



## Cambridge International AS & A Level

---

PSYCHOLOGY

9990/11

Paper 1 Approaches, Issues and Debates

October/November 2021

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 2021 series for most Cambridge IGCSE™, Cambridge International A and AS Level 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.

**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 Bandura et al. (aggression):</b></p> <p><b>State the number of participants used in this study.</b></p> <p>1 mark for correct answer</p> <p>72 / 36 males and 36 females</p>	1
1(b)	<p><b>Describe how the participants were rated on their aggressive behaviours before the experimental conditions.</b></p> <p>1 mark per correct statement. 1 mark available for naming a scale</p> <p>Rated on four scales/five point scales; By experimenter <b>and</b> nursery school teacher; Scales = physical aggression / verbal aggression / aggression towards inanimate objects / aggression inhibition (2 named for 1 mark); They were rated independently.</p>	2
1(c)	<p><b>Outline <u>one</u> conclusion from this study.</b></p> <p>2 marks full conclusion 1 mark brief/partial conclusion</p> <p>e.g. 2 marks Children will imitate aggression because they have observed it from someone that they can relate to / a model; Children will imitate aggressive behaviour even when a model is no longer present; Children are more likely to imitate aggression/behaviours observed from a same-sex model; Children who observe/witness aggressive behaviour are more likely to replicate/imitate that behaviour; Gender affects the type of aggression imitated, as boys more physical/girls more verbal;</p> <p>e.g. 1 mark People will imitate aggression; Aggression can be learnt from observation; Boys tend to imitate physical aggression more / girls tend to imitate verbal aggression more;</p> <p>e.g., 0 marks Boys produced the highest level of mallet aggression when the model was aggressive and male (result);</p> <p>There are other creditworthy responses.</p>	2

Question	Answer	Marks
2(a)	<p><b>From the study by Andrade (doodling):</b></p> <p><b>Describe the psychology being investigated in this study.</b></p> <p>1 mark per correct statement made</p> <p>e.g. Looking at whether doodling aids (cognitive) concentration/memory/attention; Arousal levels need to be maintained to be able to concentrate; Cognitive processing of dual tasks compete for the same levels of performance; This may slow down our overall cognitive processing speed; Boredom plays a role in paying attention to information; Information processing when asked to do ‘two things at once’/multitasking; Removes attention / takes away concentration / acts as a distraction (a second task);</p> <p>There are other creditworthy responses.</p>	3
2(b)	<p><b>Outline <u>one</u> strength of this study in relation to the experimental design used.</b></p> <p>1 mark for identifying a strength 1 mark for linking it to independent measures (in context of Andrade)</p> <p>e.g. There is a potential reduction in demand characteristics (1 mark); as the participants were <b>only</b> allowed to doodle or not, they would not have worked out the aim of the study (1 mark); The two groups could be compared without any risks of order/practice/boredom effects (1 mark);</p> <p>There are other creditworthy responses.</p>	2

Question	Answer	Marks
3(a)	<p><b>From the study by Canli et al. (brain scans and emotions):</b></p> <p><b>(a) Outline the sampling technique used in this study.</b></p> <p>1 mark available for identifying the sampling technique 1 mark per correct description</p> <p>e.g. Volunteer/self-selected (1 mark) This is when the participants choose to be part of a study (1 mark). They may respond to an advertisement (1 mark)</p>	2

Question	Answer	Marks
3(b)	<p><b>Outline <u>two</u> questions that participants were asked during the recognition test.</b></p> <p>1 mark per question</p> <p>Have you seen this picture/scene before? (if yes) do you remember it with certainty or less certainty / is it familiar or not familiar?;</p>	<b>2</b>
3(c)	<p><b>Describe the correlation between participants' intensity ratings and normative arousal ratings.</b></p> <p>1 mark available for identifying the type of correlation 1 mark per correct description of correlation/direction of scores</p> <p>e.g. Positive correlation (1 mark); As one score went up so did the other (1 mark), so as the intensity rating increased so did the arousal rating (1 mark)</p>	<b>2</b>

