Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/11**

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.

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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 Schachter and Singer (two factors in emotion):** **Identify which <u>one</u> of the following groups scored the highest on the Activity Index in the Euphoria condition.** **Epinephrine Ignorant (Epi Ign)** **Epinephrine Informed (Epi Inf)** **Epinephrine Misinformed (Epi Mis)** **Placebo** 1 mark for the correct answer. Epinephrine Misinformed (Epi Mis)	**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 'Ignores' was operationalised in this study.** 1 mark per correct point. The participant makes no verbal response (to stooge) / ignores stooge's <u>comments;</u> The participant does not look at / pays no attention / does not acknowledge / does not join / does not engage with the stooge; The participant wholly works on the questionnaire;	**2**

Question	Answer	Marks
2(a)	**From the study by Andrade (doodling):** **Identify <u>two</u> features of the sample used in this study.** 1 mark per correct point. n=40; Aged 18–55 years; 18 females / 2 males in control; 17 females / 3 males in doodling; 35 females / 5 males; All from MRC Applied Psychology Unit / Cognition and Brain Sciences Unit; Opportunity sample / recruited from another study that had just ended;	**2**

Question	Answer	Marks
2(b)	**Identify <u>one</u> strength of the sample used in this study.** 1 mark for correct point. e.g. (Is) generalisable (as wide age range / both sexes); (More) willing as interested in the subject; Already bored and fatigued (so a valid sample); There are other creditworthy responses.	**1**

Question	Answer	Marks
3(a)	**From the study by Saavedra and Silverman (button phobia):** **Describe the Disgust/Fear hierarchy used in this study.** 1 mark per correct point. 1 mark available for an example from the hierarchy. He was asked to rate (11) different scenarios that included buttons / list of different buttons; Each was rated on Distress scale of 0–8 / on a 9–point scale; 0 was the lowest distress / 8 was the highest distress; The (subjective) ratings used a Feelings Thermometer; One example was small clear plastic buttons rated 8 (1 mark for example);	**3**
3(b)	**Explain <u>one</u> weakness of the Disgust/Fear hierarchy used in this study.** 1 mark for identifying the weakness. 1 mark for linking it to the study. e.g. The ratings are subjective (1 mark: identification) so it would not be useful for other people to use who have a button phobia (1 mark: link to study); He may have given desirable ratings (1 mark: identification); He may have lied about the ratings (1 mark: identification); It was a case study so cannot be generalised (0 marks as not about Disgust/Fear hierarchy); There are other creditworthy responses.	**2**

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Question	Answer	Marks
4(a)	**The study by Piliavin et al. (subway Samaritans) used 'victims' who needed help.** **Describe the victims used in this study.** 1 mark per correct point made. They were all male; They were aged 26–35 years; Three white / one black; Identically dressed; Eisenhower jackets / old slacks / no tie (2 named for 1 mark); One type was drunk who smelled of liquor / held a bottle of liquor in a brown paper bag; One type was ill who had a cane;	**4**
4(b)	**One conclusion was that in a field setting, diffusion of responsibility did <u>not</u> happen.** **Outline <u>one</u> other conclusion from this study.** 2 marks full/detailed conclusion. 1 mark partial/brief conclusion. e.g. A person who is 'ill' is more likely to receive help when they collapse than a person who is 'drunk' (2 marks); People will help an ill victim (rather than a drunk) because they feel more sympathy towards them (2 marks); General public are more likely to help someone of the same race if they are drunk (2 marks); Men are more likely to help in an emergency situation than women (2 marks); People help ill victims more often (1 mark); Diffusion of responsibility did not happen (0 marks: repeating the question); The victim with the cane received spontaneous help on 62 of 65 trials (0 marks: result);	**2**

Question	Answer	Marks
5	**In Experiment 1 of the study by Laney et al. (false memory), participants completed both the Food History Inventory and the Restaurant Questionnaire.** **Describe <u>one</u> result from the Food History Inventory and <u>one</u> result from the Restaurant Questionnaire.** **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 At post-manipulation the *Love* group had increased significantly more than the *Control* group (2 marks). This was 2.6 for the *Love* group (1 mark: data). Both the *Love* group and *Control* group had ratings increase at Session 2 (2 marks). The mean ratings for the *Love* group increased (1 mark) <u>after manipulation</u> (2 marks). It increased by (an average of) 2.6 points (indicating an increase in confidence) (1 mark: data). The mean ratings for the *Control* group remained (roughly) the same (1 mark). It increased by (an average) of just 0.2 points (1 mark: data). e.g., Restaurant Questionnaire The *Love* group had a higher (mean) rating than the *Control* group (at both sessions) (2 marks). Believers reported more desire to eat asparagus at Session 2 compared to nonbelievers (2 marks). The believers score increased by around 0.5 points (1 mark: data). The *Love* groups rating (virtually) remained the same for asparagus (1 mark).	**5**

