Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/12**

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

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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)	**In the study by Pepperberg (parrot learning), Alex the parrot could choose from three labels when asked 'What's same?' about two objects. Two of these labels were colour and shape.** **Name the label that Alex could use to answer the 'What's same?' question in this study, other than colour and shape.** 1 mark for the correct answer Matter/mah-mah	**1**
1(b)	**Describe the 'model/rival' procedure used in this study.** 1 mark per correct point made There is a trainer and a model; The trainer presents objects to a second human (model); They ask questions about the objects; They praise/reward the correct answers; They show disapproval for incorrect answers; The second human acts as a model for Alex/the bird; And as a rival for the trainer's attention/rival Alex for attention; The role of model and rival were reversed;	**3**

Question	Answer	Marks
2(a)	**From the study by Dement and Kleitman (sleep and dreams):** **Outline <u>one</u> aim of this study.** 2 marks = full aim 1 mark = partial aim e.g. To investigate if dream recall differs between REM and nREM stages of sleep (2 marks); To investigate dream recall and stages of sleep (1 mark); To investigate if there was a (positive) correlation between estimates of dream duration and length of REM sleep (2 marks); To investigate estimates of dream duration (1 mark); To investigate if eye movement patterns were related to dream content (2 marks); To investigate eye movement and dreams (1 mark);	**2**
2(b)	**Outline <u>one</u> of the dreams reported where a participant was driving a car.** 2 marks detailed outline; 1 mark brief outline e.g. 2 marks Driving a car and staring at the road ahead. At an intersection, a car appeared speeding at them. (2) Driving a car and staring at the road ahead. They saw a man on the road asking for a lift/on left. (2) e.g. 1 mark Driving a car and staring at the road ahead. (1) At an intersection, a car appeared speeding at them. (1) They saw a man on the road asking for a lift. (1)	**2**

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Question	Answer	Marks
3(a)	**From the study by Baron-Cohen et al. (eyes test):** **Describe the sample for Group 2 in this study.** Adults; From adult community classes (Exeter); From public library users (Cambridge); N = 122; Opportunity sample; Similar socioeconomic class to Group 1 / wide range of occupations; Similar education background to Group 1 / broad range of education levels; Data on age only available from 88 participants; Neurotypical/not diagnosed with AS/HFA.	**3**
3(b)	**The original 'Reading the Mind in the Eyes' test had several problems. Two of these problems were:** • **the test only had two response options for each pair of eyes** • **some words in the test were difficult to understand** **State how this study solved each of these problems with the revised 'Reading the Mind in the Eyes' test.** 1 mark per correct 'solution' Problem 1: two response options = increased it to four response options / added two more options. Problem 2: some words were difficult to comprehend = a glossary (of definitions) was available.	**2**

Question	Answer	Marks
4(a)	**From the study by Laney et al. (false memory):** **Describe the Food Costs Questionnaire used in this study.** 1 mark per correct point made Participants had to indicate how much they were willing to pay; For 21 food items in a grocery store; Several of these foods (including asparagus) had featured on earlier questionnaires; They did this by circling the price; From seven priced given options / eight options in total; There was a 'would never buy it' option too; Prices were $1.90 / $2.50 / $3.20 / $3.80 / $4.40 / $5.00 / $5.70 (2 correct = 1 mark maximum).	**4**
4(b)	**Outline <u>one</u> weakness of the Food Costs Questionnaire used in this study.** 1 mark for a weakness 1 mark for linking it to the study e.g. What people say they will do on a questionnaire may not 'mirror' their behaviour (1 mark); therefore, just because they would spend a certain amount of money does not mean that actually will (1 mark). It is a subjective measure (1 mark) Only a transient measure / less valid (1 mark) Other creditworthy examples include: social desirability, lack of qualitative data, not used to groceries.	**2**

Question	Answer	Marks
5(a)	**The study by Schachter and Singer investigated two factors in emotion.** **An Activity Index was used to collect results in the Euphoria condition.** **Describe the results from the Activity Index for the Epinephrine Informed (Epi Inf) group compared to the placebo group. You must use data in your answer.** 1 mark for stating which group scored highest/lowest 1 mark for describing what the result meant 1 mark for using data (can be just the data for one group) e.g. The score on the Activity Index was higher for the Placebo / lower for the Epi Inf (1 mark) which meant the Placebo joined in more with the stooge *or* were more euphoric / Epi Inf joined in less *or* were less euphoric (1 mark). The average score was 12.72 (Epi Inf) and 16 (Placebo) (1 mark for either).	**3**
5(b)	**Outline one methodological strength of this study.** 1 mark for identifying a strength 1 mark for linking it to the study e.g. There was a high level of standardisation, so replicability is high (1 mark). The stooges were given instructions on how to act so the study can be tested for reliability (1 mark). Quantitative data were collected so it was objective / easy to compare (1 mark). The activity index generated a score to show how euphoric a participant was so all (four) conditions could be directly compared (1 mark). Other creditworthy strengths include: (internal) validity.	**2**

