



## **Cambridge International AS & A Level**

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**PSYCHOLOGY**

**9990/13**

Paper 1 Approaches, Issues and Debates

**October/November 2022**

**MARK SCHEME**

Maximum Mark: 60

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**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 2022 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

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This document consists of **14** 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.

**Social Science–Specific Marking Principles  
(for point-based marking)****1 Components using point-based marking:**

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

- a** DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
- b** DO credit alternative answers/examples which are not written in the mark scheme if they are correct
- c** DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons ...).
- d** DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- e** DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
- f** DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
- g** DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

**2 Presentation of mark scheme:**

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

**3 Annotation:**

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

Question	Answer	Marks
1(a)	<p><b>From the study by Andrade (doodling):</b></p> <p><b>State the number of participants that were in the doodling group in this study.</b></p> <p>1 mark for the correct answer</p> <p>20</p>	<b>1</b>
1(b)	<p><b>Describe the mock telephone message used in this study.</b></p> <p>1 mark per correct point made</p> <p>Recorded on (audio) cassette;  Monotone or calm voice / monotonous/dull/boring;  227 words per minute;  Lasted for 2.5 minutes;  Comfortable listening volume / different volume for each participant;  It contained the names of eight people attending the party;  There were also the names of three people and a cat, who were not attending;  Eight place names were mentioned;  Other irrelevant material was contained in the message;</p>	<b>3</b>

Question	Answer	Marks
2(a)	<p><b>From the study by Dement and Kleitman (sleep and dreams):</b></p> <p><b>Outline the relationship between the duration of time spent in REM sleep and the length of dream narrative in this study.</b></p> <p>2 marks for full outline 1 mark for partial outline</p> <p>e.g. The longer a participant was in REM sleep, the longer their dream narratives were (2 marks) Positive correlation (1 mark)</p>	<b>2</b>
2(b)	<p><b>Outline <u>one</u> conclusion from this study.</b></p> <p>2 marks for full answer 1 mark for partial/brief answer</p> <p>e.g. People can judge the duration of their time in REM with accuracy (2 marks) Dreams are not instant events but are reported/experienced in real time (2 marks) Eye movements during sleep do correspond with the content of a dream (2 marks) Eye movements match dreams (1 mark) Dreaming happens more in REM (1 mark) People can judge REM length (1 mark)</p>	<b>2</b>

Question	Answer	Marks
3(a)	<p><b>From the study by Baron-Cohen et al. (eyes test):</b></p> <p><b>Describe the sample for Group 3 in this study.</b></p> <p>1 mark per correct point</p> <p>Adults/students; Studying for undergraduate degrees / at Cambridge University; Majority studying science; N = 103; Equal male/female; Assumed to have high IQ; Not diagnosed with AS/HFA; Mean age = 20.8 years.</p>	<b>3</b>
3(b)	<p><b>The original ‘Reading the Mind in the Eyes’ test had several problems. Two of these problems were:</b></p> <ul style="list-style-type: none"> <li>• <b>the test only used 25 pairs of eyes</b></li> <li>• <b>the two response options in the test were semantic opposites.</b></li> </ul> <p><b>State how this study solved each of these problems with the revised ‘Reading the Mind in the Eyes’ test.</b></p> <p>1 mark per correct ‘solution’</p> <p>Problem 1: 25 pairs of eyes = there were 36 pairs of eyes used</p> <p>Problem 2: the two response options were semantic opposites = three foils had similar ‘valence’ (emotion)</p>	<b>2</b>