Question	Answer	Marks
4(a)	<p><b>From the study by Piliavin et al. (subway Samaritans):</b></p> <p><b>Describe what the victim did during a trial.</b></p> <p>1 mark per correct procedural point</p> <p>Always stood at the pole; In the critical area; After passing the first station (70s in); The victim was to stagger forward and collapse; They remained supine / face up / laid there until receiving help; If no help received they were helped up by the model; They then left the car at the next station.</p>	<b>5</b>
4(b)	<p><b>Identify <u>one</u> weakness of this study.</b></p> <p>1 mark for the identification</p> <p>e.g. <b>Lacks</b> generalisability (1 mark) Generalisability (0 marks) <b>Difficult</b> to replicate (1 mark) Replication (0 marks) <b>Difficult</b> to control (extraneous) variables (1 mark) Control of variables (0 marks) <b>Broke</b> ethical guideline of deception / informed consent / harm / debriefing (1 mark) Ethical issues (0 marks)</p> <p>There are other creditworthy responses.</p>	<b>1</b>

Question	Answer	Marks
5(a)	<p><b>From the study by Laney et al. (false memory):</b></p> <p><b>Identify two characteristics of the sample used in Experiment 2.</b></p> <p>1 mark per correct characteristic identified</p> <p>Undergraduates/students; Mainly female; Mean age c.20 years.</p>	2
5(b)	<p><b>Explain <u>one</u> reason why the Food Costs Questionnaire may <u>not</u> accurately measure the most someone is willing to pay for a food item in a grocery store.</b></p> <p>1 mark for a problem 1 mark for linking it to the study</p> <p>e.g. What people say they will do on a questionnaire may not 'mirror' their behaviour (1 mark); therefore just because they would spend a certain amount of money does not mean that actually will (1 mark); The sample of students might not be used to grocery shopping (1 mark) so they might not be able to even guess how much they would expect to pay (1 mark);</p> <p>It is a subjective measure (1 mark); Only a transient measure / less valid (1 mark); When in an actual shop, the products may be more appealing (1 mark);</p> <p>There are other creditworthy responses including individual experiences, fixed choices for payments, different shops have different prices, people change their minds, not in a grocery store.</p>	2

Question	Answer	Marks
6(a)	<p><b>The study by Pepperberg (parrot learning) is based on social learning theory.</b></p> <p><b>Describe social learning theory.</b></p> <p>1 mark per correct point made</p> <p>Social Learning is when someone observes the behaviour of someone else / pay attention to behaviour; They retain this information for use at a later date; The organism/person/animal must feel capable of replicating that behaviour; The person/animal will imitate the behaviour they have observed; They need to be motivated via vicarious reinforcement;</p>	4

Question	Answer	Marks
6(b)	<p><b>Outline how <u>one</u> result from this study supports social learning theory.</b></p> <p>1 mark for appropriate result, <b>then</b> 1 mark for explaining how it links to Social Learning Theory</p> <p>e.g. Alex scored well above chance on tests for same/different with familiar objects (76.6%) (1 mark). This may be because he had witnessed the model/rival learning about same/different (1 mark).</p>	<b>2</b>

Question	Answer	Marks
7(a)	<p><b>Steve has learned about the study by Dement and Kleitman (sleep and dreams). He believes that the study is ethical.</b></p> <p><b>Outline what is meant by the ethical guideline of ‘informed consent’.</b></p> <p>2 marks for a full answer 1 mark for brief/partial answer</p> <p>e.g. This is when a participant is given enough information before a study begins so they can decide whether they would like to participate (or not) (2 marks) This is when a person decides if they want to take part in a study (1 mark) Telling participants information about the study before it starts (1 mark)</p>	<b>2</b>
7(b)	<p><b>Outline why Steve is correct that this study is ethical, using evidence in your answer.</b></p> <p>Up to 1 mark for outlining one ethical guideline directly relevant to Dement &amp; Kleitman Up to 4 marks for using evidence to show that Dement &amp; Kleitman was ethical</p> <p>e.g. Confidentiality was maintained in this study (1 mark outline); The results only used initials to identify participants (1 mark evidence); They were not deceived as they knew that their sleep/dreams were getting monitored (1 mark evidence); The participants were not forced to tell their dream narratives so it can be argued that privacy was given (1 mark evidence); EEGs do not pose any risk to people so physical protection was adhered to in the study (1 mark)</p>	<b>4</b>



