

**CAMBRIDGE INTERNATIONAL AS & A LEVEL**

MAXIMUM MARK: 60

**MARK SCHEME**

**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.

- **Marks awarded are always whole marks.** Do not award half marks.
- **Marks awarded are absolute.** Full marks must be awarded if the response criteria are met. There is no systematic penalisation for inaccurate usage of spelling, punctuation, or grammar.
- **Award marks positively.** Credit what the candidate has successfully demonstrated rather than penalising what they have omitted or got wrong.

**SECTION A**

Question	Guidance and Marks Allocation	Marks
<b>1(a)</b>	<p><b>From the study by Baron-Cohen et al. (eyes test): State the number of participants in Group 1.</b></p> <p>1 mark for the correct answer.</p> <ul style="list-style-type: none"> <li>• 15 participants (AS/A-Level or undergraduate students / high-functioning autism or Asperger Syndrome individuals).</li> </ul> <p><i>Note: Group 1 consisted of 15 males with AS/HFA.</i></p>	<b>1</b>
<b>1(b)</b>	<p><b>Outline what is meant by 'social sensitivity'.</b></p> <p>1 mark for a basic/partial definition.                  2 marks for a fully outlined definition in context.</p> <ul style="list-style-type: none"> <li>• It is the ability to perceive, detect, and correctly interpret social cues, expressions, and emotional states of others (1 mark).</li> <li>• It allows individuals to understand subtle psychological signals and respond contextually or empathise appropriately with others in social interactions (2 marks).</li> </ul>	<b>2</b>

Question	Guidance and Marks Allocation	Marks
1(c)	<p><b>Outline one result comparing male participants to female participants.</b></p> <p>1 mark for partial statement/general trend. 2 marks for a detailed result comparing males and females (with data or directionality explicitly clear).</p> <ul style="list-style-type: none"> <li>• Females scored significantly higher on the Eyes Test than males in the general population control groups (Group 2 and/or Group 3) (2 marks).</li> <li>• Females performed better than males on the Eyes Test (1 mark).</li> <li>• On the AQ (Autism Spectrum Quotient), males scored significantly higher than females in the control groups (2 marks).</li> </ul>	2
2(a)	<p><b>One feature of the sample used in the study by Saavedra and Silverman (button phobia) was that the participant was a boy. Identify three features of the sample, other than that it was a boy.</b></p> <p>1 mark per valid feature identified (up to 3 maximum).</p> <ul style="list-style-type: none"> <li>• He was 9 years old.</li> <li>• He was Hispanic / American.</li> <li>• Met DSM-IV criteria for a specific phobia (of buttons).</li> <li>• Attended therapy session with his mother.</li> <li>• Symptoms had lasted for 4 years prior to the study (onset at age 5).</li> </ul>	3
2(b)	<p><b>Explain one weakness of the sample.</b></p> <p>1 mark for identifying a generic weakness. 2 marks for explaining the weakness contextually linked to the study.</p> <ul style="list-style-type: none"> <li>• <b>Low generalisability (1 mark):</b> The sample consisted of a single 9-year-old Hispanic boy suffering from a highly specific phobia. His unique psychological profile and background mean findings regarding evaluative learning and imagery exposure may not apply to females, adults, or individuals from other cultures with different phobias (2 marks).</li> </ul>	2

Question	Guidance and Marks Allocation	Marks
3	<p><b>A local business wants to introduce activities that will help its workers increase their attention and improve their memory during important meetings. Suggest what activities the local business could introduce, using your knowledge of the study by Andrade.</b></p> <p>Marks are allocated based on application of Andrade's doodling study conditions:</p> <ul style="list-style-type: none"> <li>• 1–2 marks: Suggests basic or generic activities (e.g., provide paper to write on) with loose or missing connections to Andrade.</li> <li>• 3–4 marks: Suggests specific, tailored activities explicitly based on Andrade's experimental findings (doodling as an attention/memory aid).</li> </ul> <p><b>Indicative Content:</b></p> <ul style="list-style-type: none"> <li>• The company could provide structured sheets with geometric shapes (circles and squares) to employees at the start of long meetings (1 mark).</li> <li>• Workers could be explicitly permitted/encouraged to shade or color these shapes during mundane briefings when they feel unfocused (1 mark).</li> <li>• This helps anchor cognitive resources, preventing daydreaming without overloading central processing, thereby improving monitoring and subsequent recall of meeting action points (2 marks).</li> </ul>	4
4(a)	<p><b>Outline one assumption of the learning approach, including an example from the study by Bandura et al. (aggression).</b></p> <p>1–2 marks for clearly outlining an assumption of the learning approach. 3–4 marks for integrating an accurate, explicit example from Bandura et al.</p> <ul style="list-style-type: none"> <li>• <b>Assumption:</b> Behaviors are learned from the environment through observational learning, modeling, and imitation of significant others (2 marks).</li> <li>• <b>Example:</b> In Bandura's study, children who observed an aggressive adult model hitting, punching, and striking the Bobo doll with a mallet actively imitated these identical physical and verbal behaviors when placed alone in the room with the doll, demonstrating direct observational learning (2 marks).</li> </ul>	4
4(b)	<p><b>Outline one methodological strength of the study by Bandura et al. (aggression).</b></p> <p>1 mark for naming/identifying a valid methodological strength. 2 marks for outlining it with explicit context from the study.</p> <ul style="list-style-type: none"> <li>• <b>High Standardization / Control (1 mark):</b> The laboratory environment was tightly controlled. Every child saw the model perform a highly specific, standardized sequence of physical and verbal aggressive actions for exactly 10 minutes, using identical layouts and toys across conditions, which ensures high procedural reliability (2 marks).</li> <li>• <i>Alternative:</i> Inter-rater reliability (matched pairs design on pre-existing aggression with a high correlation coefficient <math>r = 0.89</math>).</li> </ul>	2

