Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/13**

Paper 1 Approaches, issues and debates **May/June 2023**

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 May/June 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U 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 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.

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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 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.

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Question	Answer	Marks
1(a)	**From the study by Schachter and Singer (two factors in emotion):** **Identify which <u>one</u> of the following groups scored the lowest on the Activity Index in the Euphoria condition.** **Epinephrine Ignorant (Epi Ign)** **Epinephrine Informed (Epi Inf)** **Epinephrine Misinformed (Epi Mis)** **Placebo** 1 mark for correct answer. Epinephrine informed (Epi Inf)	**1**
1(b)	**In the Anger condition, an observer recorded the participant's response to the stooge using several categories.** **Outline how the category of 'Neutral' was operationalised in this study.** 1 mark per correct point. A non-committed response; An irrelevant response; To any of the stooge's remarks;	**2**

Question	Answer	Marks
2(a)	**From the study by Piliavin et al. (subway Samaritans):** **Name <u>two</u> measures observed for every participant who helped a victim.** 1 mark per correct measure. Race; Sex; Location; Latency time for helping;	**2**
2(b)	**Identify <u>one</u> methodological strength of this study.** 1 mark for correct strength identified. Ecological validity; Mundane realism; Replicable; Generalisable;	**1**

Question	Answer	Marks
3(a)	**In the final part of the study by Bandura et al. (aggression), each participant spent 20 minutes in the experimental room and their behaviour was observed through a one-way mirror.** **Outline the procedure for this final part of the study.** The room contained a range of toys / had Bobo doll and other toys in it; Behaviour was rated on (predetermined) response categories; E.g. imitation of physical aggression, imitative verbal aggression, imitative nonaggressive responses (2 named for 1 mark); The session was divided into 5 second intervals; Using an electric interval timer; A total of 240 response units were recorded per participant; The male model completed all observations; Half were then rated by a second observer (for inter-rater reliability);	**3**
3(b)	**Explain <u>one</u> weakness of this final part of the study.** 1 mark for identifying an appropriate weakness. 1 mark for linking to study. e.g. There may have been issues with validity of recording behaviours (1 mark) as the observer could distinguish which group a participant was in as nearly all children replicated novel aggressive responses shown by the model (1 mark). There may have been some issues surrounding reliability of observations (1 mark) as the inter-rater reliability score was 0.9 rather than a perfect 1 so not all behaviours were agreed upon (1 mark).	**2**

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Question	Answer	Marks
4(a)	**From the study by Milgram (obedience):** **Describe the feedback from the learner (victim) that was given to the teacher (participant) during this study.** 1 mark per correct point. These were predetermined responses; There tended to be three wrong answers to one correct; No vocal response is heard up until Shock Level 300; When 300v given, the learner pounds on the wall; From this point on there are no answers from the learner; The learner pounds again at 315v; After that there is no pounding or answers given;	**4**
4(b)	**One conclusion was that people find it stressful to follow destructive orders from a person in authority.** **Outline <u>one</u> other conclusion from this study.** 2 marks full conclusion. 1 mark brief/partial conclusion. Individuals appear to be much more obedient to an authority figure than we might expect (2 marks); People will follow / listen to an authority figure even if it means harming another person (2 marks); People are willing to harm someone if responsibility is taken away / passed on to someone else (2 marks); People will be obedient to an authority figure (1 mark); All participants gave 300v (0 marks: result);	**2**

Question	Answer	Marks
5	**In Experiment 2 of the study by Laney et al. (false memory), participants completed both the Food History Inventory and photograph ratings of food items.** **Describe <u>one</u> result from the Food History Inventory and <u>one</u> result from the photograph ratings of food items.** **You <u>must</u> use data for <u>one</u> of these results.** For result: 2 marks for result with a meaningful comparison. 1 mark for partial result / no meaningful comparison. For data: 1 mark for correct data in *one* of the results. e.g. Food History Inventory The mean confidence of the Love Group increased *more* than the Control Group (2 marks). This was 2.5 points for the Love Group (1 mark: data); The mean confidence of the Love Group increased (1 mark). e.g. Photograph Ratings Believers rated the asparagus photo as being more appetising compared to controls (2 marks). The score for the believers was 5.1 (1 mark: data); Believers scored lowest on the disgusting rating for asparagus (1 mark).	**5**

Question	Answer	Marks
6	**Outline <u>two</u> assumptions of the learning approach.** **You <u>must</u> use an example from a core study for each assumption.** For assumptions: 2 mark for full assumption 1 mark for partial assumption. For example: 1 mark per correct example per assumption. Examples have to come from a core study. E.g., assumptions Operant Conditioning can explain changes in <u>behaviour</u> (2 marks); Classical Conditioning can explain changes in <u>behaviour</u> (2 marks); Social Learning can explain changes in <u>behaviour</u> (2 marks); Conditioning can explain behaviour (1 mark); E.g., examples In the Bandura study, children observed and imitated (modelled) aggressive behaviours; In the Pepperberg study, Alex the parrot got rewarded for a correct response to a question; In the Saavedra and Silverman study, classical conditioning (evaluative learning) was used to help understand the causes of his button phobia;	**6**

