design.<br><br>As different participants took part in the levels of the IV/different conditions;<br>Participants took part in either the doodling or control conditions. | **2** |
| 1(b) | **Outline the materials used by participants in the doodling condition.**<br><br>One mark per correct point made<br><br>Used a pencil (for shading);<br>Shapes on paper were approximately 1 cm (in diameter);<br>The piece of paper was A4;<br>There was a (4.5 cm) margin on left-hand side;<br>This could be used to write information down;<br>Alternating rows of shapes;<br>The shapes were squares **and** circles. | **2** |
| 1(c) | **Outline the result for 'false alarms for places' (incidental information) in the study.**<br><br>Two marks for full result (compares the two conditions correctly)<br>One mark for partial result (e.g. one condition)<br><br>Both the doodling and control condition had the same average recall [0.3] (2)<br>The average score for the doodling group was 0.3 (1) | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 2(a) | **From the case study by Saavedra and Silverman who gave therapy to a 9-year old boy after his negative experience with buttons:**<br><br>**Outline <u>one</u> psychological concept that was investigated in this study.**<br><br>One mark for identifying<br>One mark for outlining<br><br>e.g.<br>Phobias were investigated (1). These are when people develop some irrational fear of an object/situation (1).<br><br>Operant Conditioning (1). One example of this is using a reward to increase the probability of a behaviour being repeated (1).<br><br>Classical Conditioning (1). This is when stimuli are associated together after several pairings happen (1). | **2** |
| 2(b) | **Outline <u>one</u> result from the posttreatment assessment session.**<br><br>One mark per correct point.<br><br>e.g.<br>The boy reported minimal distress about buttons (1) and he no longer met the DSM criteria for a specific phobia (of buttons) (1)<br><br>He was now wearing (clear) plastic buttons on his school uniform (1) and he was doing this every day/on a daily basis (1). | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 3(a) | **From the study by Pepperberg (parrot learning):**<br><br>**Outline <u>one</u> result of the test on Alex the parrot which used familiar objects.**<br><br>Two marks for full result (meaningful comparison)<br>One mark for partial result<br><br>e.g.<br>Alex's score was 76.7% [99/129] for all trials and 69.7% [69/99] on first-trial-only performances (2)<br>Alex's score for all trials was better than his first-trial-only performance (2)<br>He scored above chance on first-trial-only performance. (1) | **2** |
| 3(b) | **Outline <u>one</u> methodological strength of this study.**<br><br>One mark for identifying an appropriate methodological strength<br>One mark for applying it to Pepperberg<br><br>e.g.<br>There were examples of Pepperberg using 'blind' techniques to improve validity (1). For example, the trainer who conducted the trials had not trained Alex to learn same/different (1).<br><br>The procedure was standardised to aid replicability/reliability (1). For example, the choice of objects/Model-Rival Technique was clearly outlined (to help someone replicate) (1). | **2** |
| 3(c) | **Outline <u>one</u> ethical weakness of this study.**<br><br>One mark for outlining an appropriate ethical guideline/ethical issue<br>One mark for applying it to Pepperberg<br><br>e.g.<br>Housing should take into account the social behaviour of species (e.g. caging);<br>Alex was housed alone which might be stressful as parrots are social/might have been too small.<br>Aversive stimuli should be avoided/punishment should be avoided;<br>The parrot had 'no!' yelled at him when he got a question incorrect (and this could be stressful).<br>Alex may have become bored in between/during trials;<br>Keeping Alex isolated in a cage (at times) could be unethical (application) as parrots are a highly social species (ethical issue); | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 4(a) | **Describe the 'learning task' used in the study by Milgram (obedience).**<br><br>One mark per correct point.<br><br>It was a paired-associate (learning) task;<br>The participant read out a series of word pairs (to the learner);<br>The participant then read out one word;<br>Along with four terms;<br>The learner then had to indicate which word had been originally paired/responded with the corresponding word;<br>This was done by him pressing one of four switches;<br>This lit up one of four quadrants in the answer box;<br>Each incorrect answer received a shock/correct answer moved to next word. | **4** |