Question	Answer	Marks
4(a)	<p><b>Prior to the experimental part of the study by Bandura et al. (aggression), the children were observed and rated for their baseline aggressive behaviour.</b></p> <p><b>State where the children were observed in this part of the study.</b></p> <p>1 mark for correct answer</p> <p>(Stanford University) Nursery (School).</p>	<b>1</b>
4(b)	<p><b>State <u>one</u> person who observed the children in this part of the study.</b></p> <p>1 mark for correct answer</p> <p>Experimenter; (Nursery School) Teacher.</p>	<b>1</b>
4(c)	<p><b>Outline how the children were rated for their baseline aggressive behaviour in this part of the study.</b></p> <p>1 mark per correct point 1 mark available for naming one of the scales used</p> <p>Rated on four different scales about aggression; All five point ratings; Scales = physical aggression / verbal aggression / aggression towards inanimate objects / aggression inhibition (name 2 for 1 mark) They were rated independently; A composite score was given to all children / scores for scales were added up for each child;</p>	<b>2</b>
4(d)	<p><b>Outline <u>one</u> weakness of how the children were rated for their baseline aggressive behaviour in this part of the study.</b></p> <p>1 mark for identifying a weakness 1 mark for relating it to this part of the study</p> <p>e.g. It is a subjective measure of aggression (1 mark); the teacher may already have an incorrect idea about how aggressive a child is making it less valid / may have a bias against one of the children making their score more 'aggressive' (1 mark); It is a subjective measure (1 mark); Only a transient measure (1 mark).</p> <p>Other creditworthy weaknesses include: acting nicely at school, extraneous variables, validity.</p>	<b>2</b>

Question	Answer	Marks
5(a)	<p><b>The study by Schachter and Singer investigated two factors in emotion.</b></p> <p><b>An Activity Index was used to collect results in the Euphoria condition.</b></p> <p><b>Describe the results from the Activity Index for the Epinephrine Misinformed (Epi Mis) group compared to the placebo group. You <u>must</u> use data in your answer.</b></p> <p>1 mark for stating which group scored highest/lowest 1 mark for describing what the result meant 1 mark for using data (can be just the data for one group)</p> <p>e.g. The score on the Activity Index was higher for the Epi Mis / lower for the Placebo (1 mark) which meant the Epi Mis joined in more with the stooge <i>or</i> were more euphoric / Placebo joined in less <i>or</i> were less euphoric (1 mark). The average score was 22.56 (Epi Mis) and 16 (Placebo) (1 mark for either).</p>	3
5(b)	<p><b>Outline <u>one</u> methodological weakness of this study.</b></p> <p>1 mark for identifying a weakness 1 mark for linking it to the study</p> <p>e.g. There was low mundane realism for this study (1 mark: identification), as the act of being injected and then being in a room with a stranger does not happen in the real world (1 mark: relating); The study had low ecological validity (1 mark: identification); The study could have caused psychological harm (0 marks: not methodological).</p> <p>Other creditworthy weaknesses include: sample/generalisability, difficult to standardise stooge, use of independent groups.</p>	2

Question	Answer	Marks
6	<p><b>Outline what is meant by the ‘social approach’ in psychology. Include examples from the study by Yamamoto et al. (chimpanzee helping) in your answer.</b></p> <p>Up to two marks for outlining the social approach (through an assumption or description) Up to two marks for examples from Yamamoto only</p> <p>e.g. social approach We are affected by the people/individuals around us; Groups / social context can affect our behaviour; We identify with certain social groups / people.</p> <p>e.g. examples Some chimpanzees may have solved the problem because of the scenario of being able to see what the other chimpanzee needed to complete the task; Influenced by the behaviour of another chimpanzee who requested a tool to be given to them.</p>	4

Question	Answer	Marks
7	<p><b>A teacher, Nina, has some students who are having difficulty learning a new skill. She wants to help these students to learn this new skill and asks you for advice.</b></p> <p><b>Outline the advice you would give to Nina, using your knowledge of the study by Pepperberg (parrot learning).</b></p> <p>1 mark per piece of evidence clearly based on the study by Pepperberg</p> <p>e.g.</p> <ul style="list-style-type: none"><li>One teacher can act as a trainer/teacher to another adult;</li><li>They present objects and ask questions about the skill;</li><li>They are given praise / rewarded for correct skill acquisition (e.g. keep item);</li><li>They show disapproval of incorrect skill acquisition (e.g. item taken away);</li><li>The children should be allowed to participate in any verbal exchanges / ask questions;</li><li>The teacher and the model can swap roles;</li><li>Model can show/demonstrate new skill to students;</li><li>Model can compete with students / be a rival to the students.</li></ul>	4

