Cambridge International AS & A Level

**Cambridge Assessment International Education**
Cambridge International Advanced Subsidiary and Advanced Level

**PSYCHOLOGY** **9990/11**

Paper 1 Approaches Issues and Debates **October/November 2018**

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.

Cambridge International will not enter into discussions about these mark schemes.

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## 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 Canli et al (brain scans and emotions):**<br><br>**Name <u>one</u> of the brain scanning techniques used in this study.**<br><br>1 mark for the correct answer<br><br>MRI / Magnetic Resonance Imaging/Imagery;<br>fMRI / functional Magnetic Resonance Imaging/Imagery. | **1** |
| 1(b) | **Identify the purpose of using the brain scanning technique you named in part <u>(a)</u>.**<br><br>1 mark for purpose linked to the brain scan named in (a)<br><br>*MRI*<br>The purpose is to look at the structure of the brain<br><br>*fMRI*<br>The purpose is to look at the function of the brain | **1** |
| 1(c) | **Outline what a participant had to do immediately after seeing a fixation cross on the screen.**<br><br>1 mark per correct point x2<br><br>They had to indicate their emotional arousal;<br>By pressing a button (with their right hand);<br>They had to choose from one of four buttons;<br>From 0 (not emotionally intense at all) to 3 (extremely emotionally intense) | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 2(a) | **From the Schachter and Singer study (two factors in emotion):**<br><br>**Describe the psychological theory that was being tested in this study.**<br><br>1 mark per correct point made x3<br><br>e.g.<br>Physiological + cognitive (1 mark)<br>Cognitions arising from a situation can be interpreted via past experiences and this allows us to understand/label the emotion;<br>When someone experiences an emotion, physiological arousal happens;<br>They need a cue to be able to label the physiological arousal;<br>This may result in misinterpretations of the emotion as it is based on the physiological arousal | **3** |
| 2(b) | **Identify <u>one</u> ethical issue raised in this study.**<br><br>1 mark for an appropriate issue<br><br>e.g.<br>Deception/participants were deceived;<br>Lack of physical protection;<br>Lack of psychological protection;<br>Lack of confidentiality;<br>Lack of informed consent | **1** |

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| Question | Answer | Marks |
|---|---|---|
| 3(a) | **From the study by Saavedra and Silverman (button phobia):**<br><br>**Outline how the subjective rating of distress was measured in this study.**<br><br>1 mark per correct point x2<br><br>e.g.<br>Using a Feeling Thermometer;<br>On a 9-point scale/0–8 rating<br>A low score was little distress/high score was much distress | **2** |
| 3(b) | **Describe how the rating changed over the first three sessions in response to imagining hundreds of buttons falling on his body.**<br><br>1 mark per correct point x2<br><br>e.g.<br>The distress ratings dropped between session 1 and 2;<br>They dropped again between session 2 and 3;<br>As the sessions advanced there was a lower level of disgust/eq.;<br>It dropped from 8 to 5 midway through the imagery exposure/session 1 to 2;<br>Then dropped from 5 to 3 after the imagery exposure/session 2 to 3 | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 4(a) | **From the Andrade study (doodling):**<br><br>**Outline <u>one</u> finding from this study.**<br><br>1 mark – partial answer, 1 mark – full answer<br><br>e.g. 2 marks<br>The memory score for the doodling group was higher than the control group;<br>Doodling aids concentration whilst participating in a boring/mundane task.<br><br>e.g. 1 mark<br>The memory score was higher for those able to doodle;<br>Doodling aids concentration. | **2** |
| 4(b) | **Explain <u>one</u> real world application based on the finding you outlined in part <u>(a)</u>.**<br><br>1 mark – partial answer, 1 mark – full answer<br><br>e.g.<br>This could be useful for teachers (1 mark) as they should let students doodle during watching a film or when giving them a task they need to concentrate on (1 mark).<br><br>e.g.<br>Teachers may want to use this idea in the classroom (1 mark) | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 5 | **Yamamoto et al. used chimpanzees as participants in their study about helping.**<br><br>**Describe <u>two</u> ethical guidelines for working with animals that are relevant to this study.**<br><br>1 mark for naming a relevant guideline, 1 mark for description (x2)<br><br>e.g.<br>Numbers (of animals) (1 mark). The research team need to use the minimum amount of animals necessary to fulfil the aim/Yamamoto only used five chimpanzee kin pairings in their study (1 mark).<br><br>Replacement (1 mark). The research team should consider using footage from wild/zoos as evidence or computer simulations (1 mark).<br><br>Deprivation (1 mark). The research team should not withhold food/basic needs to test social behaviour (1 mark). | **4** |