Question	Guidance and Marks Allocation	Marks
5	<p><b>Suggest two applications to everyday life of the study by Hölzel et al. (mindfulness and brain scans). Your suggestions must be ethical.</b></p> <p>1 mark for a basic suggestion; 2–3 marks for fully developed, ethical everyday applications linked to the mechanics/conclusions of Hölzel et al.</p> <ul style="list-style-type: none"><li>• <b>Suggestion 1 (Stress Reduction in Workplaces):</b> HR departments can set up voluntary 8-week Mindfulness-Based Stress Reduction (MBSR) courses for employees. This helps increase grey matter density in areas like the hippocampus, improving emotional regulation and cognitive function safely and ethically (1.5 marks).</li><li>• <b>Suggestion 2 (Educational Settings for Exam Anxiety):</b> Schools can integrate voluntary short daily meditation sessions for students. This provides an ethical, non-invasive therapeutic intervention that alters brain structures involved in perspective-taking and anxiety management, aiding academic well-being (1.5 marks).</li></ul>	3

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Question	Guidance and Marks Allocation	Marks
<b>6(a)(i)</b>	<p><b>From the study by Pozzulo et al. (line-ups): Explain whether each ethical guideline below was broken: (i) consent.</b></p> <p>1 mark for a partial or definitive answer. 2 marks for a fully justified contextual explanation.</p> <p>• <b>Not broken (or adequately handled):</b> For the child participants (aged 4–7), informed written consent was explicitly obtained from their parents or legal guardians beforehand, as children cannot legally consent. Additionally, verbal assent was gained from the children themselves, ensuring ethical integrity.</p>	<b>2</b>
<b>6(a)(ii)</b>	<p><b>(ii) minimising harm.</b></p> <p>1 mark for a partial or definitive answer. 2 marks for a fully justified contextual explanation.</p> <p>• <b>Not broken:</b> The researchers used a non-violent, age-appropriate cartoon video (King Leo) rather than a realistic or traumatic crime scenario to protect the children from emotional distress. Furthermore, the tasks were framed as games, and participants were told they could stop at any time.</p>	<b>2</b>
<b>6(b)</b>	<p><b>Explain how the ethical guideline of confidentiality was followed.</b></p> <p>1 mark for general understanding of confidentiality. 2 marks for contextual explanation related to the data or identities in Pozzulo et al.</p> <p>• No personal identifying information (such as names, specific school details, or addresses) of the child or adult participants was published in the research report. Data was reported collectively as group averages (e.g., target-present/target-absent accuracy rates), keeping individual identities private.</p>	<b>2</b>
<b>7</b>	<p><b>The debate about individual and situational explanations relates to the study by Fagen et al. (elephant learning). Outline what is meant by this debate, including one example of the individual explanation and one example of the situational explanation. Both examples must be from the study by Fagen et al.</b></p> <p>• 1 mark for defining the individual explanation (internal traits/personality/dispositions). • 1 mark for defining the situational explanation (external environment/context/social cues). • 1–2 marks for a valid individual example from Fagen et al. • 1–2 marks for a valid situational example from Fagen et al.</p> <p><b>Indicative Content:</b></p> <p>• <b>Debate Definition:</b> Individual explanations attribute behaviors to internal, unique factors of the organism (e.g., personality, intelligence, genetics), whereas</p>	<b>5</b>

