Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/13**

Paper 1 Approaches Issues and Debates **October/November 2021**

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 October/November 2021 series for most Cambridge IGCSE™, Cambridge International A and AS Level 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 Andrade (doodling):** **State the number of participants used in this study.** 1 mark for correct answer 40	**1**
1(b)	**Identify two features of the mock telephone message that was played to the participants.** 1 mark per correct answer Recorded on (audio) cassette; Monotone voice / monotonous/boring/dull; 227 words per minute; Lasted for 2.5 minutes; Comfortable listening volume / different volume for each participant; It contained eight names of people attending party; It contained three names (and cat) not attending the party; It contained eight place names.	**2**
1(c)	**Outline one conclusion from this study.** 2 marks full conclusion 1 mark partial/brief conclusion e.g. People concentrate better / their memory is better when allowed to doodle as it focuses their attention / stops them getting distracted (2 marks); People can pay attention to information even when engaged in dual-processing (tasks) (2 marks) Doodling aids concentration/memory (1 mark); Participants recalled more names in the doodling condition (0 marks: result); There are other creditworthy responses.	**2**

Question	Answer	Marks
2(a)	**From the study by Yamamoto et al. (chimpanzee helping):** **Describe the psychology being investigated in this study.** 1 mark per correct point. An example from the study can gain 1 mark. e.g. Altruism (1 mark) was investigated which is helping another organism out without any benefit to themselves (1 mark); For example, one chimp gave another chimp a straw to drink the juice even though the chimp giving the straw never got the juice (1 example mark); The study was about prosocial behaviour which is about helping others who may need it (1 mark); Empathy (1 mark) was looked into which is understanding the emotional state of another organism (by imagining themselves in 'their shoes') (1 mark);	**3**
2(b)	**Outline one strength of this study in relation to validity.** 1 mark for identifying a strength 1 mark for linking it to Yamamoto e.g. There were many controls so they could be confident it was the IV affecting the DV (1 mark); controls included same tools, so it was type of condition affecting helping behaviour (1 mark: link); There were many controls that helped reduce the effects of extraneous variables (1 mark); Repeated measures design was used to limit the effect of participant variables (1 mark); There are other creditworthy responses.	**2**

Question	Answer	Marks
3(a)	**From the study by Milgram (obedience):** **Outline the sampling technique used in this study.** 1 mark available for identifying the sampling technique 1 mark per correct description e.g. Volunteer (1 mark) This is when the participants choose to be part of a study (1 mark). They may respond to an advertisement (1 mark)	**2**
3(b)	**State two characteristics of the victim (learner) used in this study.** 1 mark per correct characteristic Male; 47 years old / in his 40s; Accountant; Irish/American; Mild-mannered/friendly; Likeable; White.	**2**
3(c)	**When the participant (teacher) pressed a switch on the shock generator, there were several changes.** **Describe two changes on the shock generator after the participant pressed a switch, other than a bright red light illuminating.** 1 mark per correct point made An electric buzzing sound happened; An (electric) blue light labelled energizer lit up; The dial on generator swung to the right; Various relay clicks were heard.	**2**

Question	Answer	Marks
4(a)	**From the study by Canli et al (brain scans and emotions):** **Describe the procedure of the study when the participants were having their brain scans.** 1 mark per correct procedural point made They viewed 96 scenes; Through a mirror / back-projection screen; Each picture had a rating for arousal / valence; The order of the scenes was randomised; Each picture was presented for a 2.88 s / a few seconds; In between each scene the participants fixated on a cross/interstimulus interval of 12.96 s; They were told to view the picture the entire time it was projected / on screen; When fixation cross appeared they had to rate their arousal / emotional intensity; On a 4-point scale / from 0–3 They did this by pressing a button (with their right hand).	**5**
4(b)	**Identify one methodological weakness of this study.** 1 mark for the identification e.g. **Lacks** ecological validity (1 mark) Ecological validity (0 marks) **Lacks** generalisability (1 mark) Generalisability (0 marks) There are other creditworthy responses.	**1**

Question	Answer	Marks
5(a)	**From the study by Baron-Cohen et al. (eyes test):** **Group 3 included both males and females. Identify two other characteristics of Group 3.** 1 mark per correct characteristic Undergraduates/students; Predominantly science degrees; Assumed to have high IQ / A grade A-Levels; Not AS/HFA.	**2**
5(b)	**Each participant's attribution of mental state was tested by their selection of a word to describe the pair of eyes in a photograph.** **Explain one reason why this test may not accurately measure attribution of mental state.** 1 mark for a problem 1 mark for linking it to the study e.g. The pictures were of static eyes (1 mark); When we are attributing mental states, we see moving eyes / facial expressions (1 mark); we use body language to help us gauge mental states in the real world (1 mark alternative); People could have guessed all of the answers correctly (1 mark). There are other creditworthy responses, including emotive words are subjective, emotions can be culturally specific.	**2**

Question	Answer	Marks
6(a)	**The study by Schachter and Singer is based on the two-factor theory of emotion.** **Describe what is meant by the two-factor theory of emotion.** 1 mark per correct point made: e.g. One factor is the physiological arousal of a person; The other factor is the cognition that allows a person to make sense of a situation; So, when someone becomes aroused, they look to the environment for cues to help explain how they are feeling; Therefore, emotional experiences are a combination of physiology and cognition; This is true for when a person has no immediate explanation of their emotional arousal; There are other creditworthy responses.	**4**
6(b)	**Outline how one result from this study supports the two-factor theory of emotion.** 1 mark for appropriate result, **then** 1 mark for explaining how it links to the two-factor theory of emotion. e.g. The Epi Ign/Epi Mis groups scored higher on their emotional states compared to the Epi Inf (1 mark); This showed that they were more susceptible to the stooge's mood as they had no explanation of their emotions (compared to Epi Inf who did) (1 mark).	**2**