Question	Answer	Marks
8(a)	<p><b>Outline the debate about individual and situational explanations in psychology, using an example other than the study by Milgram (obedience).</b></p> <p>1 mark = defining individual + 1 mark example 1 mark = defining situational + 1 mark example</p> <p>e.g. The individual explanation states that we behave because of our personality (1 mark). For example, people helped in the Piliavin study because of their personality / they are altruistic (1 mark example)</p> <p>The situational explanation states that we behaviour because of the environment we find ourselves in (1 mark). For example, people helped in the Piliavin study because they were stuck in the subway car and could not escape (1 mark example)</p>	<b>4</b>

Question	Answer	Marks																		
8(b)	<p><b>Explain what psychologists have learned about obedience using <u>two</u> results from the study by Milgram.</b></p> <p>e.g.            People will follow destructive orders from a person in authority            People will inflict harm on an innocent person if told to            Some people do resist authority figures when it comes to obedience            It is not only Germans in WW2 who were blindly obedient to authority figures</p> <table border="1" data-bbox="320 551 1310 1346"> <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 <b>and</b> the candidate clearly explains what we have learned about the named concept</td> <td>4</td> </tr> <tr> <td>3</td> <td>The result presented has a meaningful comparison <b>and</b> there is a brief attempt at explaining what we have learned about the named concept; The result presented has <b>no</b> meaningful comparison <b>but</b> the candidate clearly explains what we have learned about the named concept</td> <td>3</td> </tr> <tr> <td>2</td> <td>The result presented has a meaningful comparison <b>but</b> there is no attempt at explanation; The result presented is not clear or no result <b>but</b> there is an attempt at explaining what we have learned about the named concept</td> <td>2</td> </tr> <tr> <td>1</td> <td>The result presented has <b>no</b> meaningful comparison <b>or</b> 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> <p>e.g.            Level 4: People will follow destructive orders from a person in authority. In the study all participants went to 300 V and then 65% went to 450 V.            People will show signs of distress when engaging in destructive obedience.            Participants in the study showed sweating, nervous laughing, biting of lip, violent seizures (2 named needed).</p> <p>Level 3: People will follow destructive orders from a person in authority. 65% of participants went to 450 V.            People will show signs of distress when engaging in destructive obedience.            Participants in the study showed sweating, nervous laughing, biting of lip, violent seizures (1 named needed).</p> <p>Level 2: People will follow destructive orders from a person in authority OR in the study all participants went to 300 V and then 65% went to 450 V OR            People will follow destructive orders as 65% gave the maximum voltage</p> <p>Level 1: People will follow destructive orders; people will follow authority figures; people get distressed following orders / being obedient</p>	Level	Criteria	Marks	4	The result presented has a meaningful comparison <b>and</b> the candidate clearly explains what we have learned about the named concept	4	3	The result presented has a meaningful comparison <b>and</b> there is a brief attempt at explaining what we have learned about the named concept; The result presented has <b>no</b> meaningful comparison <b>but</b> the candidate clearly explains what we have learned about the named concept	3	2	The result presented has a meaningful comparison <b>but</b> there is no attempt at explanation; The result presented is not clear or no result <b>but</b> there is an attempt at explaining what we have learned about the named concept	2	1	The result presented has <b>no</b> meaningful comparison <b>or</b> there is a basic attempt at explaining	1	0	No creditworthy answer	0	8
Level	Criteria	Marks																		
4	The result presented has a meaningful comparison <b>and</b> the candidate clearly explains what we have learned about the named concept	4																		
3	The result presented has a meaningful comparison <b>and</b> there is a brief attempt at explaining what we have learned about the named concept; The result presented has <b>no</b> meaningful comparison <b>but</b> the candidate clearly explains what we have learned about the named concept	3																		
2	The result presented has a meaningful comparison <b>but</b> there is no attempt at explanation; The result presented is not clear or no result <b>but</b> there is an attempt at explaining what we have learned about the named concept	2																		
1	The result presented has <b>no</b> meaningful comparison <b>or</b> there is a basic attempt at explaining	1																		
0	No creditworthy answer	0																		

Question	Answer	Marks
9	<p><b>Evaluate the study by Baron-Cohen et al. (eyes test) 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.</b></p> <p>Suitable strengths include: quantitative data, validity, reliability            Suitable weaknesses include: generalisations, validity, ethics</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