



Cambridge International AS & A Level

PYSCHOLOGY

9990/12

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.

This document consists of **9** printed pages.

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.

Question	Answer	Marks
1(a)	From the study by Milgram (obedience): Identify the sampling technique used in this study. 1 mark for correct answer. Volunteer/self-selecting	1
1(b)	Identify <u>two</u> examples of ‘signs of extreme tension’ shown by participants in this study. 1 mark for ‘sign’ – if more than one written in either scaffolded slot then take the first answer for each. Signs of extreme tension: Sweat; Tremble; Stutter; Bit lip; Groan; Dig fingernails into flesh; Nervous laughing (fits); Smiling; Full-blown seizures;	2
1(c)	Describe the ‘preliminary run’ that participants had to complete before the ‘regular run’ in this study. 1 mark per correct point. The participant/teacher was given 10 words to read (to the learner); Three of these were neutral/ones the learner would get correct; Seven of these were ‘incorrect’ answers; So a voltage of 105v was administered;	3
2(a)	From the study by Laney et al. who investigated whether new information about liking asparagus can change old information: Outline <u>one</u> psychological concept that was investigated in this study. 1 mark for identifying 1 mark for outlining e.g. (Positive) false memories (1 mark). These are memories that are an apparent recollection of an event/behaviour/situation that never actually happened (1 mark).	2

Question	Answer	Marks
2(b)	Outline <u>one</u> result from the Food History Inventory in Experiment 2 of this study. 2 marks = full result (with a meaningful comparison) 1 mark = partial result e.g. The mean confidence of the Love Group increased <i>more</i> than the Control Group (2 marks) The mean confidence of the Love Group increased (1 mark).	2

Question	Answer	Marks
3(a)	From the study by Andrade (doodling): Outline <u>one</u> result from the memory scores for names (monitored information) in this study. 2 marks = full result (compares the two conditions correctly) 1 mark = partial result (e.g. one condition) e.g. The doodling condition scored (on average) higher than the control condition (2 marks) The average score for the doodling group was 5.1 (1 mark)	2
3(b)	Outline <u>one</u> methodological strength of this study. 1 mark = an appropriate methodological strength 1 mark = applied to Andrade e.g. The study had controls so we could establish cause and effect (1 mark); The study controlled things like the length of the script/the time the participant was spoken to before recall, meaning that Andrade could be confident it was doodling causing changes in recall rate(s) (2 marks) There was a standardised procedure meaning reliability could be assessed (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 Andrade e.g. Participants were deceived (1 mark); They did not know that they would have to remember the names/places in telephone message (1 mark) Participants might have experienced some psychological distress (1 mark) because they were not expecting a memory test/could not remember the names/places (1 mark)	2

Question	Answer	Marks
4(a)	In the study by Pepperberg (parrot learning), a principal trainer and secondary trainers were used during the ‘test procedures’. Describe what the principal trainer would do during the ‘test procedures’. 1 mark per correct point. She was sat in the room with her back to Alex/the parrot; She did not look at Alex/the parrot during the presentation of (test) objects; She did not know what object was being presented; She repeated out loud what Alex/the parrot said; It was then decided if the response was correct/incorrect/indistinct.	4
4(b)	Outline how the overall test score was calculated in this study. Dividing the total number of correct identifications (1 mark) by the total number of presentations required (1 mark).	2

Question	Answer	Marks
5	Adelia wants to replicate the Epinephrine Misinformed (Epi Mis) condition from the study by Schachter and Singer (two factors in emotion) and needs your help. You must produce clear instructions for Adelia, from when the participant arrives until they are given the injection. Suggest instructions that Adelia 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 Mis condition. General: You must tell the participant 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 Mis specific: You must also tell them/reveal that there may be side effects; Tell them that they are short-lived; Tell them they will last about 15 minutes or so; Tell them that their feet will feel numb/itching sensation/might get a slight headache;	5

