Cambridge International AS & A Level

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Cambridge International Advanced Subsidiary and Advanced Level

PSYCHOLOGY **9990/11**

Paper 1 Approaches, Issues and Debates **October/November 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 October/November 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

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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 Andrade (doodling):** **Outline the instructions that were given only to the 'doodling' group. These were given before they listened to the telephone message.** **1 mark per correct statement** They were asked to shade in the squares and circles; They were told it does not matter how neatly they do it; They were told it does not matter how quickly they do it; They were told it was to relieve any boredom;	**3**
1(b)	**Outline <u>one</u> result from this study.** **1 mark – brief result (no comparison)** **2 marks – full result (comparison)** e.g. Participants in the doodling group recalled more (1 mark); Participants in the doodling group had a better memory score than the control (1 mark); The doodling condition recalled a mean of 7.8 names compared to 7.1 of the non-doodling group; Participants in the doodling groups recalled more names/places compared to the control group (2 marks); The doodlers (mainly) doodled and the non-doodlers did not (2 marks);	**2**

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Question	Answer	Marks
2(a)	**From the study by Bandura et al. (aggression):** **Outline <u>one</u> aim of this study.** **1 mark – brief aim** **2 marks – detailed aim** e.g. To investigate how children learn aggression (1 mark); To see if aggression was nature or nurture (1 mark); To investigate whether children imitate the aggressive behaviour of an aggressive model (2 marks); To investigate whether children are more likely to imitate the behaviour of a same-sex model (2 marks); To investigate whether children would imitate aggression of a model in the absence of the model (2 marks);	**2**
2(b)	**One of the response categories was 'imitation of physical aggression'.** **Identify <u>three</u> examples of 'imitation of physical aggression' from this study.** **1 mark per example** Hitting Bobo with a mallet; Sitting on the Bobo doll and punching the Bobo doll (on the nose); Kicking the Bobo doll; Tossing the Bobo doll into the air;	**3**

Question	Answer	Marks
3(a)	**From the study by Canli et al. (brain scans and emotions):** **Explain why the study is from the biological approach.** **1 mark – brief answer** **2 marks – clear explanation or linked to a general assumption** e.g. The study was interested in the role of the brain in behaviour and this is biological (1 mark); The study was investigating the role of the amygdala in memories (1st mark); The biological approach is interested in the role of the brain in our behaviour/experiences (2nd mark); They were testing the role of the amygdala in memory (1 mark) and this is part of the brain which is biology/neurology (1 mark);	**2**
3(b)	**Explain <u>one</u> weakness of using brain scans in this study.** **1 mark – brief answer or answer not linked to study** **2 marks – detailed answer linked to study** e.g. People may act differently when having a scan compared to real life (1 mark); People may act differently when having a scan compared to real life so the emotional intensity scores may have been different in a real-life situation rather than on a screen (2 marks); People may feel stressed/anxious whilst having a brain scan (1st mark) and this could have affected how they rated the emotional intensity of each picture/scene (reducing validity) (2nd mark);	**2**
4(a)	**In the study by Dement and Kleitman (sleep and dreams), the procedure that the researchers first used to measure participants' estimations of REM sleep duration was unsuccessful and had to be revised.** **Describe how the researchers first attempted to measure participants' estimations of REM sleep duration.** **1 mark per correct point** Participants were woken at different increments of time (in REM); They were then asked to estimate the time they had been dreaming; To the nearest minute; So, they were not given a fixed choice;	**2**
4(b)	**Describe the revised procedure used to measure participants' estimations of REM sleep duration.** **1 mark per correct point** Participants were woke at either 5 or 15 minutes after the onset of REM; They were then asked to choose if they had been dreaming for 5 or 15 minutes;	**2**

Question	Answer	Marks
5(a)	**From the study by Piliavin et al. (subway Samaritans):** **Outline what the model was supposed to do in the 'Adjacent area – late' condition.** **1 mark per correct statement** Model stood in (the middle of) adjacent car; Waited until passing the sixth station/waited for approximately 150s; Then began to help the victim;	**2**
5(b)	**Describe <u>one</u> methodological strength of this study.** **1 mark – identifying strength** **1 mark – linking it to the study** e.g. The study has ecological validity (1 mark); This is because the setting was a real-life subway carriage (1 mark); The study has mundane realism (1 mark); This is because the 'task' of seeing a person collapse does happen in the real world (1 mark); The procedure was standardised (1 mark); The models only helped out after a set time (e.g. 70s) so the study could be replicated/tested for reliability (1 mark);	**2**
6	**Describe the psychology being investigated in the study by Yamamoto et al. (chimpanzee helping).** **1 mark for each correct statement** Examples from the study by Yamamoto et al. can gain credit (1 mark maximum) e.g. Altruism was investigated which is helping another chimpanzee without any benefit to themselves; For example, one chimp gave another chimp a straw to drink the juice even though the chimp giving the straw never got the juice; The study was about prosocial behaviour which is about helping others who may need it; Empathy was looked into which is understanding the emotional state of another organism (by imagining themselves in 'their shoes'); Looked into targeting helping which is the ability to help someone else in a situation; Looked at targeting helping and seeing if organisms would use altruism to help/help without expecting a reward; Can an organism comprehend the specific needs of another organism?	**4**

