CAMBRIDGE
International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/13**

Paper 1 Approaches, Issues and Debates **October/November 2025**

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 2025 series for most Cambridge IGCSE, Cambridge International A and 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 descriptions 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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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 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

4 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.

Annotations guidance for centres

Examiners use a system of annotations as a shorthand for communicating their marking decisions to one another. Examiners are trained during the standardisation process on how and when to use annotations. The purpose of annotations is to inform the standardisation and monitoring processes and guide the supervising examiners when they are checking the work of examiners within their team. The meaning of annotations and how they are used is specific to each component and is understood by all examiners who mark the component.

We publish annotations in our mark schemes to help centres understand the annotations they may see on copies of scripts. Note that there may not be a direct correlation between the number of annotations on a script and the mark awarded. Similarly, the use of an annotation may not be an indication of the quality of the response.

The annotations listed below were available to examiners marking this component in this series.

Annotations

Annotation	Meaning
	A creditworthy point made by the candidate A creditworthy 'what' for a generic everyday application question
	An incorrect response
BOD	Benefit of Doubt
REP	Repetition of a point
	Unclear response
I	The named issue in the 10-mark essay
L1 L2 L3 L4 L5	Levels used for the 10-mark essay (L1–L5) Levels used for the 8-mark similarity/difference question (L1–L4)

Annotation	Meaning
NAQ	Not Answering the Question
SEEN	The blank page has been seen. An attached response has been seen.
	A creditworthy strength in the 10-mark essay. A creditworthy 'how' for a generic everyday application question
	A creditworthy weakness in the 10-mark essay.
	A creditworthy point in the 10-mark essay that is **b**rief
	A creditworthy point in the 10-mark essay that is **d**etailed
	A creditworthy example in **Q7**

Question	Answer	Marks	Guidance
1(a)	**From the study by Andrade (doodling):** **Outline how the participants were recruited in this study.** 1 mark per correct point. By opportunity sampling. The participants had just completed an unrelated experiment. They were asked if they would spend another 5 minutes helping out another study. They were members of a participant panel/volunteers.	**2**	List is definitive.
1(b)	**Identify <u>two</u> features of the piece of paper given to the participants in the doodling condition.** 1 mark per correct feature. Shapes were 1cm (in diameter). 10 shapes per row. (Alternating rows of) squares and circles. Margin down the side (to write target information). A4 size.	**2**	List is definitive. Accept 'same size shapes' = 1 mark
1(c)	**Identify how recall of incidental information was measured.** 1 mark for correct answer. (Correct) number of places (recalled).	**1**	Take the first answer only.

Question	Answer	Marks	Guidance
2(a)	**From the study by Piliavin et al. (subway Samaritans):** **One conclusion was that, in a natural setting, people do offer spontaneous help to a victim in need.** **Outline <u>one</u> other conclusion from this study.** 2 marks full/detailed conclusion. 1 mark partial/brief conclusion. e.g., A person who is 'ill' is more likely to receive help than a person who is 'drunk' (2 marks). People help ill victims more often (1 mark).	**2**	Do **not** credit conclusions about spontaneous help as this is in the question. Conclusions relating to diffusion of responsibility, the bystander effect or cost-reward are acceptable.
2(b)	**Outline <u>one</u> ethical weakness of this study.** 1 mark for identifying an appropriate/possible ethical issue. 1 mark for outlining the weakness using an example from Piliavin. e.g., The participants were deceived by the whole set up (1 mark). The victim was acting ill/drunk but the Ps never knew this (1 mark). As there were so many participants debriefing never happened so not everyone knew it was a fake set up/had taken part in a study (1 mark). Debriefing after the event happened would have ensured people knew it was fake (1 mark). There are other creditworthy weaknesses.	**2**	Do not credit a methodological weakness. Guidelines are: Deception Debriefing Harm/stress Consent Right to withdraw Privacy Confidentiality

