Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/12**

Paper 1 Approaches, Issues and Debates **May/June 2022**

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 2022 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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[Turn over

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 Piliavin et al. (subway Samaritans):** **State the approximate number of participants used in this study.** 1 mark for correct answer 4450.	**1**
1(b)	**Trials on a given day were always in the same victim condition.** **State how the victim condition was chosen.** 1 mark for correct answer (Teams were told to) alternate (the conditions across days).	**1**
1(c)	**Identify <u>two</u> differences between the models used in this study.** 1 mark per correct difference Age; Clothes worn / attire; Location (before helping) / adjacent vs critical; Speed at which they gave help (if no one helped) / early vs late.	**2**

Question	Answer	Marks
2(a)	**From the study by Pepperberg (parrot learning):** **Name <u>two</u> items that were always available to Alex the parrot without him having to request them.** 1 mark per correct item named Water; Sunflower seeds; Dried corn; Kibble; Oats; Safflower.	**2**

Question	Answer	Marks
2(b)	**Describe <u>one</u> methodological weakness of this study.** 1 mark for the methodological weakness. 1 mark for linking to the study. e.g. The tasks lacked mundane realism (1 mark). Stating what is same/different about two objects not found in the wild is not an everyday task (1 mark). The study was only conducted on one parrot (1 mark), so this makes it difficult to generalise (to other parrots) (1 mark). There are other creditworthy responses.	**2**

Question	Answer	Marks
3(a)	**From the study by Dement and Kleitman (sleep and dreams):** **One feature of the sample in this study was that they were all adults. Identify <u>three</u> other features of the sample used in this study.** 1 mark per correct point made Mostly male / 7 males; 2 females; 9 in total; 5 studied intensively; 4 used minimally to confirm results.	**3**
3(b)	**Describe <u>one</u> result about dream recall from REM awakenings in the first half of the night compared to the second half of the night.** 2 marks full result with specific group mentioned. 1 mark partial/brief result with no specific group mentioned. e.g., group of 5 participants studied intensely There were (slightly) more dreams recalled in the first half compared to the second half for the 5 participants that were studied intensely (2 marks); There were (slightly) more dreams recalled in the first half (compared to the second half) (1 mark). e.g., entire sample There were more dreams recalled in the second half compared to the first half for the entire sample (2 marks); There were more dreams recalled in the second half (compared to the first half) (1 mark).	**2**

Question	Answer	Marks
4(a)	**At the end of the study by Milgram (obedience), the experimenter used an 'interview and dehoax' procedure with his participants.** **Describe this procedure.** 1 mark per correct point made At the end of the study each participant was debriefed; They were asked to rate how painful they thought the shocks were; (On a scale) out of 14 / 14 point scale / 14 = most painful; Open-ended questions were asked / asked them how there were feeling; Projective measures were used; Attitude-scales were employed; The participant met Mr Wallace / stooge; To show that no harm had happened / re-assure the participant that no harm had occurred; This was conducted in a friendly manner; The participant was allowed to ask any further questions.	**4**
4(b)	**Studies in social psychology can be used to help managers in the workplace.** **Suggest how the study by Milgram could be used to help a manager with disobedient workers. Your suggestion <u>must</u> be ethical.** 1 mark for **what** the real-world application is. 1 mark for stating **how** it would be done based on the procedure of Milgram. e.g. A manager could get workers to be more obedient in the workplace by changing what they wear / wear clothes that appear to be authoritative (1 mark: what) by wearing clothes that show this authority like a technician's coat (1 mark: how). Workers could be encouraged to be more obedient vocally (1 mark: what) as an authority figure can give out commands in a firm tone / stern voice (1 mark: how). There are other creditworthy responses.	**2**

Question	Answer	Marks
5(a)	**From the study by Canli et al. (brain scans and emotions):** **Outline <u>one</u> aim of this study.** 2 marks full aim. 1 mark partial/brief aim. e.g. To investigate whether the amygdala is sensitive to different levels of experienced emotional intensities (2 marks); To investigate whether the degree of emotional intensity affects the role of the amygdala in enhancing memory (2 marks); To investigate the role of the amygdala in memories (1 mark). There are other creditworthy responses.	**2**
5(b)	**Explain <u>one</u> reason why the procedure was standardised in this study.** 1 mark for identifying a reason. 1 mark for explaining why it is a reason. 1 mark for linking it to the study (only be awarded if a reason has been explained). It would allow the study to be more easily replicated (1 mark); Therefore, it could be tested for reliability (1 mark); For example knowing how long the picture was presented for means exact replication is possible (1 mark). It would increase the (internal) validity of the study (1 mark); Therefore, cause and effect are (more) likely to be seen (1 mark); For example knowing it was the emotion of the picture causing brain activity (1 mark). It can help to reduce extraneous/uncontrolled variables (1 mark); So that we know it is probably the IV of emotion (1 mark) causing the change in brain activity – the DV (1 mark). There are other creditworthy responses.	**3**

Question	Answer	Marks
6	**Outline what is meant by the 'learning approach' in psychology. Include examples from the study by Saavedra and Silverman (button phobia) in your answer.** Up to two marks for outlining the learning approach (through an assumption or description). Up to two marks for examples from Saavedra and Silverman **only**. e.g. learning approach We learn through conditioning; This may be through rewards and punishment / operant conditioning; We can also learn through observation and imitation / social learning; We can also learn by association / classical conditioning. e.g. examples The boy may have been scared because of the incident in the classroom with the bowl of buttons; He was rewarded at times when he showed progress of not being scared by his mother. There are other creditworthy responses.	4

