Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/13**

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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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 Baron-Cohen et al. (eyes test):** **State the number of participants diagnosed with AS/HFA in this study.** 1 mark for correct answer 15.	**1**
1(b)	**The AS/HFA participants were the only group asked to make two judgements about each photograph. One of these judgements was about the emotion in the photograph.** **Name the other judgement this group was asked to make about each photograph.** 1 mark for correct answer Gender/sex.	**1**
1(c)	**Identify the <u>two</u> ways that the revised eyes test increased the range of scores a participant could obtain.** 1 mark per correct way identified Increased to 36 pairs of eyes Gave four response options.	**2**

Question	Answer	Marks
2(a)	**In the study by Yamamoto et al., the chimpanzee helper had access to a tray containing seven objects. Two of these objects were the straw and the stick.** **Name <u>two</u> objects the chimpanzee helper could choose, other than the straw and the stick.** 1 mark per correct object named Hose; Chain; Rope; Brush; Belt.	**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). A chimpanzee does not have to reach for a juice box in a real life situation (1 mark). There could be issues of generalisability (1 mark). There were only five pairs of mother-child pairings and these may not represent chimpanzees in the wild (1 mark). Other creditworthy responses include: repeated measures, used in previous studies, familial altruism.	**2**

Question	Answer	Marks
3(a)	**From the study by Dement and Kleitman (sleep and dreams):** **Describe the sample used in this study.** 1 mark per correct point made Adults; 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 <u>no</u> 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 Ps studied intensely There were (slightly) less no dream recalls in the first half compared to the second half for the 5 participants that were studied intensely (2 marks); There were (slightly) less no dreams recalls in the first half (compared to the second half) (1 mark). e.g., entire sample There were more no dream recalls in the first half compared to the second half for the entire sample (2 marks); There were more no dreams recalls in the second half (compared to the first half) (1 mark).	**2**

Question	Answer	Marks
4(a)	**From the study by Milgram (obedience):** **Describe the procedure after the 'preliminary run' until the participant pressed the 300-volt shock level switch.** 1 mark per correct point made. The participants are presented with a (second) list of words / read out a series of words; They were asked to read a word and four response options; When the list is complete, the participant is asked to repeat from the beginning; They are asked to give a shock every time an incorrect word is given; No answer / absence of answer was to be treated as incorrect; If an answer was correct they would move on to the next word; This must continue until the learner has learned all word pairs; They were told to start at 15v; And increase the shock level one step / 15v; Prods were used if the participant refused to continue / to firmly ask the participant to continue.	**4**
4(b)	**Studies in social psychology can be used to help government officials.** **Suggest how the study by Milgram could be used to help a government official make the general public follow a new public safety guideline. 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 government official could get the general public to be more obedient by changing clothing (1 mark: what); wearing clothes that show authority like a technician's coat (1 mark: how). The general public 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). Milgram found that an authoritative figure was obeyed (1 mark: what) so the government official needs to be stern and firm to show their authority so the public follow new guidelines / get scientists to wear lab coats to show their authority when giving a vaccine for instance (1 mark: how). There are other creditworthy responses.	**2**

Question	Answer	Marks
5(a)	**From the study by Pepperberg (parrot learning):** **Outline <u>one</u> aim of this study.** 2 marks full aim. 1 mark partial/brief aim. e.g. To test if an avian species / parrot can understand the concept of same <u>and</u> different (2 marks); To see if a bird knew same/different (1 mark); To test animal cognition in a parrot (1 mark) To test same and different (0 marks).	**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 (can 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, having a set model/rival procedure 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 if object was novel causing a correct answer (1 mark) It can help to reduce extraneous/uncontrolled variables (1 mark); So that we know it is probably the IV of whether the object was familiar or novel (1 mark); causing the change in response to What's same / What's different – the DV (1 mark) [if this is split: IV affecting DV then the description, still 2 marks].	**3**

Question	Answer	Marks
6	**Outline what is meant by the 'cognitive approach' in psychology. Include examples from the study by Andrade (doodling) in your answer.** Up to two marks for outlining the cognitive approach (through an assumption or description). Up to two marks for examples from Andrade **only**. e.g. cognitive approach It is about the way we process information; It is about how our memory works; We process information in the same way: input–process–output; We think/process like a computer. e.g. examples People were able to process information from a telephone message without focusing on it; Participants could recall more names when they were doodling so they could selectively attend; Tested if doodling affect memory recall. There are other creditworthy responses.	**4**