Question	Answer	Marks	Guidance
3(a)	**The study by Hassett et al. (monkey toy preferences) used a sample of male and female monkeys.** **Identify <u>two</u> features of the sample used in this study, other than sex and species.** 1 mark per correct feature. Troop of 135 individuals. Lived together for more than 25 years. Lived at Yerkes Center. Matriline social structure/same natal group. 14 not used due to hormonal treatment. Age range 3 months to over 13 years. 82 potential participants. 34 monkeys used in data analysis. 39 infants **not** used (as interactions not coded). 53 monkeys were excluded in total.	**2**	List is definitive. **No** tolerance on numbers. Do credit information about rank if presented.
3(b)	**Describe <u>one</u> result for the toy preferences of female monkeys in this study.** 2 marks for the result with a meaningful comparison. 1 mark for result with no meaningful comparison. e.g., 2 marks There was only a slight increase in duration for play with a plush toy compared to a wheeled toy (for females). More female monkeys preferred wheeled toys compared to plush toys/no preference. Female monkeys played with plush toys with a longer frequency than wheeled toys. e.g., 1 mark There was only a slight increase in duration for play with a plush toy.	**2**	Accept results based on frequency or duration of play or % preference. No significant preference = 1 Any result compared to males = 1 mark max

Question	Answer	Marks	Guidance
4	**From the study by Pozzulo et al. (line-ups):** **Describe how the cartoon foils were selected.** 1 mark per correct point. They were selected from readily available images on the internet. They were chosen as they had a similar appearance to Dora/Diego. Similarity was based on facial structure/hair length/hair colour (only 1 mark for any of these). Three judges conducted the ratings. On 10 photographs for <u>each</u> target. The four cartoon characters receiving the highest similarity scores were used.	**4**	List is definitive. Do **not** credit what the pictures looked like (e.g., black and white; cropped) as the question is about <u>selection</u>.

Question	Answer	Marks	Guidance
5(a)	**From the study by Perry et al. (personal space):** **One feature of the sample was that it consisted of only male participants.** **Identify <u>two</u> other features of the sample used in the study.** 1 mark per correct feature. n=54 Undergraduates/students. University of Haifa. Age 19–32/average age 25.29 Gained course credit/volunteer sample. Normal/corrected to normal vision. No history of psychiatric/neurological conditions. 5 were left-handed.	**2**	List is definitive. Tolerance for average age is 25–26

Question	Answer	Marks	Guidance
5(b)	**Explain <u>one</u> weakness of using animations in Experiment 1 in this study.** 1 mark for identifying a weakness of using animations. 1 mark for explaining the weakness via example from the study by Perry. e.g., The use of animations lacks ecological validity/mundane realism (1 mark). The situations of an animated person approaching to measure personal space is not an everyday occurrence (1 mark). The use of animations is not a valid measure of personal space (1 mark). A person may act differently when personal space is invaded in reality compared to an animation (1 mark). There are other creditworthy weaknesses.	**2**	Do **not** credit general weaknesses of the study by Perry. It <u>must</u> be about animations.

Question	Answer	Marks	Guidance
6(a)	**In the background to their study, Saavedra and Silverman (button phobia) outlined the role of disgust in childhood phobias.** **Outline the role of disgust in childhood phobias.** 1 mark per correct point. Disgust is a feeling of aversion towards something offensive/something we fear. Disgust when interacting with fear can result in avoidance behaviour(s). Children can negatively evaluate a specific phobic object. This evaluation happens without any anticipation of threat (from the phobic object). So, as there is no fear, it must be disgust that is causing a negative evaluation. A study that measured disgust in children with a spider phobia, showed it decreased as fear decreased/showed a link between disgust and fear. They can be repulsed by a (previously) neutral stimulus.	**3**	List is all that is covered in the original paper but do credit other examples. Do credit 'usually triggered by a traumatic event in childhood' Do **not** credit examples from the boy in the study.
6(b)	**Two friends, Hannah and Josh, are discussing the generalisability of the study by Saavedra and Silverman (button phobia).** **Hannah says the study is generalisable, but Josh says it is not generalisable.** **Outline why you think either Hannah or Josh is correct, using evidence from the study.** 1 mark per point made linked to generalisability	**4**	

Question	Answer	Marks	Guidance
6(b)	e.g., Hannah The study used a fear/disgust hierarchy to rate the buttons. This could easily be used with other people who have different phobias. The use of positive reinforcement from his mum is useful to know. As this could be used with other children who have different phobias to help them overcome them. e.g., Josh The sample was just one (Hispanic American) boy (with a button phobia). This is rare/unique and would be difficult to generalise to other people with phobias. It might be that the results only apply to him and his personal experience in the classroom that caused the phobia. The experience of the bowl of buttons falling on him in a classroom is probably unique. Other children may react differently to certain buttons when they rate them on the Feelings Thermometer meaning it is subjective/less generalisable. The Imagery Exposure therapy may not generalise to people who have a more common phobia. There are other creditworthy responses.		If both Hannah and Josh feature in the answer, mark them independently and credit the highest score. For Hannah, can give credit for arguments stating mechanisms of the therapy that could be used with many other people. If the candidate mixes up Hannah and Josh (e.g., says Hannah but gives a 'is not generalisable') or does not name the friend then max 2 and annotate with a ? For Josh, 1 mark is available for stating who the study might **not** be generalisable to.

