



# Cambridge International AS & A Level

---

**PSYCHOLOGY**

**9990/11**

Paper 1 Approaches, Issues and Debates

**October/November 2020**

**MARK SCHEME**

Maximum Mark: 60

---

<p><b>Published</b></p>
-------------------------

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 2020 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

---

This document consists of **11** 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)	<p><b>From the study by Baron-Cohen et al. testing theory of mind in participants with Asperger's syndrome and autism:</b></p> <p><b>Name the test that was being revised in this study.</b></p> <p>1 mark for correct answer</p> <p>(Reading the Mind in the) Eyes Test;</p>	1
1(b)	<p><b>Identify <u>two</u> problems with the original test.</b></p> <p>1 mark per problem identified/described</p> <p>Forced-choice using two options;            Parents of AS children scored low;            Narrow range of total scores/ceiling effect of scores;            Too few questions/used 25 questions;            Contained basic and complex mental states;            Some items could be solved by looking at gaze direction;            More female faces (than male);            Target and foil were (semantic) opposites;</p>	2
1(c)	<p><b>Outline <u>one</u> conclusion from this study.</b></p> <p>2 marks = full conclusion            1 mark = partial conclusion            0 marks = purely results</p> <p>e.g.:</p> <p>People diagnosed with AS/HFA lack theory of mind (1 mark);            People diagnosed with AS/HFA lack theory of mind, so they find it difficult show empathy/difficult to understand the emotions of others (2 marks);            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).</p>	2

Question	Answer	Marks
2	<b>From the study by Piliavin et al. (subway Samaritans):</b>	
2(a)	<p><b>Describe what the observers recorded about participants in the adjacent area.</b></p> <p><b>1 mark per correct point</b></p> <p>Coded race, sex, location of people (any 2 gets <b>1</b> mark);            Latency/time taken for first helper to arrive if no model present;            Latency/time taken for (extra) help to arrive after model helped;            Spontaneous comments from people;            Elicited comments from people.</p>	<b>3</b>
2(b)	<p><b>Describe <u>one</u> result about the sex of ‘spontaneous first helpers’. You <u>must</u> use data in your answer.</b></p> <p><b>3 marks</b> = comparison result with correct data  <b>2 marks</b> = comparison result with no data or using qualitative data as comparison or implicit  <b>1 mark</b> = one result (e.g. for just males) or basic result</p> <p>e.g. <b>3 marks</b>            More males were spontaneous first helpers compared to females as 90% of spontaneous first helpers were male.</p> <p>e.g. <b>2 marks</b>            More males were spontaneous first helpers compared to females.</p> <p>e.g. <b>1 mark</b>            More males helped.</p>	<b>3</b>

Question	Answer	Marks										
3	<p><b>Explain one or more real-world applications of the study by Dement and Kleitman (sleep and dreams). Do <u>not</u> refer to more than three applications in your answer.</b></p> <p>Suitable examples include:</p> <p>Sleep disorders; Insomnia.</p> <p>This will be band-marked as follows:</p> <table><tr><th>Marks</th><th>Description</th></tr><tr><td><b>5</b></td><td><b>One</b> application suggested in depth and it is clear what the application is and how it will be achieved; <b>OR</b> <b>More than one</b> application suggested in less depth, but still clearly showing what the application is and how it will be achieved.</td></tr><tr><td><b>3–4</b></td><td><b>One</b> application suggested which has some detail with the application identifiable and how it will be achieved; <b>OR</b> <b>More than one</b> application suggested that are brief, but the application is identifiable with how it will be achieved.</td></tr><tr><td><b>1–2</b></td><td><b>One or more</b> application suggested that are/is brief but may lack clarity as to what the application is and/or how it will be achieved.</td></tr><tr><td><b>0</b></td><td>No creditworthy real-world application or description of study only.</td></tr></table>	Marks	Description	<b>5</b>	<b>One</b> application suggested in depth and it is clear what the application is and how it will be achieved; <b>OR</b> <b>More than one</b> application suggested in less depth, but still clearly showing what the application is and how it will be achieved.	<b>3–4</b>	<b>One</b> application suggested which has some detail with the application identifiable and how it will be achieved; <b>OR</b> <b>More than one</b> application suggested that are brief, but the application is identifiable with how it will be achieved.	<b>1–2</b>	<b>One or more</b> application suggested that are/is brief but may lack clarity as to what the application is and/or how it will be achieved.	<b>0</b>	No creditworthy real-world application or description of study only.	5
Marks	Description											
<b>5</b>	<b>One</b> application suggested in depth and it is clear what the application is and how it will be achieved; <b>OR</b> <b>More than one</b> application suggested in less depth, but still clearly showing what the application is and how it will be achieved.											
<b>3–4</b>	<b>One</b> application suggested which has some detail with the application identifiable and how it will be achieved; <b>OR</b> <b>More than one</b> application suggested that are brief, but the application is identifiable with how it will be achieved.											
<b>1–2</b>	<b>One or more</b> application suggested that are/is brief but may lack clarity as to what the application is and/or how it will be achieved.											
<b>0</b>	No creditworthy real-world application or description of study only.											

