



Cambridge International AS & A Level

PSYCHOLOGY

9990/11

Paper 1 Approaches, Issues and Debates

May/June 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 May/June 2021 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

This document consists of **11** printed pages.

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.

**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.

Question	Answer	Marks
1(a)	<p>State the lowest voltage shock that was labelled on the shock generator.</p> <p>1 mark for correct answer</p> <p>15 (volts)</p>	1
1(b)	<p>Describe the shock instructions the participant (teacher) was told to follow when the victim (learner) gave an incorrect answer.</p> <p>1 mark per correct point made</p> <p>They were told to give a shock to learner each time they gave an incorrect response; This was done by pressing a switch/button They were told to move one switch higher each time/increase by 15 V each time; They were told to say the voltage level; Before giving that shock level;</p>	3
1(c)	<p>Milgram suggested one reason for obedience was the payment to the participant (teacher).</p> <p>Suggest <u>one</u> reason for obedience in this study, other than the payment.</p> <p>1 mark for a suggestion based on the study</p> <p>e.g. Being in a university; The experimenter's prods; The way the experimenter was dressed; The authority figure;</p>	1

Question	Answer	Marks
2(a)	<p>From the study by Piliavin et al. (subway Samaritans):</p> <p>Outline <u>one</u> aim of the study, other than to test the effect of race on helping behaviour.</p> <p>2 marks full aim 1 mark brief/partial aim</p> <p>e.g. To investigate bystander behaviour in a realistic setting/where there is a clear view of victim (2 marks); To investigate if a person is more likely to help an ill or drunk victim (2 marks); To investigate bystander behaviour (1 mark); To investigate diffusion of responsibility (1 mark) which states that the more people present in an emergency the less likely they are to help (1 mark); To test the idea of a Good Samaritan (1 mark);</p>	2
2(b)	<p>Describe <u>one</u> result about same-race helping in the cane (ill) condition.</p> <p>2 marks meaningful comparison 1 mark no comparison</p> <p>e.g. There was a slight tendency for same-race helping in this condition, but it was not a significant result (2 marks) Overall, people were more likely to help an ill victim of their own race compared to a different race (2 marks) White helpers were more likely to help a white victim compared to black helpers (2 marks) Black helpers were less likely to help a black victim compared to white helpers (2 marks) Overall, people helped out same race more often (1 mark)</p>	2
2(c)	<p>Outline <u>two</u> comments made by participants who did <u>not</u> help the victim.</p> <p>1 mark per comment</p> <p>'It is for men to help him'; 'I wish I could help him'; 'I am not strong enough'; 'I never saw this kind of thing before'; 'I don't know where to look'; 'You feel so bad when you don't know what to do';</p>	2

Question	Answer	Marks
3(a)	<p>From the study by Laney et al. (false memory):</p> <p>Identify <u>three</u> features of the sample used in Experiment 2</p> <p>1 mark per correct point made</p> <p>n = 103; Undergraduates; University of Washington; Received course credit (for participation); Majority female; Mean age 20 years; Volunteers;</p>	3
3(b)	<p>Suggest <u>one</u> real-world application based on the results of the study.</p> <p>1 mark for what the application is about 1 mark for how it will be implemented/used</p> <p>e.g. The false memory procedure could be used with children who are fussy eaters (1 mark: what); they could be led to believe that they actually like healthy food to improve their diets (1 mark: how);</p> <p>Can help children who are obese/have a poor diet (1 mark: what) by letting parents alter their child's diet via a false memory (1 mark: how);</p>	2

Question	Answer	Marks
4(a)	<p>Describe <u>one</u> assumption of the learning approach, using an example other than the study by Pepperberg (parrot learning).</p> <p>1 mark assumption with no example 2 marks assumption with an example</p> <p>e.g. We learn through conditioning (1 mark). For operant we can get rewarded for being good so we are likely to be good again (1 mark: example);</p> <p>Social Learning helps to explain changes in behaviour (1 mark). We observe and imitate behaviours of aggressive role models and copy that aggression (1 mark: example);</p> <p>We learn through classical conditioning (1 mark); We learn from reinforcement/punishment (1 mark);</p>	2