Question	Answer	Marks	Guidance
7	**The nature versus nurture debate relates to the study by Bandura et al. (aggression)** **Outline what is meant by this debate, including <u>one</u> example from the nature side and <u>one</u> example from the nurture side from the study by Bandura et al.** 1 mark for outlining nature **plus** 1 mark for example from Bandura. 1 mark for outlining nurture **plus** 1 mark for example from Bandura. e.g., Nature Nature is about behaviours being genetically encoded and with us from birth (1 mark). Boys were more physically aggressive than girls as this could be due to them having higher levels of testosterone/due to hormones (1 mark). e.g., Nurture Nurture is about the learning of behaviours through experiences/after birth (1 mark). Participants in all conditions had already been matched on (pre-existing) aggression levels yet, for instance, male Ps were much more likely to imitate a physically aggressive male role model (1 mark). Ps were matched on levels of aggression (1 mark) and there were differences in levels of imitated behaviour depending on whether a model was aggressive or not, so learned (1 mark). There are other creditworthy examples.	**4**	Ignore examples that are not from Bandura. Do **not** accept tautological outlines, for example, nurture is about being nurtured. Tick-e = example.

Question	Answer	Marks	Guidance
8(a)	**Pauline, a teacher, is helping her class of younger children to learn a new skill. The skill has a correct sequence of tasks. However, many children are getting this sequence wrong. Pauline needs to help the children and has come to you for advice.** **Using your knowledge of the study by Fagen et al. (elephant learning):** **Outline the advice you would give to Pauline.** 1 mark per piece of advice clearly based on the study by Fagen et al. 1 mark available for identifying a relevant primary or secondary reinforcer. Pauline could use a rewards-based system to get the children to learn the new skill. Every time the children get the task/part of the task correct, they get rewarded with something they desire. This could be a primary reinforcer/reward like some fruit/candy/food. She could also use a secondary reinforcer where the children can earn tokens every time they get the task correct. They could exchange the tokens for something they desire, like some extra play time. Pauline could shape the sequence needed to complete the new task/skill. This can be done by rewarding behaviours that get closer to the correct sequence. For example, they could be rewarded when the first attempt is correct but then when the get it correct two times and so on.	**4**	No credit for justifying advice as this is not what the question is about. The main ideas are operant conditioning including positive reinforcement, shaping, primary reinforcers, secondary reinforcers, capturing, luring, chaining. Do **not** credit punishment but do credit do not punish the children. If candidate names a task and uses that throughout answer, then credit. Do **not** credit classical conditioning or social learning examples. Responses such as 'shape the behaviour, 'using chaining', 'capture the behaviour' etc. cannot be awarded credit without telling how this would be achieved.

Question	Answer	Marks	Guidance
8(a)	Pauline could teach/instruct them each individual part of a sequence (and reward them). She could capture naturally occurring behaviours that the children show as part of the new skill. Pauline can reward the children for the correct sequence. There are other creditworthy pieces of advice		
8(b)	**Explain <u>one</u> reason for <u>one</u> piece of advice you outlined in part (a).** 2 marks for full/detailed reason. 1 mark for partial/brief reason. e.g., 2 marks One result from the study showed that shaping the behaviour of elephants with a sequence of behaviours lead to a successful trunk wash through secondary positive reinforcement. Operant conditioning predicts that rewards will increase the probability/encourage/motivate the children to repeat the behaviours. e.g., 1 mark In the study by Fagen, shaping the elephant's behaviour led to success. Rewards will motivate/encourage the children. There are other creditworthy reasons.	**2**	The response must be linked to something mentioned in Q8(a). Credit can be given to findings or theoretical arguments. Do **not** credit 'association'. Encourages them to continue/repeat = 2

Question	Answer	Marks	Guidance
9(a)	**From the study by Baron-Cohen et al. (eyes test):** **Describe the psychology being investigated.** 1 mark per correct point. Creditworthy points include theory of mind, social sensitivity, reliability, validity. 1 mark available for an example from the study. e.g., Theory of Mind This refers to our ability to attribute mental states to ourselves and others. It is linked to empathy which is the ability to understand how other people are feeling/thinking. This can be done by imagining what the other person is feeling/thinking/putting ourselves in the shoes of others. It is also about how we use this knowledge to explain the actions of other people. It is also about how we use this knowledge to predict the actions of others. We use this knowledge to understand that people may have different ideas and hold different emotions to us. It can be tested using the Eyes Test where people have to judge the emotions of others' by looking at eyes only (example mark). There are other creditworthy responses.	**4**	Do credit descriptions of AS/HFA for 1 mark max.

