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 **May/June 2019**

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.

Cambridge International is publishing the mark schemes for the May/June 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

© UCLES 2019

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.

© UCLES 2019

Question	Answer	Marks
1(a)	**From the study by Milgram (obedience):** **Describe <u>one</u> aim of this study.** **1 mark brief aim** **2 marks detailed aim** e.g. To investigate how obedient people are to an authority figure (1 mark) To investigate how obedient people are to an authority figure asking them to physically harm another person (2 marks) To test out the 'are Germans different' hypothesis (1 mark)	**2**
1(b)	**Describe <u>one</u> strength of this study.** **1 mark for identifying strength** **1 mark for relating it directly to the study** e.g. The procedure was standardised so replication would be easier (1 mark) The procedure was standardised so replication would be easier (e.g. the prods given), another research team could conduct it again to test for reliability (2 marks) The measure of obedience was quantitative and objective (1 mark) The measure of obedience was quantitative and objective (e.g. the maximum voltage that a P would give) so comparisons between Ps is meaningful/valid (2 marks) The actual aim of the study about obedience was hidden (from Ps) (1 mark) The actual aim of the study about obedience was hidden (from Ps) so there would be low demand characteristic/increased 'real' behaviour (2 marks)	**2**

Question	Answer	Marks
2(a)	**From the study by Pepperberg (parrot learning):** **Identify the concept that was being tested in this study.** **1 mark for correct answer.** Same/different.	**1**
2(b)	**Alex the parrot remained in his cage during 'sleep hours'.** **Describe what Alex was allowed to do during non-sleeping hours, when he was <u>not</u> being used in a trial.** **1 mark per correct statement** He was allowed free access to all parts of the laboratory; These had to be contingent in a correct vocalisation (e.g. wanna go gym)/he could ask to go anywhere; He was allowed to eat any standard food/drink as much water as he wanted/were always available/not deprived of this/has access too/was fed regularly; He could **request** fresh fruit/vegetable/nuts; He could **request** toys.	**4**

Question	Answer	Marks
3(a)(i)	**In the study by Saavedra and Silverman (button phobia), the boy completed a disgust/fear hierarchy by giving a distress rating to different stimuli on a scale from 0–8.** **Name <u>one</u> stimulus which was given a rating of 8.** **1 mark for correct name.** **If more than 1, take the first answer.** Clear small (buttons); Coloured small (buttons); Small plastic (buttons).	**1**
3(a)(ii)	**Name <u>the</u> stimulus that was given a rating of 2.** **1 mark for correct name.** **If more than 1, take the first answer.** Large denim/jean (buttons).	**1**
3(b)	**Outline the results from the post-treatment assessment session.** **1 mark per correct statement.** The boy reported minimal distress/there was a reduction in the distress/disgust ratings; He no longer met the DSM-IV/diagnostic criteria for a (specific) phobia; He could now wear (clear) buttons/his school uniform shirt.	**3**

Question	Answer	Marks
4	**Describe the procedure during the brain scanning phase of the study by Canli et al. (brain scans and emotions).** **1 mark for each correct statement** They entered an fMRI scanner; Ps viewed 96 scenes via a screen; Viewed them through a mirror directed at the screen; Movement was minimised by using a bite-bar; These were already rated for valence/arousal; The order of the scenes was randomised; Each picture/scene was shown for around 3s; There was a gap of c.13s in between pictures/scenes being shown; A fixation cross appeared on the screen; They were told to look at each picture/screen for the time it was on the screen; When fixation cross appeared they had to rate their emotional arousal; This was done by pressing a button/using a clicker The ratings were from 0 (not intense) to 3 (extremely intense).	**5**

Question	Answer	Marks
5(a)	**From the study by Baron-Cohen et al. (eyes test):** **Identify <u>two</u> of the characteristics of the sample in Group 3.** **1 mark per characteristic** Students/adults/average age of 20.8 (years) (Nearly) equal males/females; Studying undergraduate degree; From the University of Cambridge; Predominantly studying science; Assumed to have a high IQ; (Assumed to be) non-autistic.	**2**
5(b)	**Explain <u>one</u> problem with the original version of the 'Reading the Mind in the Eyes' test.** **1 mark for identifying problem** **1 mark for explaining problem** e.g. It contained basic and complex mental states (1 mark) This reduces validity as some items were too easy/lead to a ceiling effect (1 mark) It contained only two responses choices per pair of eyes (1 mark) This means that the probability of getting it correct is 50% which reduced validity/easy to guess/not a good discriminator (1 mark) There were only 25 questions in the original (1 mark) This means that it had low validity due to a high ceiling effect (1 mark) There are other creditworthy problems.	**2**