| 4(b) | **Outline how Milgram ensured that the participant was never the learner.**<br><br>One mark per correct point.<br><br>The 'participants' drew slips from a hat;<br>Both slips always had the word 'teacher' on it;<br>The 'true' participant was always first to choose. | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 5 | **Sai wants to replicate an experimental condition from the study by Bandura et al. (aggression) and needs your help. You must produce clear instructions for Sai, from when the child in the experimental condition arrives at the experimental room until the child observes a model assembling the tinker toys.**<br><br>**Suggest instructions that Sai could use to replicate this part of the study.**<br><br>One mark per correct instruction.<br><br>You must bring in each child individually (to the experimental room);<br>You must invite the model to join in a game with the child;<br>You must take the child to the corner of the room which looks like a play area (this will already be set up);<br>You must allow the child to sit at the table;<br>You must then demonstrate how the child can make pictures from potato prints/stickers;<br>You can then leave the child to produce their pictures;<br>You must get the experimenter to (initially) stay in the room so the child cannot leave;<br>You must take the model to the opposite corner of the room (to the child);<br>You must make sure the corner contains a table, chair, mallet, tinker toys and Bobo Doll (two named for mark);<br>You must explain that the toys in this corner are for the model to play with/tell them not play with them;<br>Once the model is seated you must leave the room. | **5** |

| Question | Answer | Marks |
|---|---|---|
| 6(a) | **From the study by Baron-Cohen (eyes test):**<br><br>**Identify <u>two</u> characteristics of the sample used in Group 1.**<br><br>One mark per characteristic. If more than two given take the first two answers.<br><br>Adults/average age of 29.7 years;<br>Diagnosed with AS/HFA;<br>Male;<br>Average IQ of 115. | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 6(b) | **Describe how the participants were recruited for Group 1.**<br><br>One mark per correct point<br><br>Via volunteer/self-selecting sampling;<br>Advertisements were placed in UK National Autistic Society magazine;<br>All (potential) participants had been diagnosed with AS/HFA;<br>Using established criteria (DSM/ICD);<br>They had to be in an equivalent range of socioeconomic class/education as Group 2. | **3** |
| 6(c) | **Outline <u>one</u> conclusion from this study.**<br><br>Two marks for full conclusion<br>One mark for partial conclusion<br>0 marks for purely results<br><br>e.g.<br>The Revised 'Eyes Test' overcame the problems of the original version (1);<br>The Revised 'Eyes Test' overcame the problems of the original version making it a valid test of social intelligence (in adults) (2);<br>The Revised test could discriminate AS and non-AS participants (1);<br>People with autism have difficulties with Theory of Mind (1);<br>People with autism have difficulties with Theory of Mind as they cannot see the perspective of other people (2);<br>Males are more likely to be autistic/females less likely to be autistic (1);<br>Participants with AS/HFA scored lower on the Eyes Test than all other groups (0); | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 7(a) | **From the study by Laney et al. (false memory):**<br><br>**Outline <u>one</u> aim of this study.**<br><br>Two marks for full aim<br>One mark for partial aim<br><br>e.g.<br>To investigate whether (positive) false memories about asparagus can be implanted into a person (2);<br>To investigate whether people can have a positive false memory implanted creating a likeness for certain foods/asparagus (2);<br>To investigate whether a person can change their opinion about something (e.g. food) if a false memory is implanted (2);<br>To investigate false memories for food (1);<br>To investigate if false memories can be implanted (1); | **2** |
| 7(b) | **Suggest <u>one</u> real-world application of this study.**<br><br>Two marks for application that clearly shows who would benefit/linked to study/how it would be done/has the what <u>and</u> how.<br>One mark for brief application but linked to study OR plausible application outlined but not explained/only has the what <u>or</u> how.<br><br>e.g.<br>This could be used to help children improve their diets (1 mark: what). Children could be 'tricked' by their parents/dietician by telling them that they loved broccoli/asparagus/cabbage, etc. the first time they tried it by having a false memory implanted (1 mark: how).<br><br>Can be used to help cancer patients follow diets (1 mark: what). Patients can have a false memory implanted of tasty food to help them like it (1 mark: how). | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 8(a) | **The study by Piliavin et al. (subway Samaritans) is from the social approach.**<br><br>**Outline <u>two</u> assumptions of the social approach, using any example for each.**<br><br>One mark for appropriate assumption (×2)<br>One mark for any relevant example (×2)<br><br>e.g.<br>Behaviour/cognitions/emotions can be influenced by other individuals (1). For example, in Milgram the experimenter in the lab coat used prods to get them to continue to give electric shocks (1)<br><br>Behaviour/cognitions/emotions can be influenced by groups (1). For example, in emergency situations people may believe other people are giving/calling for help so just walk on by when they usually help (1). | **4** |

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>8(b)</td><td>
Explain how <u>one</u> result from the study by Piliavin et al. supports the situational explanation of behaviour and how <u>one</u> result does <u>not</u> support diffusion of responsibility.