Question	Answer	Marks
6	**Outline <u>two</u> assumptions of the cognitive 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 and be linked to the assumption given. e.g. assumptions Behaviours and emotions can be explained in terms of cognitive processes such as attention, language and memory (2 marks) (must have 2 examples to award 2; otherwise award 1). We process information in the same way: input – process – output (2 marks). Similarities <u>and</u> differences between people can be understood in terms of individual patterns of cognition (2 marks). Behaviours and emotions can be explained in terms of cognitive <u>processes</u> (1 mark). It is about the way we process information (1 mark). We think/process like a computer (1 mark). e.g. examples In the Laney study they examined the role of suggestion on false memories. In the Baron-Cohen et al. study it was about how autistic people process information about emotions. In the Andrade study it was about how we can divide our attention across tasks.	**6**

Question	Answer	Marks
7	**Suggest <u>two</u> real-world applications based on the study by Milgram (obedience).** **Your suggestions <u>must</u> be ethical.** 1 mark for *what* the application is (clearly based on Milgram). 1 mark for *how* it will be achieved. e.g. A teacher could get students to complete required tasks in the classroom / make sure students are listening (1 mark: what) by wearing clothes that show authority like a technician's coat (1 mark: how) / using prods like 'you must finish this task in the lesson' (1 mark: how). Soldiers could be encouraged to be more obedient at <u>following orders</u> (1 mark: what) as an authority figure can give out commands in a firm tone / stern voice (1 mark: how). Patients can be encouraged to adhere to a new drug treatment (1 mark: what). The doctor can use prods like 'it is essential you take these for two weeks' (1 mark: how). People can be encouraged to take up a life saving vaccine (1 mark: what). Doctors can appear on advertisements in a laboratory coat telling people to have the vaccine (1 mark: how). Lifeguards can have a uniform/whistle to show authority (1 mark: how). To improve obedience / stop disobedience in students (0 marks: obedience is in the question, the 'what' must be explicit: see above). A guard can administer electric shocks to people who are not being obedient in a prison (0 marks: not ethical).	**4**

Question	Answer	Marks
8	**Two friends, Danilo and Noah, are discussing the validity of the study by Baron-Cohen et al. (eyes test). Danilo thinks the study has validity but Noah thinks the study does <u>not</u> have validity.** **Explain <u>one</u> reason why Danilo is correct and <u>one</u> reason why Noah is correct, using evidence from this study.** 3 marks for Danilo. 1 mark per correct point made. 1 mark available for type of validity. 3 marks for Noah. 1 mark per correct point made. 1 mark available for type of validity. **e.g., Danilo** The study did have some internal validity (1 mark: type). Baron-Cohen had a range of controls like the same eyes and choices of emotions (1 mark). This ensured that Baron-Cohen could conclude that the type of participant (e.g., AS/HFA) affected the choice of emotional response (1 mark). Extraneous variables were controlled (1 mark). **e.g., Noah** The study lacked ecological validity / mundane realism (1 mark: type). This is because the eyes that were viewed were static (1 mark) and this is not how we judge emotions in the real world – we have social cues too (1 mark). The person could just guess the correct answer (1 mark maximum). The second test was an improvement on the first test (1 mark). For example, a glossary was provided so people could understand the words that described the emotions (1 mark). The sample lacks population validity (1 mark: type). This is because the sample of AS/HFA participants was only 15 (1 mark) and they were all male so the findings may not be valid for females (1 mark).	**6**

Question	Answer	Marks
9(a)	**From the study by Dement and Kleitman (sleep and dreams):** **Describe what is meant by REM sleep**. 1 mark per correct point. It is Rapid Eye Movement sleep / our eyes flicker / move rapidly; Our body is paralysed; Tend to dream / dream more often in this period of sleep / more likely to recall dreams; Increases in length every (sleep) cycle; Brain activity/waves most similar to when awake / low voltage / fast pattern brain waves / on EEG monitor; Occur at regular intervals during the night/occurs in cycles through the night; Usually every 90 minutes; Usually lasts for 3–50 minutes/average length 20 minutes; It is the last stage of the sleep cycle/it is Stage 5 of the sleep cycle;	**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 Dement and Kleitman (sleep and dreams) and the study by Canli et al. (brain scans and emotions).

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

Creditworthy points include: sample/sampling, ethics, quantitative data, brain measurement techniques.

<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 marks</td></tr>
<tr><td>0</td><td>No creditworthy material.</td><td>0 marks</td></tr>
</table>

e.g., difference
4 marks
Both studies used different techniques to measure brain activity. Canli used an FMRI scan to be able to see brain activity while the participants watched the different emotional scenes. Dement and Kleitman used a different technique called an EEG that could only monitor brain wave activity/ patterns. Therefore, Canli's technique is more comprehensive than Dement and Kleitman's.

3 marks
Both studies used different techniques to measure brain activity. Canli used an FMRI scan to be able to see brain activity whilst the participants watched the different emotional scenes. Dement and Kleitman used a different technique called an EEG to measure brain waves when asleep.

2 marks
Both studies used different techniques to measure brain activity. Canli used an FMRI scan to measure brain activity / Dement and Kleitman used an EEG.

1 marks
Both studies used different techniques to measure brain activity.

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

Question	Answer	Marks
10	**Evaluate the study by Bandura et al. (aggression) 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 include: internal validity, reliability, observations, quantitative data. Suitable weaknesses include: ethics, external validity, sample size, generalisations. **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**