Question	Answer	Marks
6	**A teacher, Jayne, has a new class of students. Her students are not concentrating during films (movies) in class. She is thinking of ways to help them and asks you for advice.** **Outline the advice you would give to Jayne, using your knowledge of the study by Andrade (doodling).** **1 mark per piece of evidence clearly based on the study by Andrade.** e.g. Jayne could give each student a piece of paper; She could tell them that whilst watching the film they can doodle; They can doodle whenever they want/about whatever they want; Or the paper can already have shapes on it so they can colour them in; She could ask them to focus on specific pieces of information; She must tell them that there will be a test after the film.	**4**

Question	Answer	Marks
7	**From the study by Dement and Kleitman (sleep and dreams):** **Describe <u>one</u> result about dream recall in REM sleep and <u>one</u> result about the estimations of dream-duration time in REM sleep. You must use data for <u>one</u> of these results.** **2 marks per result (must have some meaningful comparison to gain the 2)** **1 mark for correct data in *one* of the answers** e.g. dream recall in REM sleep There were many more instances of dream recall in REM (1 mark) compared to instance of no recall/recall in NREM (1 mark); There were 152 instances of dream recall in REM across all participants/39 instances of no recall (1 mark: data)/There were 11 instances of dream recall in NREM/149 instances of no recall (alternative 1 mark: data). DN was more accurate with his estimations of 5 minutes in REM compared to estimations of 15 minutes in REM (2 marks: comparison). He was 80% correct for 5 minutes (1 mark: data)/He was 50% correct for 15 minutes (alternative 1 mark: data). e.g. estimations of dream-duration time in REM sleep Participants were more accurate at estimating 5 mins (1 mark) compared to 15 mins (1 mark); On 88% of trial (45/51) the participants estimated 5 mins correctly (1 mark: data); On 78% of trials (47/60) the participants estimated 15 mins correctly (alternative 1 mark: data).	**5**

© UCLES 2019

Question	Answer	Marks
8(a)	**Mandy has learned about the study by Bandura et al. (aggression). She believes that the results support the nurture side of the nature-nurture debate.** **Outline what is meant by the 'nature-nurture debate'.** **1 mark for the nature side of argument** **1 mark for the nurture side of argument** e.g. The nature side of the debate is about what behaviours etc. we are born with (1 mark) whereas the nurture side of the debate is about what we learn in our lives (1 mark).	**2**
8(b)	**Outline why Mandy is correct, using evidence in your answer.** **1 mark per point made** e.g. The children copied the aggression they had seen so it was learnt; For example they shouted things like sock him/kick him; Bandura stated that it was Social Learning Theory causing the aggressive behaviour; They observed and then imitated what they had seen showing learning; Children had been matched on levels of aggression so any increased aggression levels they showed in the study had to be learnt; Children with an aggressive model were more likely to display aggression compared to a non-aggressive model (2 marks: evidence with comparison); Boys were more likely to be <u>physically</u> aggressive (compared to girls) (1 mark evidence as not stated condition) Girls were more likely to be <u>verbally</u> aggressive (compared to boys) (1 mark evidence as not stated condition) Boys were more aggressive (0 marks evidence as no comparison and not stated condition)	**4**

Question	Answer	Marks
9(a)	**Describe <u>two</u> aims of the study by Schachter and Singer (two factors in emotion).** **1 mark for brief aim** **2 marks for detailed aim** **2 marks available *per* aim** e.g. 1 mark To test out the two factor theory of emotion To test out the role of cognitive labels in emotions To test out the role of physiology in emotions To investigate the effect of a stooge on behaviour e.g. 2 marks To test out the two factor theory of emotion which is that an emotional experience comes from a cognitive label and some physiological arousal To test out how cognitive labels like anger and euphoria affect how we perceive our own emotions To test that when physiologically aroused and there ***is no*** immediate explanation for it; do we describe feelings based on available cognitions? To test that when physiologically aroused and there ***is an*** immediate explanation for it, we do not use available cognitions to explain it To test given the same cognitive circumstances, will an individual describe their feelings as emotions only when they experience physiological arousal? To investigate the effect of a stooge on behaviour who would be angry or euphoric	**4**