Question	Answer	Marks
4(b)(i)	<p>Explain how <u>one</u> finding from the study by Pepperberg supports the assumption of the learning approach that you have described in (a).</p> <p>1 mark for finding 1 mark for linking it to an assumption highlighted in 4(a). If it does not match assumption can still gain 1 mark for a correct result.</p> <p>e.g. Alex scored well above chance on tests for same/different with familiar objects (76.6%) (1 mark: finding). This maybe because he was rewarded (conditioned) during training/testing (1 mark: link); Alex was able to comprehend same/different (1 mark: finding) after observing a teacher and competing using the model/rival technique (1 mark: link); He could imitate words for colour/shape (1 mark: finding); He was taught using the model/rival technique that uses positive reinforcement to motivate (1 mark: link);</p>	2
4(b)(ii)	<p>Explain how <u>one</u> finding from the study by Pepperberg does <u>not</u> support the assumption of the learning approach that you have described in (a).</p> <p>1 mark for finding 1 mark for explaining why there is no link to an assumption highlighted in 4(a). If it does not match assumption can still gain 1 mark for a correct result.</p> <p>e.g. Alex scored well above chance on tests of same/different with novel objects (82.3%) (1 mark: finding). He had not been conditioned/rewarded to know these differences/was only rewarded <i>after</i> he got the answer correct (so this cannot explain why he was good at these) (1 mark: explain)</p>	2

Question	Answer	Marks
5(a)	<p>From the study by Saavedra and Silverman (button phobia):</p> <p>During diagnosis, the boy did <u>not</u> meet the DSM-IV criteria for one disorder. Name this disorder.</p> <p>1 mark for correct answer</p> <p>OCD/Obsessive Compulsive Disorder</p>	1
5(b)	<p>Describe the Feelings Thermometer.</p> <p>1 mark per correct point made</p> <p>A hierarchy of disgust/fear; Nine point scale/0–8; 0 = no distress/8 = very distressed; Used to rate his level of disgust/fear/distress/anxiety;</p>	2

Question	Answer	Marks
5(c)	<p>Outline <u>one</u> strength of this study.</p> <p>1 mark for identifying the strength 1 mark for relating it to the Saavedra and Silverman study</p> <p>e.g. There was a standardised procedure to the study to aid replicability/reliability (1 mark); for example, the treatment session lengths were 20 mins for the boy (1 mark); The study could be said to have high ecological validity (1 mark); This is because the therapy sessions were ‘real’, and the activities would happen in real life (1 mark); The study followed the ethical guideline of informed consent (1 mark); as both the mum and boy gave this and knew exactly what the therapy was about (1 mark);</p>	2

Question	Answer	Marks
6	<p>Describe the procedure from the study by Bandura et al. (aggression) from when a participant entered the experimental room until the model began to assemble tinker toys.</p> <p>1 mark per correct procedural point</p> <p>The participant was taken to one corner of the room; It was a structured play area; The child was seated (at a table); The experimenter demonstrated to the child how to make pictures/potato prints/use stickers; Once the child began ‘playing’, the experimenter took the model to the opposite corner; A variety of objects were located there (e.g. mallet, Bobo etc.); The experimenter explained that these were for the model to play with; The model was seated at their own table; The experimenter then left the room;</p>	5

Question	Answer	Marks
7(a)	<p>From the study by Baron-Cohen et al. (eyes test):</p> <p>Describe the procedure used to select the target words and foils before the main study.</p> <p>1 mark per correct statement made</p> <p>Piloted on a group of eight judges; At least five from the eight had to agree that the target word was most suitable; No more than two judges had to pick a single foil; Items that failed had new target words generated/was re-piloted with new words;</p>	3

Question	Answer	Marks
7(b)	<p>Group 1 consisted of 15 adults recruited using adverts in a specialist magazine.</p> <p>Identify <u>three</u> other characteristics of Group 1.</p> <p>1 mark per characteristic</p> <p>(all) male; (diagnosed) with AS/HFA; Mean age of 29.7 (years); Normal range IQ/mean IQ = 115; Same socioeconomic classes as Group 2; Same educational levels as Group 2;</p>	3