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| Question | Answer | Marks |
|---|---|---|
| 6(a) | **Describe <u>two</u> assumptions of the learning approach, using a different example for each assumption.**<br><br>1 mark per assumption, 1 mark per example (x2)<br><br>e.g.<br>Social Learning helps to explain changes in behaviour (1 mark). A child may watch an adult being aggressive and then copy that behaviour (1 mark).<br><br>Stimulus-Response can explain behaviour (1 mark). In Classical Conditioning a dog may salivate after a bell has been rung (1 mark).<br><br>We learn through operant conditioning/by consequence (1 mark). If a dog is given a treat to learn how to sit it is likely to repeat the behaviour (1 mark). | **4** |
| 6(b) | **Explain how <u>one</u> finding from the Pepperberg study (parrot learning) supports <u>one</u> of the assumptions of the learning approach.**<br><br>1 mark for finding, 1 mark for link to an assumption<br><br>e.g. 2 marks<br>Alex scored well above chance on tests for same/different with familiar objects (1 mark). This may be because he was rewarded (conditioned) during training/testing (1 mark).<br><br>Alex did learn the concept of same/different (1 mark). This was through the model-rival technique showing he could imitate and observe (1 mark).<br><br>e.g. 1 mark<br>The parrot received a reward for the correct answer.<br>The parrot did learn the concepts of same/different. | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 7(a) | **From the study by Baron-Cohen et al. (eyes test):**<br><br>**Identify the sampling technique used to recruit the AS/HFA group in this study.**<br><br>1 mark for correct answer<br><br>Volunteer/self-selected | **1** |
| 7(b) | **Describe how the AS/HFA sample was recruited in this study.**<br><br>1 mark for each point x3<br><br>Via advertisements;<br>Via the National Autistic Society magazine (or a support group);<br>All had to have been diagnosed in specialist centres;<br>All given the WAIS-R. | **3** |
| 7(c) | **Outline <u>one</u> strength of the sampling technique used to recruit the AS/HFA group in this study.**<br><br>1 mark for strength, 1 mark for link to the study<br><br>e.g.<br>Volunteers tend to be more motivated and therefore are less likely to drop out of the study (1 mark). Therefore, the AS/HFA participants would be more likely to complete the Eyes Test/AQ (1 mark).<br><br>More likely to find a larger sample in this instance (1 mark), as AS/HFA is a difficult group to find so advertising should have improved the chances of this (1 mark).<br><br>As they have volunteered, they have already given their consent to take part (1 mark). | **2** |

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| Question | Answer | Marks |
|---|---|---|
| 8(a) | **Two friends, Brett and Mia, are discussing the Piliavin et al. study (subway Samaritans) in terms of the debate about individual and situational explanations.**<br><br>**Outline the debate about individual and situational explanations in psychology.**<br><br>1 mark for the individual side of the debate, 1 mark for the situational side of the debate<br><br>e.g.<br>The individual side refers to behaviours from factors within the person (dispositional) (e.g. personality)<br><br>The situational side refers to behaviour from factors in the external environment (e.g. home life) | **2** |
| 8(b) | **Mia believes the Piliavin et al. study supports the individual side of the debate but Brett believes it supports the situational side of the debate.**<br><br>**Outline why you think <u>either</u> Brett <u>or</u> Mia is correct, using evidence from the study.**<br><br>1 mark per point made x4<br><br>e.g. Brett<br>When no model was present, every trial with the cane/ill victim, someone came to help (1 mark). This suggests that the situation of seeing an 'ill' victim triggered helping behaviour (1 mark).<br><br>People did leave the critical area when no help was provided (1 mark) which shows that the situation was too distressing so they left to decrease arousal (1 mark)<br><br>e.g. Mia<br>When no model was present, every trial with the cane/ill victim, someone came to help (1 mark). This could suggest that there is a certain type of person(ality) who is willing to help out an 'ill' victim (1 mark). | **4** |

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| Question | Answer | Marks |
|---|---|---|
| 9(a) | **Some research has found that children readily imitate behaviour shown by an adult model when that model is present.**<br><br>**Describe <u>two</u> ways in which the Bandura et al. study (aggression) differs from this.**<br><br>1 mark for the difference and 1 mark for outlining what that was in the Bandura study (x2)<br><br>e.g.<br>They tested the (aggressive) behaviour in a novel setting (1 mark). The children were observed in a 'set up' play room/ different room to witnessing the role model to see if imitation occurred (1 mark).<br><br>The control group was not exposed to the behaviour of a model (1 mark). They were simply observed in the generalisation situation/observation room (1 mark).<br><br>Children displayed (verbal/physical) aggression once they were left alone with the Bobo doll. This shows they do internalise behaviours for *future* use (2 marks).<br><br>They showed imitative behaviour/aggression in the absence of a model (1 mark).<br><br>Children displayed acts of aggression that were not shown by the adult (1 mark). | **4** |

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>9(b)</td><td>
Explain <u>one</u> result from the Bandura et al. study that <u>supports</u> Social Learning Theory and <u>one</u> result that does <u>not support</u> Social Learning Theory.<br><br>
e.g. support<br>Imitation of physical aggression, verbal aggression<br><br>
e.g. does not support<br>Mallet aggression, novel aggression<br><br>
<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 how the result supports/does not support SLT</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 how the result supports/does not support SLT;<br>The result presented has no meaningful comparison but the candidate clearly explains how the result supports/does not support SLT</td><td>3</td></tr>
<tr><td>2</td><td>The result presented has a meaningful comparison but there is no attempt at explanation or explanation is not about SLT;<br>The result presented is not clear but there is an implicit attempt at explaining how the result supports/does not support SLT</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>
</td><td>8</td></tr>
</table>

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| Question | Answer | Marks |
|---|---|---|
| 10 | **Evaluate the Dement and Kleitman (sleep and dreams) study in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about the use of quantitative data.**<br><br>Strengths include quantitative data, laboratory conditions, replication, standardisation<br><br>Weaknesses include ethics, qualitative data, generalisability, ecological validity<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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