© UCLES 2019

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>9(b)</td><td>

Explain whether each guideline below was broken in the study by Schachter and Singer (two factors in emotion):

- confidentiality
- debriefing
- deception
- protection

Use the following Levels marking for each guideline <u>separately</u>

<table>
<tr><th>Level</th><th>Descriptor</th><th>Marks</th></tr>
<tr><td>2</td><td>The answer explicitly describes the ethical guideline and the example is contextualised from the named study
OR The ethical guideline is implicit from the use of a well argued example contextualised from the named study</td><td>2</td></tr>
<tr><td>1</td><td>The answer explicitly describes the ethical without correct contextualisation/no contextualisation
OR The ethical guideline is implicit from the use of a brief example contextualised from the named study
OR The ethical guideline is incorrectly described but the contextualised example from the named study is correct</td><td>1</td></tr>
<tr><td>0</td><td>The description of the ethical guideline is incorrect and/or the contextualised example is incorrect
OR no answer given</td><td>0</td></tr>
</table>

Confidentiality
e.g. Any data should not be identifiable as a single participants' responses/participants' data must not be named as theirs
All we know is that there were male students from the University of Minnesota/only the doctors had access to their medical records

Debriefing
e.g. After a study has been completed, participants should be told about the true aim of the study/what deception/occurred
This guideline was not broken as after the self-report, the researchers explained the deception of the injection/stooge/answered any questions

Deception
e.g. A participant should not be deceived without a strong justification/only if revealing the deception would not cause discomfort
This guideline was broken as they were told the wrong information whilst getting the injection

</td><td>8</td></tr>
</table>

Question	Answer	Marks
9(b)	Protection **Note: can be answered for or against here – go with intentions of the candidate** e.g. Participants should leave the study in the same psychological/physical state as they entered/Participants should not be potentially harmed by the procedure of a study The guideline was broken as the participants did receive an injection which may have caused physical/psychological pain The guideline was not broken as the injection was given by a professional doctor to ensure minimal pain They all had to be health screened prior to the study	

© UCLES 2019

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>10</td><td>Evaluate the study by Piliavin et al. 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 independent measures.
<table>
<tr><th></th><th>Additional guidance – to be deleted for publication</th></tr>
<tr><td>Level 4 (8–10 marks)
• Evaluation is comprehensive.
• Answer demonstrates evidence of careful planning, organisation and selection of material.
• Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout.
• Answer demonstrates an excellent understanding of the material.</td><td>10 marks is reserved for: The candidate has given four evaluation points (two strengths and two weakness) that are in depth, in the context of the study, and include the named evaluation point.

Max 8 if: The candidate has given three evaluation points (at least one strength and one weakness) and they are in the context of the Piliavin study and it includes the named evaluation point, in depth.</td></tr>
<tr><td>Level 3 (6–7 marks)
• Evaluation is good.
• Answer demonstrates some planning and is well organised.
• Analysis is often evident but may not be consistently applied.
• Answer demonstrates a good understanding of the material.</td><td>Max 6: if the answer does not include the named evaluation point.

Max 6: if The candidate has given one strength and one weakness and they are in the context of the Piliavin study and indepth.</td></tr>
<tr><td>Level 2 (4–5 marks)
• Evaluation is mostly appropriate but limited.
• Answer demonstrates limited organisation or lacks clarity.
• Analysis is limited.
• Answer lacks consistent levels of detail and demonstrates a limited understanding of the material.</td><td>Max 5: The candidate has given either two strengths or two weaknesses (contextualised).

Max 4: if The candidate has given one strength or weakness that is in the context of the Piliavin study which is indepth</td></tr>
<tr><td>Level 1 (1–3 marks)
• Evaluation is basic.
• Answer demonstrates little organisation.
• There is little or no evidence of analysis.
• Answer does not demonstrate understanding of the material.</td><td>Max 3: The candidate has given two evaluation points that are generic/brief.

Max 2: The candidate has given one evaluation point that is generic/brief.</td></tr>
</table></td><td>10</td></tr>
</table>

© UCLES 2019

Question	Answer		Marks
10	**Level 0 (0 marks)** No response worthy of credit.	If the answer is a description of the study	