Question	Answer	Marks
7(a)	**From the study by Pepperberg (parrot learning):** **Identify <u>two</u> colours that Alex the parrot could already name *before* this study began.** **1 mark per correct answer** Rose/red; Grey; Green; Blue; Yellow;	**2**
7(b)	**Outline <u>one</u> result from the 'Transfer Tests with Novel Objects'. You <u>must</u> use data in your answer.** **1 mark for the result** **1 mark for correct use of data** e.g. Alex's score was above chance of 1/3 (1 mark); Alex's score was 85% correct on all trials (2 marks); Alex's score was 82.3% on first-trial performance (2 marks);	**2**
7(c)	**Suggest <u>one</u> real life application of this study.** **1 mark for brief application but linked to study <u>or</u> plausible application outlined but not explained/only has the what or how;** **2 marks for application that clearly shows who would benefit/linked to study/how it would be done/has the what and how.** e.g. Be useful to see if other species can learn abstract concepts using the same procedure, e.g. assistance animals (1 mark); The technique could be useful in helping children who are having difficulty learning abstract concepts; By using the model/rival technique, the child can learn the concepts through rewards/engaging with the model/rival (2 marks); Use the model-rival technique to teach children behaviours/train animals to perform certain tasks (1 mark);	**2**

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Question	Answer	Marks
8	**Two friends, Javier and Lorena, are discussing the ethics of the study by Saavedra and Silverman (button phobia). Javier thinks the study is ethical but Lorena thinks it is unethical.** **Explain <u>one</u> reason why Javier is correct and <u>one</u> reason why Lorena is correct, using evidence from this study.** **3 marks for the answer for Javier** **3 marks for the answer for Lorena** e.g. Javier The study did gain informed consent (1 mark). This was taken from the boy and his mother before the therapy started (1 mark). Therefore, both the boy and mother knew exactly what the therapy was going to entail (1 mark); the boy/mother agreed to wanting to take part in the study/having results published (alternative 1 mark). Also, they started the therapy with his least distressing scenario (1 mark). The mother used positive reinforcement during the therapy so the boy would not get too distressed (1 mark) Therefore, the boy was protected from any harm throughout the therapy (1 mark). e.g. Lorena The study could have easily caused psychological stress (1 mark). The boy was having to confront his button phobia throughout the therapy (1 mark). He also had to discuss potential causes/effects of the phobia (e.g. buttons falling on him in art class) which would be stressful (1 mark).	**6**

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>9(a)</td><td>Describe <u>two</u> independent variables from the study by Schachter and Singer (two factors in emotion).

1 mark for identifying an IV, ×2
1 mark for operationalising the IV, ×2

The emotional situation (1 mark); anger or euphoria (1 mark);
The injection information (1 mark); misinformed/informed/ignorant/placebo (1 mark for any two of these);</td><td>4</td></tr>
<tr><td>9(b)</td><td>Explain <u>two</u> differences between the study by Schachter and Singer (two factors in emotion) and the study by Canli et al. (brain scans and emotions).

e.g. 4 marks
They used different sexes as participants. Schachter and Singer used 184 male students from the University of Minnesota whereas Canli only used 10 females who were all right-handed.

e.g. 3 marks
They used different sexes as participants. Schachter and Singer used (184) male students from the University of Minnesota whereas Canli only used females.

e.g. 2 marks
They used different sexes as participants. Schachter and Singer used males whereas Canli used females.

e.g. 1 mark
They used different sexes as participants.

<table>
<tr><th>Level</th><th>Criteria for each result</th><th>Marks</th></tr>
<tr><td>4</td><td>The difference is well explained using both studies as examples.</td><td>4</td></tr>
<tr><td>3</td><td>The difference is well explained but only one study is used as an example OR both studies used briefly.</td><td>3</td></tr>
<tr><td>2</td><td>The difference is brief with an attempt at using at least one study as an example OR
The difference is well explained but there is no study evidence.</td><td>2</td></tr>
<tr><td>1</td><td>The difference is brief with no attempt at using studies as examples.</td><td>1</td></tr>
<tr><td>0</td><td>No creditworthy material.</td><td>0</td></tr>
</table>
</td><td>8</td></tr>
</table>

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Question	Answer	Marks
10	**Evaluate the study by Laney et al. (false memory) 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 self-reports.** **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. **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. **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. **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. **Level 0 (0 marks)** No response worthy of credit.	**10**