Question	Answer	Marks
8(a)	<p>Research has shown that males' brains respond to positive imagery more than females' brains.</p> <p>Explain <u>two</u> ways the study by Canli et al. (brain scans and emotions) differs from this research.</p> <p>1 mark for identifying a difference 1 mark for describing the element of the study supporting the difference</p> <p>e.g. The participants in the Canli study were not male (1 mark: identifying) as they were all female (1 mark: describing)</p> <p>The Canli study did not investigate positive imagery (1 mark: identifying) as the images ranged from negative to neutral (1 mark: describing)</p> <p>The sample was different (1 mark: identifying) Canli only used females in their study (1 mark: describing)</p>	4

Question	Answer	Marks										
8(b)	<p>Explain <u>one</u> similarity and <u>one</u> difference between the study by Canli et al. (brain scans and emotions) and <u>one</u> other core study from the biological approach.</p> <p>4 marks available for the similarity 4 marks available for the difference</p> <p>Creditworthy points include: sample/sampling, ethics, quantitative data, brain measurement techniques. There are others.</p> <p>e.g. difference 4 marks 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 that could only monitor brain wave activity/patterns during sleep/dreaming.</p> <p>3 marks 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.</p> <p>2 marks Canli used an FMRI scan measure brain activity whilst Dement and Kleitman used an EEG.</p> <p>1 marks Both studies used different techniques to measure brain activity.</p> <table border="1" data-bbox="320 1223 1310 1783"> <tbody> <tr> <td data-bbox="320 1223 1158 1323">The similarity/difference is well explained using both studies as examples.</td> <td data-bbox="1158 1223 1310 1323">4 marks</td> </tr> <tr> <td data-bbox="320 1323 1158 1453">The similarity/difference is well explained but only one study is used as an example OR both studies used briefly.</td> <td data-bbox="1158 1323 1310 1453">3 marks</td> </tr> <tr> <td data-bbox="320 1453 1158 1621">The similarity/difference is brief with an attempt at using at least one study as an example OR The difference is well explained but there is no study evidence.</td> <td data-bbox="1158 1453 1310 1621">2 marks</td> </tr> <tr> <td data-bbox="320 1621 1158 1722">The similarity/difference is brief with no attempt at using studies as examples.</td> <td data-bbox="1158 1621 1310 1722">1 mark</td> </tr> <tr> <td data-bbox="320 1722 1158 1783">No creditworthy material.</td> <td data-bbox="1158 1722 1310 1783">0 marks</td> </tr> </tbody> </table>	The similarity/difference is well explained using both studies as examples.	4 marks	The similarity/difference is well explained but only one study is used as an example OR both studies used briefly.	3 marks	The similarity/difference is brief with an attempt at using at least one study as an example OR The difference is well explained but there is no study evidence.	2 marks	The similarity/difference is brief with no attempt at using studies as examples.	1 mark	No creditworthy material.	0 marks	8
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Question	Answer	Marks
9	<p>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 the use of quantitative data.</p> <p>Suitable strengths include: quantitative data, internal validity, reliability, ethics Suitable weaknesses include: quantitative data, external validity, generalisability, ethics</p> <div style="border: 1px solid black; padding: 5px;"> <p>Level 4 (8–10 marks)</p> <ul style="list-style-type: none"> • 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. </div> <div style="border: 1px solid black; padding: 5px;"> <p>Level 3 (6–7 marks)</p> <ul style="list-style-type: none"> • 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. </div> <div style="border: 1px solid black; padding: 5px;"> <p>Level 2 (4–5 marks)</p> <ul style="list-style-type: none"> • 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. </div> <div style="border: 1px solid black; padding: 5px;"> <p>Level 1 (1–3 marks)</p> <ul style="list-style-type: none"> • Evaluation is basic. • Answer demonstrates little organisation. • There is little or no evidence of analysis. • Answer does not demonstrate understanding of the material. </div> <div style="border: 1px solid black; padding: 5px;"> <p>Level 0 (0 marks) No response worthy of credit.</p> </div>	10