Question	Answer	Marks
7(a)	**Lizzie has learned about the study by Laney et al. (false memory). She believes that the study is unethical.** **Outline what is meant by the ethical guideline of informed consent.** 2 marks for a full answer 1 mark for brief/partial answer e.g. This is when a participant is given enough information before a study begins so they can decide whether they would like to participate (or not) (2 marks) This is when a person decides if they want to take part in a study (1 mark) Telling participants information about the study before it starts (1 mark)	**2**
7(b)	**Outline why Lizzie is correct that the study is unethical, using evidence in your answer.** Up to 1 mark for outlining one ethical guideline directly relevant to Laney et al. Up to 4 marks for using evidence to show that Laney et al. was unethical e.g. The participants were deceived (1 marks). They had been told that they were completing the questionnaires to look into the relationship between personality and food preference (1 mark); The study was actually about implanting false memories about asparagus (1 mark); They were also deceived that the feedback given to them on return was factual (1 mark); Laney did not get informed consent as the participants were not told it was about false memories (1 mark); Participants may have been psychologically stressed by the idea of being 'tricked' (1 mark); There are other creditworthy responses.	**4**

Question	Answer	Marks
8(a)	**Outline the nature versus nurture debate in psychology, using an example other than the study by Bandura et al. (aggression) as an example.** 1 mark = defining nature + 1 mark example 1 mark = defining nurture + 1 mark example e.g. Nature means a behaviour that we are born with / genetic / hard-wired (1 mark). For example, intelligence has a genetic component that is passed on through generations (1 mark example). Nurture means a behaviour that has been learned by an organism after birth (1 mark); For example, in the study by Pepperberg Alex learned same/ different through observing a model/rival (1 mark example).	**4**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>8(b)</td><td>

Explain what psychologists have learned about aggression using two results from the study by Bandura et al.

e.g.
Children do learn aggression through social learning; Children learn more from observing then imitating a same-sex model; Aggression is more likely to be about nurture rather than nature; Models are powerful influencers of aggressive behaviour; Boys more likely to be aggressive compared to girls;

<table>
<tr><th>Level</th><th>Criteria</th><th>Marks</th></tr>
<tr><td>4</td><td>The result presented has a meaningful comparison and the candidate clearly explains what we have learned about the named concept</td><td>4</td></tr>
<tr><td>3</td><td>The result presented has a meaningful comparison and there is a brief attempt at explaining what we have learned about the named concept;
The result presented has no meaningful comparison but the candidate clearly explains what we have learned about the named concept</td><td>3</td></tr>
<tr><td>2</td><td>The result presented has a meaningful comparison but there is no attempt at explanation;
The result presented is not clear or no result but there is an attempt at explaining what we have learned about the named concept</td><td>2</td></tr>
<tr><td>1</td><td>The result presented has no meaningful comparison or there is a basic attempt at explaining</td><td>1</td></tr>
<tr><td>0</td><td>No creditworthy answer</td><td>0</td></tr>
</table>

e.g.,
Level 4: Children were more likely to learn/replicate aggression from a model of the same-sex. Boys were more likely to replicate the verbal aggression from a male model than a female model.
Children will replicate aggressive behaviours observed from a model.
Participants in the aggressive condition were significantly more likely to replicate physical/verbal aggression compared to those in the nonaggressive condition / control group.

Level 3: Children were more likely to learn/replicate aggression from a model of the same-sex. Boys were more likely to replicate the verbal aggression from a male model.
Children will replicate aggressive behaviours observed from a model.
Participants in the aggressive condition were significantly more likely to replicate physical/verbal aggression

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

Question	Answer	Marks
8(b)	Level 2: Children were more likely to learn/replicate aggression from a model of the same-sex OR boys were more likely to replicate the verbal aggression from a male model than a female model. Children will replicate aggressive behaviours observed from a model OR Participants in the aggressive condition were significantly more likely to replicate physical/verbal aggression compared to those in the nonaggressive condition / control group Level 1: Children will replicate aggressive behaviours; models influence aggressive behaviour;	

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>9</td><td>
Evaluate the study by Piliavin et al. (subway Samaritans) in terms of two strengths and two weaknesses. At least one of your evaluation points must be about the use of qualitative data.

Suitable strengths include: Qualitative data, quantitative data, reliability, validity (ecological)

Suitable weaknesses include: Ethics, field experiments, validity, generalisations

<table>
<tr><th>Level</th><th>Criteria</th><th>Marks</th></tr>
<tr><td>4</td><td>• 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.</td><td>8–10</td></tr>
<tr><td>3</td><td>• 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.</td><td>6–7</td></tr>
<tr><td>2</td><td>• 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.</td><td>4–5</td></tr>
<tr><td>1</td><td>• Evaluation is basic.
• Answer demonstrates little organisation.
• There is little or no evidence of analysis.
• Answer does not demonstrate understanding of the material.</td><td>1–3</td></tr>
<tr><td>0</td><td>No response worthy of credit.</td><td>0</td></tr>
</table>
</td><td>10</td></tr>
</table>