Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/13**

Paper 1 Approaches, issues and debates **May/June 2020**

MARK SCHEME

Maximum Mark: 60

Published

Students did not sit exam papers in the June 2020 series due to the Covid-19 global pandemic.

This mark scheme is published to support teachers and students and should be read together with the question paper. It shows the requirements of the exam. The answer column of the mark scheme shows the proposed basis on which Examiners would award marks for this exam. Where appropriate, this column also provides the most likely acceptable alternative responses expected from students. Examiners usually review the mark scheme after they have seen student responses and update the mark scheme if appropriate. In the June series, Examiners were unable to consider the acceptability of alternative responses, as there were no student responses to consider.

Mark schemes should usually be read together with the Principal Examiner Report for Teachers. However, because students did not sit exam papers, there is no Principal Examiner Report for Teachers for the June 2020 series.

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

Cambridge International is publishing the mark schemes for the June 2020 series for most Cambridge IGCSE™ and Cambridge International A & 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 Canli et al. (brain scans and emotions):** **Identify the sampling technique used in this study.** 1 mark for correct answer Volunteer/self-selecting	**1**
1(b)	**Outline the scale that was used by participants to indicate their emotional arousal to each picture.** 1 mark per correct point. (The scale was) 0 = not emotionally intense at all; To 3 = extremely emotionally intense; There were four choices (per image); It was a scale of buttons that they had to press.	**2**
1(c)	**Describe what happened to a participant during the 'recognition test' in this study.** 1 mark per correct point. Participants were asked if they had seen the picture before; If they said 'yes' they had two choices; Whether they had remembered with certainty; Whether they had a feeling of familiarity (rather than certainty); Participants responded with a no if the picture had not been seen before; They were shown a mixture of pictures they had and had not seen before; The foils were balanced for valence and arousal characteristics;	**3**

Question	Answer	Marks
2(a)	**From the study by Pepperberg that used a parrot as the participant:** **Outline <u>one</u> psychological concept that was investigated in this study.** 1 mark for identifying 1 mark for outlining e.g. Social Learning (1 mark). This is when a person/animal observes and imitates a chosen behaviour (1 mark). The concepts of same and different (1 mark). This is about understanding whether two objects share a feature such as matter or not (1 mark) Animal cognition (1 mark). This is about whether non-humans have the ability to think and reason (1 mark).	**2**

Question	Answer	Marks
2(b)	**Outline <u>one</u> result for first-trial-only performance from this study. You must use data in your answer.** 2 marks = full result with data + naming the test 1 mark = partial result or result does not name the test but is identifiable e.g. Familiar objects On familiar objects he scored 70% (2 marks) He scored above chance on familiar objects (1 mark)	**2**

Question	Answer	Marks
3(a)	**From the study by Baron-Cohen et al. (eyes test):** **Outline <u>one</u> result from this study. Refer only to results from the eyes test in your answer.** 2 marks = full result (compares the two conditions correctly) 1 mark = partial result (e.g. one condition) e.g. The AS/HFA participants/Group 1 scored lower on the eyes test compared to the students/Group 3 (2 marks) The AS/HFA participants /Group 1 scored lowest on the eyes test (1 mark) The distributions of scores followed a (rough) normal distribution with the modal score being 24/36 (2 marks)	**2**
3(b)	**Outline <u>one</u> methodological strength of this study.** 1 mark = an appropriate methodological strength 1 mark = applied to Baron-Cohen e.g. The Revised Eyes Test follows a standardised procedure (1 mark). All participants had the same 36 pairs of eyes to judge so direct comparisons could made across groups (1 mark) The Revised Eyes Test is a standardised measure (of Theory of Mind) (1 mark)	**2**
3(c)	**Outline <u>one</u> ethical weakness of this study.** 1 mark = an appropriate/possible ethical issue 1 mark = applied to Baron-Cohen e.g. Participants (especially AS/HFA) may have felt psychological distress (1 mark). They may not have understood the emotions in any of the eyes which could have stressed them (1 mark)	**2**