Question	Answer	Marks
7	**From the study by Laney et al. (false memory):** **Describe the Restaurant Questionnaire.** 1 mark per correct point made. Assessed desire to eat 32 dishes; There was a critical item of '(sautéed) asparagus (spears)'; Formatted to look like a menu; Five categories/courses of dish; Appetisers, soups, salads, entrees (main course), sides and desserts [name any 2 of these for 1 mark]; They had to imagine they were out for a special dinner; Then decide how likely they would order each item; They had to not take into account the price of the dish; Each choice was rated from 1–8; 8 point scale; 1 = definitely no / 8 = definitely yes.	4

Question	Answer	Marks
8(a)	**From the study by Schachter and Singer (two factors in emotion):** **Outline the category of 'initiates new activity' for the behaviour of participants in the Euphoria condition.** 1 mark per correct point made. This is when creative euphoria was exhibited (by the participant); These were behaviours not shown by the stooge; An example would be jumping on a table / laughing / spun hula hoop on neck / opened window / threw paper basketballs at passers-by.	**2**
8(b)	**Two friends, Maryam and Zara, are discussing this study in terms of reliability.** **Maryam believes the study does have reliability but Zara believes the study does <u>not</u> have reliability.** **Outline why you think <u>either</u> Maryam <u>or</u> Zara is correct, using evidence from the study.** 1 mark per point made, with: Up to 2 marks for any relevant finding(s)/part of study/example from study Up to 3 marks for outlining. e.g. Maryam There were parts of the study that were standardised (1 mark). There was a set script that had to be followed (1 mark) like the one for the experimenter when talking about the injection (1 mark) so this means other researchers could replicate the study (1 mark). The study also had good levels of inter-observer reliability (1 mark). The observers produced a score of +0.88 (which indicates high agreement) (1 mark). e.g. Zara There were parts of the study that were difficult to standardise (1 mark). The stooge did have a set way they were supposed to act but this may not have been the same each time (1 mark) therefore each participant might have got a slightly different set of behaviours/comments (1 mark) so this means that replication may be difficult to achieve (1 mark). There was large variation in some participant variables (1 mark). For example, some did not react to the adrenaline and were removed from the study (1 mark) and there was variation in reaction to the adrenaline across the participant group (1 mark). There are other creditworthy responses.	**4**

Question	Answer	Marks
9(a)	**Describe the psychology being investigated in the study by Bandura et al. (aggression).** 1 mark for each correct statement. Examples from the study by Bandura et al. can gain credit (max 1). e.g. People pay attention to / observe the behaviour of a role model; They watched a model being aggressive/non-aggressive towards a Bobo Doll (example mark); They then retain that information in their memory; They will the imitate/reproduce the behaviour if they feel capable; If they witnessed the model get rewarded (vicarious) then they are more likely to repeat / try to repeat; The imitation is seen as more probable if the role model is of the same sex (as the observer); Learned behaviour can be displayed in a situation where the model is not present. There are other creditworthy responses.	**4**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>9(b)</td><td>
Explain whether each ethical guideline below was broken in the study by Bandura et al. (aggression)

• Confidentiality
• Deception
• Protection from physical harm
• Protection from psychological harm

Use the following levels marking for each guideline <u>separately.</u>

<table>
<tr><th>Level</th><th>Descriptor</th><th>Marks</th></tr>
<tr><td>2</td><td>The answer explicitly describes the ethical guideline and the example is contextualised from the named study
OR The ethical guideline is implicit from the use of a well-argued example contextualised from the named study.</td><td>2</td></tr>
<tr><td>1</td><td>The answer explicitly describes the ethical without correct contextualisation/no contextualisation
OR The ethical guideline is implicit from the use of a brief example contextualised from the named study
OR The ethical guideline is incorrectly described but the contextualised example from the named study is correct.</td><td>1</td></tr>
<tr><td>0</td><td>The description of the ethical guideline is incorrect and/or the contextualised example is incorrect
OR no answer given.</td><td>0</td></tr>
</table>

Confidentiality
Any data should not be identifiable as a single participants’ responses/ participants’ data must not be named as theirs;
The identities of the children were not revealed – all we know is that they attended a Nursery at Stanford (and their age range) (not broken).

Deception
A participant should not be deceived without a strong justification / only if revealing the deception would not cause discomfort;
The children were deceived as they never knew they were being watched in the experimental room (broken).

Protection from physical harm
Participants should leave the study in the same physical state as they entered;
The children witnessed and then repeated aggressive behaviours and these were not ‘reversed’ before leaving the study (broken);
The child might have got harmed when hitting the Bobo Doll / playing with other toys like a mallet (broken).
</td><td>8</td></tr>
</table>

Question	Answer	Marks
9(b)	Protection from psychological harm Participants should not be potentially distressed/stressed by the procedure of a study; The children may have been scared of watching a model acting aggressively towards the Bobo doll (broken); The children might have had longer term psychological effects of watching aggression/violence (broken). There are other creditworthy responses.	

Question	Answer	Marks
10	**Evaluate the study by Yamamoto et al. (chimpanzee helping) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about laboratory experiments.** Strengths include: validity (internal), reliability, quantitative data, ethics. Weaknesses include: ethics, validity (external), generalisability. **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**