Question	Guidance and Marks Allocation	Marks
	<p>Situational explanations attribute behaviors to external environmental forces, conditions, or learning contexts (2 marks).</p> <ul style="list-style-type: none"> <li>• <b>Individual Example:</b> Elephants showed varying individual performance or learning speeds. For example, some elephants required more sessions or failed to pass training criteria due to unique internal dispositions, age, or past history (1.5 marks).</li> <li>• <b>Situational Example:</b> The application of Positive Reinforcement Therapy (PRT) acted as a powerful situational factor. Receiving a secondary reinforcer (whistle) and primary reward (food/fruit) directly caused the elephants to offer their trunks or ears for medical procedures (1.5 marks).</li> </ul>	
8	<p><b>Describe the background to the study by Piliavin et al. (subway Samaritans).</b></p> <p>1 mark per valid descriptive point concerning the background/theoretical context (up to 4 marks).</p> <ul style="list-style-type: none"> <li>• Prompted by the high-profile murder of Kitty Genovese, where multiple witnesses reportedly failed to intervene.</li> <li>• Latane and Darley had proposed the 'bystander effect' and 'diffusion of responsibility' based on lab studies.</li> <li>• Laboratory findings consistently showed that as group size increases, the probability of intervention decreases.</li> <li>• Piliavin wanted to investigate if these findings held true in a high-ecological validity field setting (a moving subway train) where escape from the emergency was difficult.</li> </ul>	4

## SECTION B

Question	Guidance and Marks Allocation	Marks
9(a)	<p><b>Describe the housing conditions for the rhesus monkeys in the study by Hassett et al. (monkey toy preferences).</b></p> <p>1 mark per valid descriptive element up to 4 marks.</p> <ul style="list-style-type: none"> <li>• Monkeys lived in socially stable, multi-male, multi-female troops.</li> <li>• Housed in an indoor-outdoor compound at the Yerkes National Primate Research Center.</li> <li>• Had continuous access to outdoor areas containing climbing structures and environmental enrichment.</li> <li>• Water was available ad libitum (continuously).</li> <li>• Fed monkey chow twice daily, supplemented regularly with fresh fruit and vegetables.</li> </ul>	4
9(b)	<p><b>Explain one similarity and one difference between the study by Hassett et al. (monkey toy preferences) and the study by Saavedra and Silverman (button phobia). Do not refer to the sample or approaches in your answer.</b></p> <p>Max 4 marks for the similarity, max 4 marks for the difference. Award points for identifying, structuring, and matching details from both studies.</p> <ul style="list-style-type: none"> <li>• <b>Similarity (Quantitative Data Collection):</b> Both studies gathered objective, structured quantitative data. Hassett et al. quantified interactions by measuring the precise frequency and duration of contacts with plush vs. wheeled toys. Saavedra and Silverman utilized quantitative metrics through a 9-point Feelings Anxiety Hierarchy scale to rate distress levels from 0 to 8 across different button scenarios (4 marks).</li> <li>• <b>Difference (Methodological Design / Environment):</b> Hassett et al. was a controlled observation set in a semi-naturalistic group compound where monkeys freely interacted with objects without explicit trial intervention. In contrast, Saavedra and Silverman was a clinical case study utilizing specific behavioral interventions (positive reinforcement and imagery exposure therapy) in a controlled therapeutic environment, tracking a progressive treatment plan over time (4 marks).</li> </ul>	8
10	<p><b>Evaluate the study by Milgram (obedience) in terms of two strengths and two weaknesses. At least one of your evaluation points must be about reliability.</b></p> <p>Marks are awarded using a holistic levels-of-response framework:</p>	10

Level	Marks	Description
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Question	Guidance and Marks Allocation		Marks
Level 4	8–10	Good evaluation of two strengths and two weaknesses. Explicitly includes reliability. Structured logically with strong contextual analysis of Milgram's study.	
Level 3	5–7	Discusses strengths and weaknesses but may lack full balance (e.g., 2S/1W) or shallow evaluation. Mentions reliability.	
Level 2	3–4	Descriptive account of Milgram's strengths/weaknesses with minimal evaluation.	
Level 1	1–2	Fragmented, isolated points. Very brief.	

#### Indicative Content – Strengths:

- 1. Reliability (Standardization):** Extremely high standardized laboratory control. Every participant experienced the exact same scripted cover story, the same shock generator layout, identical pre-recorded screams/prottests from the learner, and identical verbal prods from the experimenter ("Please continue", "The experiment requires that you continue"), allowing precise replication.
- 2. Internal Validity:** Controlled environment minimized extraneous variables. High psychological realism caused genuine stress responses, showing that participants truly believed they were administering real shocks, validating obedience metrics.

#### Indicative Content – Weaknesses:

- 1. Ethical Violations:** Caused immense psychological distress (sweating, trembling, seizures). Deception was used regarding the true aim and the reality of the shocks. Right to withdraw was heavily compromised by the verbal prods.
- 2. Ecological Validity:** The laboratory setting and task (administering electric shocks to a stranger for pairing words) is an artificial context that does not accurately mimic real-world administrative or military obedience scenarios.