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Question	Answer	Marks
4(a)	**In the study by Saavedra and Silverman (button phobia), the boy with the phobia went through a 'behavioural exposures' procedure as part of his treatment.** **Describe the 'behavioural exposures' procedure as used in this study.** 1 mark per correct point. It was based on contingency management (procedures); The mother would provide positive reinforcement; Contingent on the child successfully completing the gradual exposure to buttons; Treatment sessions lasted about 30 minutes with the boy; And then another 20 minutes with the boy and mother; A hierarchy of distress was constructed (for buttons); A series of buttons were rated from 0–8; This was using a Feeling Thermometer.	**4**
4(b)	**Outline the posttreatment follow-up assessment session.** 1 mark per correct point. They re-administered two measures; One was the ADIS-C-P/measured his anxiety towards buttons; He was also assessed against DSM (IV) criteria; To see if he still had a diagnosed phobia (of buttons)	**2**

Question	Answer	Marks
5	**Maria wants to replicate the Epinephrine Ignorant (Epi Ign) condition from the study by Schachter and Singer (two factors in emotion) and needs your help. You must produce clear instructions for Maria, from when the participant arrives until they are given the injection.** **Suggest instructions that Maria could use to replicate this part of the study.** 1 mark per correct instruction. Max 3 for instructions given that are not specific to the Epi Ign condition. General: You must tell the P that the study is about vision; You must tell them that it is about how vitamins affect vision; You must tell them that a vitamin compound/Suproxin is being assessed; You must then gain their permission to be injected (with Suproxin); You must tell them that the injection is mild/harmless; Epi Ign specific: You must **not** tell them about any side effects; You must then leave the room; You must remind the physician to re-iterate no side effects/harmless/mild;	**5**

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Question	Answer	Marks
6(a)	**From the study by Piliavin et al. (subway Samaritans):** **Identify <u>two</u> characteristics of the sample used in this study.** 1 mark per characteristic. Males and females; 45% black; 55% white; Travellers on a subway (in New York);	**2**
6(b)	**Describe how the sample was obtained for this study.** 1 mark per correct point They were unsolicited people on a New York Subway; They would be travelling between 11 am and 3 pm; From Harlem to the Bronx; On a weekday; Between April and June; Recruited/obtained via opportunity sampling/from those available at the time;	**3**
6(c)	**Outline <u>one</u> conclusion from this study.** 2 marks = full conclusion 1 mark = partial conclusion 0 marks = purely results e.g. People help ill victims more often (1 mark); A person who is 'ill' is more likely to receive help than a person who is 'drunk' (2 marks) 100% of the white drunk victims got help when no model was present (0 marks)	**2**

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Question	Answer	Marks
7(a)	**From the study by Dement and Kleitman (sleep and dreams):** **Outline <u>one</u> aim of this study.** 2 marks = full aim 1 mark = partial aim e.g. To investigate if dream recall differs between REM and nREM stages of sleep (2 marks); To investigate dream recall and stages of sleep (1 mark); To investigate if there was a (positive) correlation between estimates of dream duration and length of REM sleep (2 marks); To investigate estimates of dream duration (1 mark); To investigate if eye movement patterns were related to dream content (2 marks); To investigate eye movement and dreams (1 mark);	**2**
7(b)	**Suggest <u>one</u> real-world application of this study.** 1 mark for application (clearly based on Dement and Kleitman) 1 mark for who it would benefit/elaboration e.g. This could be useful to help diagnose a (potential) sleep disorder in a patient (1 mark). They could undergo an EEG whilst sleeping to see if REM and nREM sleep is happening 'correctly' (1 mark).	**2**

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>8(a)</td><td>The study by Bandura et al. (aggression) is from the learning approach.

Outline <u>two</u> assumptions of the learning approach, using any example for each.

1 mark = appropriate assumption (×2)
1 mark = any relevant example (×2)

e.g.
Conditioning can help to explain our behaviour (1 mark); If we reward someone they are likely to want to repeat that behaviour (1 mark)

Social learning can help explain our behaviour (1 mark); Bandura found that children will observe and imitate an aggressive role model (1 mark)</td><td>4</td></tr>
<tr><td>8(b)</td><td>Explain how <u>one</u> result from the study by Bandura et al. supports the nature side of the nature–nurture debate and how <u>one</u> result supports the nurture side of the nature–nurture debate.

<table>
<tr><th>Level</th><th>Criteria</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 the nature/nurture explanation.</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 the nature/nurture explanation;
The result presented has no meaningful comparison but the candidate clearly explains how the result supports the nature/nurture explanation.</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 the nature/nurture explanation;
The result presented is not clear but there is an implicit attempt at explaining how the result supports the nature/nurture explanation.</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>

Question	Answer	Marks
9	**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 generalisations.** **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**

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