Question	Answer	Marks
8(a)	<p><b>Outline what is meant by the ethical guideline of ‘confidentiality’.</b></p> <p>2 mark for full definition 1 mark for partial/brief definition</p> <p>All data needs to be stored separately from personal data like the participants’ names (2 marks); Any identifiable feature of a participant must not be published (2 marks); Do not take personal details (1 mark); Revealing more than they would usually (0 marks: this is privacy).</p>	2
8(b)	<p><b>From the study by Canli et al. (brain scans and emotions):</b></p> <p><b>Two friends, Willow and Leo, are discussing this study in terms of ethics.</b></p> <p><b>Willow believes the study is ethical but Leo believes the study is <u>not</u> ethical.</b></p> <p><b>Outline why you think <u>either</u> Willow <u>or</u> Leo is correct, using evidence from the study.</b></p> <p>1 mark per point made, with:</p> <p>Up to 2 marks for any relevant finding(s)/knowledge of ethical guidelines Up to 3 marks for explanation(s) or consequence(s) of breaking guideline</p> <p>e.g. Willow It can be argued that the study followed the confidentiality guideline (1 mark: guideline). All we know is that the participants were right-handed females (1 mark: explanation). This means that it would be impossible to identify any of the participants who took part in the study (1 mark: explanation).</p> <p>Informed consent implied as volunteers (1 mark: guideline).</p> <p>e.g. Leo It can be argued that the study broke the ethical guideline of protection from psychological harm. (1 mark: guideline). The participants had to look at some imagery that could have been disturbing (1 mark: explanation) so did not leave the study in the same psychological state as they entered (1 mark: explanation).</p> <p>Participants were deceived at certain points in the study (1 mark: guideline).</p>	4

Question	Answer	Marks
9(a)	<p data-bbox="316 248 1150 315"><b>In Experiment 2 of the study by Laney et al. (false memory), participants had to view twenty slides of common food.</b></p> <p data-bbox="316 349 1310 416"><b>Describe what participants were asked to do immediately after viewing each slide.</b></p> <p data-bbox="316 450 775 483">1 mark for each correct point made</p> <p data-bbox="316 517 1283 786">They had to rate each photograph on four scales; How appetising/disgusting they found the photograph (1 mark for either of these); Whether the photographer was novice, amateur or professional (2 needed for mark); Artistic quality of the photo was rated / photography rated; They were rated on an 8 point scale / from 1–8; 1 = not at all, to 8 = very much (need both to gain this mark);</p>	<b>4</b>

Question	Answer	Marks																		
9(b)	<p><b>Explain <u>one</u> similarity and <u>one</u> difference between the study by Laney et al. (false memory) and <u>one</u> other study from the cognitive approach.</b></p> <p>4 marks available for the similarity, e.g. laboratory based, quantitative data 4 marks available for the difference, e.g. participants (sample or demographics)</p> <p><i>Similarity</i> e.g. 4 marks Both Andrade and Laney studies were experimental in nature. For example, both studies had manipulated IVs. In the Andrade study there were two conditions of doodling and non-doodling. In Laney study there were also two conditions of love asparagus and a control.</p> <p>e.g. 3 marks Both Andrade and Laney studies were experimental in nature. For example, both studies had manipulated IVs. In the Andrade study there were two conditions of doodling and non-doodling.</p> <p>e.g. 2 marks Both Andrade and Laney studies were experimental in nature. For example, both studies had manipulated IVs.</p> <p>e.g. 1 mark Both Andrade and Laney were experimental in nature.</p> <table border="1" data-bbox="320 1122 1310 1749"> <thead> <tr> <th>Level</th> <th>Descriptor</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>The similarity/difference is well explained using both studies as examples.</td> <td>4</td> </tr> <tr> <td>3</td> <td>The similarity/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 similarity/difference is brief with an attempt at using at least one study as an example OR The similarity/difference is well explained but there is no study evidence.</td> <td>2</td> </tr> <tr> <td>1</td> <td>The similarity/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> </tbody> </table>	Level	Descriptor	Marks	4	The similarity/difference is well explained using both studies as examples.	4	3	The similarity/difference is well explained but only one study is used as an example OR both studies used briefly.	3	2	The similarity/difference is brief with an attempt at using at least one study as an example OR The similarity/difference is well explained but there is no study evidence.	2	1	The similarity/difference is brief with no attempt at using studies as examples.	1	0	No creditworthy material.	0	8
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10	<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 generalisability.</b></p> <p>Strengths include: reliability, quantitative data Weaknesses include: validity (external), ethics, 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