Question	Answer	Marks	Guidance
9(b)	**Explain <u>two</u> similarities between the study by Baron-Cohen et al. (eyes test) and the study by Andrade (doodling).** Use the marking grid below. 4 marks for the similarity, e.g., experimental, lack mundane realism, quantitative data collection, experimental design used. e.g., similarity e.g., 4 marks Both Andrade and Baron-Cohen studies were experimental in nature. For example, both studies had IVs. In the Andrade study there were two conditions of doodling and non-doodling. In the Baron-Cohen study the IV was natural and based around if a person had been diagnosed with AS/HFA or not. Therefore, both were trying to establish cause and effect (explanation). e.g. 3 marks Both Andrade and Baron-Cohen studies were experimental in nature. For example, both studies had IVs. In the Andrade study there were two conditions of doodling and non-doodling/in the Baron-Cohen study the IV was natural and based around if a person had been diagnosed with AS/HFA or not. e.g. 2 marks Both Andrade and Baron-Cohen studies were experimental in nature. For example, both studies had IVs and measured DVs. e.g. 1 mark Both Andrade and Baron-Cohen were experimental in nature.	**8**	Award L1-L4 for <u>each</u> similarity For Level 4 there must be some attempt at *explaining* the similarity. Both used humans = L1 Both about cognitive psychology = L1 Both laboratory = L1 Both have good application = L3 max

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr><td>9(b)</td><td>
<table>
<tr><th>Mark/ Level</th><th>Description</th></tr>
<tr><td>4</td><td>The similarity/difference is well explained using both studies as examples.</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 are used briefly.</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></tr>
<tr><td>1</td><td>The similarity/difference is brief with no attempt at using the studies as examples.</td></tr>
<tr><td>0</td><td>No creditable response.</td></tr>
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Question	Answer	Marks	Guidance
10	**Evaluate the study by Hölzel et al. (mindfulness and brain scans) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about self-reports.** Strengths include: reliability (standardisation), quantitative data, validity, self-reports. Weaknesses include: ethics, generalisability, quantitative data, self-reports.	**10**	

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr><td>10</td><td>Example: in detail (named issue)
The self-report collected quantitative data which makes it easier to have meaningful comparisons between groups/conditions. They Ps completed the FFMQ at two-time points (before and after MBSR or control). As a result, they could compare changes in all five measures of mindfulness for both groups of Ps to test longer-term effectiveness.

Example: brief but in context
The sample size was only 16 participants making it difficult to generalise beyond the sample.

Example: no context
There were controls in place so they could establish cause and effect/has internal validity.

<table>
<tr><th>Level</th><th>Description</th><th>Mark</th></tr>
<tr><td>5</td><td>• Very good evaluation including the named issue.
• Thoroughly addresses both strengths and both weaknesses in detail.
• Selection of evidence is very thorough and effective.</td><td>9–10</td></tr>
<tr><td>4</td><td>• Good evaluation including the named issue.
• Addresses strengths and weaknesses but may include three or four points. The majority of the points are in depth.
• Selection of evidence is thorough and effective.</td><td>7–8</td></tr>
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<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr><td>10</td><td>
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<tr><td>3</td><td>• Mostly appropriate evaluation but may not include the named issue.
• Addresses either two strengths or two weaknesses in detail or one of each in detail or all four briefly.
• Selection of evidence is mostly effective.</td><td>5–6</td></tr>
<tr><td>2</td><td>• Weak evaluation and may not include the named issue.
• Addresses either a strength or a weakness. Evaluation points are brief.
• Some points may have no context.
• Selection of evidence is sometimes appropriate.</td><td>3–4</td></tr>
<tr><td>1</td><td>• Little or no evaluation.
• Discussion of strengths and weaknesses is absent or superficial.
• Selection of evidence is limited.</td><td>1–2</td></tr>
<tr><td>0</td><td>No creditable response.</td><td></td></tr>
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