Question	Answer	Marks
6	**The debate about individual and situational explanations relates to the study by Milgram (obedience).** **Outline what is meant by this debate. Include <u>one</u> example from the individual explanation and <u>one</u> example from the situational explanation from the study by Milgram.** 1 mark for the individual side of argument; 1 mark for example from study 1 mark for the situational side of argument; 1 mark for example from study e.g. definitions The individual side refers to behaviours from factors within the person (dispositional); The situational side refers to behaviour from factors in the external environment. e.g. examples Some participants may have been more obedient because of their 'personality' type, e.g. being more submissive (individual); Some participants refused to continue whilst others went to 450 v (individual); Some participants may have been more obedient because of the experiment or prods given to make them continue shocking (situational); Some participants may have been more obedient due to the presence of an authority figure (situational). There are other creditworthy examples.	**4**

Question	Answer	Marks
7	**Omar organises a football team for children but they are sometimes too aggressive during games. He wants to reduce this aggressive behaviour and asks you for advice.** **Outline the advice you would give to Omar, using your knowledge of the study by Bandura et al. (aggression).** 1 mark per piece of evidence clearly based on the study by Bandura et al. e.g. Omar could bring in a trainer/model that is non-aggressive; The children could be asked to watch the model as they play football (non-aggressively); Omar can monitor physical aggression in boys as they are more likely to display it; Omar could reward the model for their non-aggressive behaviour; Ask the parents to make the children watch non-aggressive TV / play non-aggressive video games; Omar could make sure the children are not annoyed/frustrated before a game (of football).	**4**

Question	Answer	Marks
8(a)	**From the study by Piliavin et al. (subway Samaritans):** **Name <u>two</u> features of the sample in this study.** 1 mark per correct feature: About 4450 participants; New York City; Subway passengers; 45% black / 55% white; Opportunity sampled; Mean number of people per car was 43.	**2**
8(b)	**Two friends, Saad and Amina, are discussing this study in terms of generalisability.** **Saad believes the study does have generalisability but Amina believes the study does <u>not</u> have generalisability.** **Outline why you think <u>either</u> Saad <u>or</u> Amina is correct, using evidence from the study.** 1 mark per point made, with: Up to 2 marks for any relevant information from the study / facts about the sample. Up to 3 marks for explanation(s), including who can/cannot be generalised to. e.g. Saad There was a very large amount of people who were participants / 4450 participants (1 mark: information) representing a potential wide range of occupations/cultures/background (1 mark: information) so they could easily represent the <u>helping behaviour</u> of many other different people (1 mark: explanation). The sample was large with both genders represented (1 mark: information). e.g. Amina They were all from one location on a subway (1 mark: information) which is restrictive in terms of the type of people used in the sample (1 mark: explanation). It might be that the results only apply to subway passengers and not rural-living people (1 mark: explanation) and it is possible that the same people were 'regulars' on this route (1 mark: explanation). They <u>only</u> used a sample from New York/Bronx (1 mark: information) so this may not represent the helping behaviour of people with different cultural customs (1 mark: explanation). They <u>only</u> used victims that were black or white (1 mark: information). The victims were <u>only</u> males (1 mark: information).	**4**

Question	Answer	Marks
9(a)	**Describe the psychology being investigated in the study by Andrade (doodling).** 1 mark for each correct statement 1 mark available for a general assumption of the cognitive approach 1 mark available for a specific example from Andrade e.g. Looking at whether doodling aides (cognitive) concentration (example mark); Arousal levels need to be maintained to be able to concentrate; Cognitive processing of dual tasks; That compete for the same levels of performance; Boredom plays a role in paying attention to information; Information processing when asked to do 'two things at once'; The cognitive approach is about input-process-output (mark for assumption); 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 <u>one</u> similarity and <u>one</u> difference between the study by Andrade (doodling) and <u>one</u> other study from the cognitive approach.

4 marks available for the similarity, e.g. laboratory based, quantitative data; experimental design
4 marks available for the difference, e.g. participants (sample or demographics); ethics

Similarity
e.g. 4 marks
Both Andrade and Laney studies were experimental in nature. For example, both studies had manipulated IVs. In the Andrade study there were two conditions of doodling and non-doodling. In Laney study there was also two conditions of love asparagus and a control.

e.g. 3 marks
Both Andrade and Laney studies were experimental in nature. For example, both studies had manipulated IVs. In the Andrade study there were two conditions of doodling and non-doodling.

e.g. 2 marks
Both Andrade and Laney studies were experimental in nature. For example, both studies had manipulated IVs.

e.g. 1 mark
Both Andrade and Laney were experimental in nature.

<table>
<tr><th>Level</th><th>Descriptor</th><th>Marks</th></tr>
<tr><td>4</td><td>The similarity/difference is well explained using both studies as examples.</td><td>4</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 used briefly.</td><td>3</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</td></tr>
<tr><td>1</td><td>The similarity/difference is brief with no attempt at using studies as examples.</td><td>1</td></tr>
<tr><td>0</td><td>No creditworthy material.</td><td>0</td></tr>
</table>

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

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