Question	Answer	Marks
7	**Suggest <u>two</u> real-world applications based on the study by Baron-Cohen et al. (eyes test).** **Your suggestions <u>must</u> be ethical.** 1 mark for *what* the application is (clearly based on Baron-Cohen et al.). 1 mark for *how* it will be achieved. The eyes test could be used as a diagnostic tool for AS/HFA (1 mark: what); those who score low on the test may show a lack of theory of mind (1 mark: how). The eyes test can be used to improve social intelligence in people diagnosed with AS/HFA (1 mark: what). A therapist can run through the test with them explaining why each emotion is being shown (1 mark: how).	**4**

Question	Answer	Marks
8	**Two friends, Maria and Oscar, are discussing the ethics of the study by Saavedra and Silverman (button phobia). Maria thinks the study is ethical but Oscar thinks the study is <u>not</u> ethical.** **Explain <u>one</u> reason why Maria is correct and <u>one</u> reason why Oscar is correct, using evidence from this study**. 3 marks for Maria. 1 mark per correct point made. 1 mark available for naming guideline. 3 marks for Oscar. 1 mark per correct point made. 1 mark available for naming guideline. E.g., Maria The study did gain informed consent (1 mark). This was taken from the boy and his mother before the therapy started (1 mark). Therefore, both the boy and mother knew exactly what the <u>therapy</u> was going to entail (1 mark); the boy/mother **agreed** to wanting to take part in the study / having results published (alternative 1 mark). Also, they started the therapy with his least distressing scenario (1 mark). The mother used positive reinforcement during the therapy so the boy would not get too distressed (1 mark). Therefore, the boy was protected from any harm throughout the therapy (1 mark). E.g., Oscar The study could have easily caused psychological stress (1 mark). The boy was having to confront his button phobia throughout the therapy (1 mark). He also had to discuss potential causes/effects of the phobia (e.g., buttons falling on him in art class) which would be stressful (1 mark).	**6**

Question	Answer	Marks
9(a)	**From the study by Yamamoto et al. (chimpanzee helping):** **Outline what is meant by altruism**. 1 mark per correct point. e.g. The willingness to help / doing certain things for someone else (1 mark) even if it disadvantages yourself / gain no benefit (1 mark).	**2**
9(b)	**Outline what is meant by targeted helping.** 1 mark per correct point. e.g. To select an appropriate tool / offer appropriate advice; To help someone else / a chimpanzee solve a task; As the person/chimpanzee giving the help understands the demands of the situation;	**2**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>9(c)</td><td>
Explain <u>one</u> similarity and <u>one</u> difference between the study by Yamamoto et al. (chimpanzee helping) and the study by Pepperberg (parrot learning).

4 marks available for the similarity.
4 marks available for the difference.

Creditworthy points include: sample/sampling, ethics, quantitative data, species used.

<table>
<tr><th>Level</th><th>Descriptor</th><th>Mark</th></tr>
<tr><td>4</td><td>The similarity/difference is well explained using both studies as examples.</td><td>4 marks</td></tr>
<tr><td>3</td><td>The similarity/difference is well explained/described but only one study is used as an example
OR both studies used briefly.</td><td>3 marks</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 marks</td></tr>
<tr><td>1</td><td>The similarity/difference is brief with no attempt at using studies as examples.</td><td>1 mark</td></tr>
<tr><td>0</td><td>No creditworthy material.</td><td>0 marks</td></tr>
</table>

e.g. similarity
4 marks
Both of the studies used animals/non-humans as participants. Yamamoto used a group of chimpanzees in a Primate Research Laboratory whilst Pepperberg used a solitary African Grey parrot. Therefore, they would have to adhere to the same ethical guidelines of housing etc.
3 marks
Both of the studies used animals/non-humans as participants. Yamamoto used a group of chimps to test helping and Pepperberg used a parrot to test his comprehension.
2 marks
Both of the studies used animals/non-humans as participants. Yamamoto used a group of chimps.1 mark
Both studies used animals/non-humans as participants.
</td><td>8</td></tr>
</table>

Question	Answer	Marks
10	**Evaluate the study by Dement and Kleitman (sleep and dreams) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about reliability.** Suitable strengths are: internal validity, reliability, quantitative data. Suitable weaknesses are: external validity, ethics, quantitative data. **Level 4 (8–10 marks)** • Evaluation is comprehensive. • Answer demonstrates evidence of careful planning, organisation and selection of material. • Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout. • Answer demonstrates an excellent understanding of the material. **Level 3 (6–7 marks)** • Evaluation is good. • Answer demonstrates some planning and is well organised. • Analysis is often evident but may not be consistently applied. • Answer demonstrates a good understanding of the material. **Level 2 (4–5 marks)** • Evaluation is mostly appropriate but limited. • Answer demonstrates limited organisation or lacks clarity. • Analysis is limited. • Answer lacks consistent levels of detail and demonstrates a limited understanding of the material. **Level 1 (1–3 marks)** • Evaluation is basic. • Answer demonstrates little organisation. • There is little or no evidence of analysis. • Answer does not demonstrate understanding of the material. **Level 0 (0 marks)** No response worthy of credit.	**10**

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