Question	Answer	Marks
4	<b>From the study by Saavedra and Silverman (button phobia):</b>	
4(a)(i)	<p><b>Name <u>one</u> stimulus given a Distress Rating of 2 or 3 on the Disgust/Fear Hierarchy.</b></p> <p><b>1</b> mark for correct answer Take first answer only.</p> <p>Large denim jean (buttons); Small denim jean (buttons); Clip-on denim jean (buttons).</p>	1

Question	Answer	Marks
4(a)(ii)	<p><b>Name <u>one</u> stimulus given a Distress Rating of 7 or 8 on the Disgust/Fear Hierarchy.</b></p> <p><b>1</b> mark for correct answer Take first answer only.</p> <p>Hugging Mom when she was wearing regular medium plastic (buttons); Small coloured plastic (buttons); Small clear plastic (buttons).</p>	<b>1</b>
4(b)	<p><b>Describe the participant used in this study.</b></p> <p><b>1</b> mark per correct point</p> <p>One boy; 9-year old; Hispanic/American; He was presented by his mum to a Child Anxiety and Phobic Program; He did not meet the criteria for OCD; He did meet the criteria (DSM–IV) for a phobia; He had experienced a bowl of buttons falling on him (at school).</p>	<b>3</b>
4(c)	<p><b>Explain why this study is from the learning approach.</b></p> <p><b>2</b> marks = clearly linked to learning approach (either through example or assumption) <b>1</b> mark = partially linked to learning approach/assumption of the learning approach only</p> <p>e.g. Part of this therapy was based on operant conditioning (<b>1</b> mark). He was rewarded for being able to handle buttons on the Feeling Thermometer (<b>1</b> mark).</p> <p>He had an experience of the bowl of buttons falling on to him (<b>1</b> mark). He never had this phobia before then so the phobia has been learnt (<b>1</b> mark).</p>	<b>2</b>

Question	Answer	Marks
5	<p><b>From the study by Yamamoto et al. (chimpanzee helping): Describe the procedure of the First ‘Can See’ condition <u>and</u> the ‘Cannot See’ condition.</b></p> <p><b>1</b> mark per correct point <b>Max 3</b> for either condition</p> <p>e.g. First Can See: The chimpanzees were in adjacent/separate (experimental) booths/rooms; There was a transparent panel / wall divider separating both booths; Each chimp was either a helper or recipient; There was a task that needed a stick or straw to solve; All chimps had a tray of seven objects; The helper could give the recipient an object through the hole / hole in the wall so chimpanzee could pass a tool through.</p> <p>e.g. Cannot See: The chimpanzees were in adjacent/separate (experimental) booths/rooms (only awarded if not awarded for the First Can See condition); The wall between them was opaque; Except for a small window that could only be accessed if a chimpanzee purposely wanted to look through it (to help).</p>	4
6	<p><b>Describe the psychology that is being investigated in the study by Canli et al. (brain scans and emotion).</b></p> <p><b>1</b> mark per ‘psychology’ point made <b>1</b> identification mark is available <b>1</b> mark available for an explicit example from the study</p> <p>Creditworthy ‘psychology’ includes emotions, amygdala, brain scans, memories.</p> <p>e.g.: An fMRI is a non-invasive technique / measures brain activity; Radio waves are coupled with a strong magnetic field to create the scan output; This allows a researcher to look at blood flow in the brain during mental activities / processing of information.</p> <p>The amygdala was investigated about its links with memories; It is part of the brain in the temporal lobe / part of the limbic system; The amygdala has different functions in different hemispheres of the brain.</p>	5