<table>
<tr><th>Level</th><th>Criteria for each result</th><th>Marks</th></tr>
<tr><td>4</td><td>The result presented has a meaningful comparison and the candidate clearly explains why it supports/does not support the named concept</td><td>4</td></tr>
<tr><td>3</td><td>The result presented has a meaningful comparison and there is a brief attempt at explaining why it supports/does not support the named concept<br>The result presented has no meaningful comparison but the candidate clearly explains why it supports/does not support the named concept</td><td>3</td></tr>
<tr><td>2</td><td>The result presented has a meaningful comparison but there is no attempt at explanation;<br>The result presented is not clear but there is an implicit attempt at explaining why it supports/does not support the named concept</td><td>2</td></tr>
<tr><td>1</td><td>The result presented has no meaningful comparison or there is a basic attempt at explaining</td><td>1</td></tr>
<tr><td>0</td><td>No creditworthy answer</td><td>0</td></tr>
</table>
e.g. does not support diffusion<br>
The median latency time for help when a group had 1–2 males in it (critical area) was around 300s whereas the median for groups of 7+ was around 80s (2). With diffusion of responsibility, the larger the group the less likely people will help. However, this clearly shows that larger groups responded faster giving help (more often) (2)<br><br>
e.g. does support situational<br>
Only around 3/4 of the time did a black drunk victim get help, compared to 100 per cent of white drunk victims (or any other condition) (2). Therefore, the situation participants found themselves in – someone needing help who was black and appeared drunk – stopped some people helping who may have helped in a different situation (2).
</td><td>8</td></tr>
</table>

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| Question | Answer | Marks |
|---|---|---|
| 9 | **Evaluate the study by Canli et al. (brains scans and emotions) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about laboratory-based research.**<br><br>Strengths include: validity, reliability, quantitative measures<br>Weaknesses include: ethics, sample, generalisability<br><br>**Level 4 (8–10 marks)**<br>• Evaluation is comprehensive.<br>• Answer demonstrates evidence of careful planning, organisation and selection of material.<br>• Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout.<br>• Answer demonstrates an excellent understanding of the material.<br><br>**Level 3 (6–7 marks)**<br>• Evaluation is good.<br>• Answer demonstrates some planning and is well organised.<br>• Analysis is often evident but may not be consistently applied.<br>• Answer demonstrates a good understanding of the material.<br><br>**Level 2 (4–5 marks)**<br>• Evaluation is mostly appropriate but limited.<br>• Answer demonstrates limited organisation or lacks clarity.<br>• Analysis is limited.<br>• Answer lacks consistent levels of detail and demonstrates a limited understanding of the material.<br><br>**Level 1 (1–3 marks)**<br>• Evaluation is basic.<br>• Answer demonstrates little organisation.<br>• There is little or no evidence of analysis.<br>• Answer does not demonstrate understanding of the material.<br><br>**Level 0 (0 marks)**<br>No response worthy of credit. | **10** |

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