Question	Answer	Marks
7	**From the study by Schachter and Singer (two factors in emotion):** **Describe the procedure in the Euphoria condition from immediately after the participant was injected, until the stooge started their routine.** 1 mark per correct point made. The doctor/physician left the room; The experimenter returned to the room; With a stooge who was introduced as another participant / the stooge also entered the room; They were told they had had Suproxin shots/injection; They would be taking some vision tests; They had to wait 20 mins for the Suproxin to enter the bloodstream; The room they were in had deliberately been left in disarray; The experimenter apologised for the 'mess'; They were told that if they needed any paper, pencils etc. to help themselves; Once the experimenter had left, the stooge introduced himself again.	**4**

Question	Answer	Marks
8(a)(i)	**From the study by Bandura et al. (aggression):** **Identify <u>one</u> example of 'imitative verbal aggression' said by the participants.** 1 mark for correct example given. Sock him; Hit him (down); Kick him; Throw him (in the air); Pow.	**1**
8(a)(ii)	**Identify <u>one</u> example of 'imitative non-aggressive verbal response' said by the participants.** 1 mark for correct example given. He keeps coming back (for more); He sure is (a) tough (fella).	**1**

Question	Answer	Marks
8(b)	**Two friends, Arturo and Gloria, are discussing this study in terms of validity.** **Arturo believes the study does have validity but Gloria believes the study does <u>not</u> have validity.** **Outline why you think <u>either</u> Arturo <u>or</u> Gloria 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., Arturo There were strict controls in the study meaning cause-effect could be established (1 mark). Pre-aggression levels were matched across conditions to help conclude if the behaviour of the model was affecting (imitative) aggressive behaviours (1 mark). It was laboratory based so it reduces the effects of extraneous variables (1 mark). Participants were matched on aggression levels so this participant variable was controlled for (1 mark). Also, they did not know they were being watched so demand characteristics were low (1 mark). e.g., Gloria The task given to the participants lacked mundane realism (and validity) (1 mark). This is because they had to sit and watch an adult model playing with toys (and not participate) which is not an everyday activity (1 mark). It was in a laboratory so low ecological validity / was an artificial environment (1 mark). The set-up did not reflect a real-life setting as the children were deliberately frustrated / being watched through a one-way mirror (1 mark). There are other creditworthy responses.	**4**

Question	Answer	Marks
9(a)	**Describe the psychology being investigated in the study by Laney et al. (false memory).** 1 mark for each correct statement. Examples from the study by Laney et al. can gain credit (max 1). e.g. People may have memories for events etc. that never actually happened; Testing if positive false memories could be created as previous studies focused on negative ones; People can reconstruct memories of events that have real and false memories in them; These could alter our perception of childhood memories (or any memory); People can fill in the gaps using false information; The information can be post-event that gets embedded in the actual memory; They can be either negative (a crime) or positive (liking asparagus). 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 Laney et al. (false memories)

- **Confidentiality**
- **Deception**
- **Informed consent**
- **Protection from psychological harm**

Use the following levels marking for each guideline separately.

<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;
All we know is that they were students from Washington / California University (not broken).

Deception
A participant should not be deceived without a strong justification / only if revealing the deception would not cause discomfort;
The participants were deceived into thinking that a computer report about their childhood when they liked asparagus (broken).

Informed Consent
Participants should be given sufficient information about the study in order to choose if they want to participate or not;
Participants were not told anything about the study being on false memories (broken).

Protection from psychological harm
Participants should leave the study in the same psychological state as they entered / Participants should not be potentially stressed by the procedure of a study;
Completing questionnaires about food or looking at slides of food should probably not agitate people too much mentally (not broken).

</td><td>8</td></tr>
</table>

Question	Answer	Marks
10	**Evaluate the study by Piliavin et al. (subway Samaritans) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about quantitative data.** Strengths include: quantitative data, validity (external), real world application, reliability, generalisability. Weaknesses include: validity, reliability, ethics, 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**