Question	Answer	Marks
7(a)	<p><b>From the study by Laney et al. (false memory):</b></p> <p><b>Outline <u>one</u> aim of this study.</b></p> <p><b>2 marks = full aim</b>  <b>1 mark = partial aim</b></p> <p>e.g.:          To investigate whether (positive) false memories about asparagus can be implanted into a person (<b>2 marks</b>);          To investigate false memories for food (<b>1 mark</b>).</p>	<b>2</b>
7(b)	<p><b>Outline <u>one</u> methodological weakness of this study.</b></p> <p><b>1 mark = appropriate methodological weakness</b>  <b>1 mark = applying it to Laney</b></p> <p>e.g.:          Some of the questionnaires used fixed choice answers so this may not represent what would happen in reality (<b>1 mark</b>). For example, the Food Costs questionnaire have seven choices, but in reality not one of those might represent what a participant would pay for that food item (<b>1 mark</b>).</p> <p>Only undergraduate students were used in both studies which may limit generalisability (<b>1 mark</b>). They were all of a similar age/educational level so they may not represent how older adults (potentially) form (positive) false memories (<b>1 mark</b>).</p>	<b>2</b>
7(c)	<p><b>Suggest <u>one</u> real-world application based on the procedure of this study.</b></p> <p><b>1 mark for what the application is (clearly based on Laney)</b>  <b>1 mark for how it will be achieved</b></p> <p>e.g.:          This could be used to help children improve their diets (<b>1 mark: what</b>). Children could be 'tricked' by their parents/dietician by telling them that they loved broccoli/asparagus/cabbage, etc., the first time they tried it and keep repeating the false information (<b>1 mark: how</b>).</p>	<b>2</b>



Question	Answer	Marks
8(a)	<p><b>From the study by Bandura et al. (aggression):</b></p> <p><b>Describe how the children were rated on aggressive behaviour in their nursery school, prior to the study.</b></p> <p><b>1</b> mark per correct statement  <b>1</b> mark available for naming two of the scales used</p> <p>Rated on four different scales about aggression;  All five point scales;  By experimenter <b>and</b> nursery school teacher;  Scales = physical aggression / verbal aggression / aggression towards inanimate objects / aggression inhibition (2 named = <b>1</b> mark);  They were rated independently;  A composite score was given to all children / scores for scales were added up for each child.</p>	<b>4</b>

8(b)

**Explain whether each guideline below was broken in the study by Bandura et al.**

- confidentiality
- protection from physical harm
- protection from psychological harm
- right to withdraw

Use the following Levels marking for each guideline separately.

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

Confidentiality:

e.g. Any data should not be identifiable as a single participants' response / participants' data must not be named as theirs.  
All we know is that they were children from a nursery at Stanford University / we only know the gender and age (range).

Protection from physical harm:

e.g. Participants should leave the study in the same physical state as they entered / Participants should not be potentially harmed by the procedure of a study.  
The children could have injured themselves when they were playing/hitting / being aggressive with the Bobo doll / toys in the room so this was broken.

Protection from psychological harm:

e.g. Participants should leave the study in the same mental/psychological state as they entered / Participants should not be potentially harmed by the procedure of a study.  
The children could have left the study thinking that aggression was good/frightening so their way of thinking had been changed / not reduced before leaving the study.

Right to withdraw:

e.g. participants should be able to leave the study at any point (without penalty);  
In the experimental room the experimenter remained with the child so they could not leave the room, so it was broken.

8

Question	Answer	Marks
9 9	<p><b>Evaluate the study by Milgram (obedience) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about qualitative data.</b></p> <p>Strengths include: reliability, qualitative data, quantitative data. Weaknesses include: ethics, validity (external), generalisability.</p> <div style="border: 1px solid black; padding: 5px;"> <p><b>Level 4 (8–10 marks)</b></p> <ul style="list-style-type: none"> <li>• Evaluation is comprehensive;</li> <li>• Answer demonstrates evidence of careful planning, organisation and selection of material;</li> <li>• Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout;</li> <li>• Answer demonstrates an excellent understanding of the material.</li> </ul> </div> <div style="border: 1px solid black; padding: 5px;"> <p><b>Level 3 (6–7 marks)</b></p> <ul style="list-style-type: none"> <li>• Evaluation is good;</li> <li>• Answer demonstrates some planning and is well organised;</li> <li>• Analysis is often evident but may not be consistently applied;</li> <li>• Answer demonstrates a good understanding of the material.</li> </ul> </div> <div style="border: 1px solid black; padding: 5px;"> <p><b>Level 2 (4–5 marks)</b></p> <ul style="list-style-type: none"> <li>• Evaluation is mostly appropriate but limited;</li> <li>• Answer demonstrates limited organisation or lacks clarity;</li> <li>• Analysis is limited;</li> <li>• Answer lacks consistent levels of detail and demonstrates a limited understanding of the material.</li> </ul> </div> <div style="border: 1px solid black; padding: 5px;"> <p><b>Level 1 (1–3 marks)</b></p> <ul style="list-style-type: none"> <li>• Evaluation is basic;</li> <li>• Answer demonstrates little organisation;</li> <li>• There is little or no evidence of analysis;</li> <li>• Answer does not demonstrate understanding of the material.</li> </ul> </div> <div style="border: 1px solid black; padding: 5px;"> <p><b>Level 0 (0 marks)</b> No response worthy of credit.</p> </div>	10