Question	Answer	Marks
6(a)	From the study by Baron-Cohen et al. (eyes test): Identify <u>two</u> characteristics of the sample used in Group 3. 1 mark per characteristic. (normal) adults; Students; Males and females (even split); Studying at Cambridge University;	2
6(b)	Describe how the participants were recruited for Groups 2 and 3. 1 mark per correct point Max 2 for Group 2; Max 2 for Group 3 Group 2: Opportunity/volunteer sampling; From adult community/education classes in Exeter; From public libraries in Cambridge; Group 3: Opportunity/volunteer sampling; From students studying degrees at Cambridge University; All students had performed well in Advanced Level qualifications;	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. The Revised 'Eyes Test' overcame the problems of the original version (1 mark) The Revised 'Eyes Test' overcame the problems of the original version making it a valid test of social intelligence (in adults) (2 marks) The Revised test could discriminate AS and non-AS participants (1 mark) AS/HFA participants scored lower on the Eyes Test than all other groups (0 marks)	2

Question	Answer	Marks
7(a)	From the study by Canli et al. (brain scans and emotion): Outline <u>one</u> aim of this study. 2 marks = full aim 1 mark = partial aim e.g. To investigate whether the amygdala is sensitive to different levels of experienced emotional intensities (2 marks) To investigate whether the degree of emotional intensity affects the role of the amygdala in enhancing memory (2 marks) To investigate the role of the amygdala in memories (1 mark)	2
7(b)	Suggest <u>one</u> real-world application of this study. 1 mark for application (clearly based on Canli) 1 mark for who it would benefit/elaboration e.g. People in advertising may want to use emotionally intense imagery (1 mark). The images in this study that were rated emotionally intense were remembered better so products linked to this type of imagery may also be well remembered (1 mark) Psychologists may want to use the same procedure with people who have memory difficulties (1 mark). If a patient does not remember emotionally intense imagery then they may have a problem with/may have a damaged amygdala (1 mark)	2

Question	Answer	Marks																		
8(a)	The study by Yamamoto et al. (chimpanzee helping) is from the social approach. Outline <u>two</u> assumptions of the social approach, using any example for each. 1 mark = appropriate assumption (×2) 1 mark = any relevant example (×2) e.g. Behaviour/cognitions/emotions can be influenced by other individuals (1 mark). For example, in the study by Milgram, the experimenter in the lab coat used prods to get them to continue to give electric shocks (1 mark) Behaviour/cognitions/emotions can be influenced by groups (1 mark). 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 mark).	4																		
8(b)	Explain how <u>one</u> result from the study by Yamamoto et al. supports the individual explanation of prosocial behaviour and how <u>one</u> result does <u>not</u> support the individual explanation of prosocial behaviour. <table border="1"> <thead> <tr> <th>Level</th><th>Criteria</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>4</td><td>The result presented has a meaningful comparison and the candidate clearly explains how the result supports/does not support the individual 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/does not support the individual explanation; The result presented has no meaningful comparison but the candidate clearly explains how the result supports/does not support the individual 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 individual explanation; The result presented is not clear but there is an implicit attempt at explaining how the result supports/does not support the individual 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> </tbody> </table>	Level	Criteria	Marks	4	The result presented has a meaningful comparison and the candidate clearly explains how the result supports/does not support the individual explanation.	4	3	The result presented has a meaningful comparison and there is a brief attempt at explaining how the result supports/does not support the individual explanation; The result presented has no meaningful comparison but the candidate clearly explains how the result supports/does not support the individual explanation.	3	2	The result presented has a meaningful comparison but there is no attempt at explanation or explanation is not about the individual explanation; The result presented is not clear but there is an implicit attempt at explaining how the result supports/does not support the individual explanation.	2	1	The result presented has no meaningful comparison or there is a basic attempt at explaining.	1	0	No creditworthy answer.	0	8
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Question	Answer	Marks
9	Evaluate the study by Bandura <i>et al.</i> (aggression) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about observations. 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