Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/13**

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.

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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 Saavedra and Silverman about a boy with button phobia:** **State the age at which the boy's button phobia began.** 1 mark for correct answer 5 (years)	**1**
1(b)	**State what happened to the boy's ratings of distress from session 2 to session 4.** 1 mark for correct answer They increased/went up/got larger etc.	**1**
1(c)	**Describe the disgust-related exposure sessions.** 1 mark per correct point made They explored reasons why he felt buttons were disgusting; Used self-control/cognitive strategies; He had to imagine buttons falling on to him; He had to imagine hugging his mother with buttons on her shirt; He was asked how they looked/felt/smelled; He then was asked to elaborate on how he felt; It progressed from larger to smaller buttons; Cognitive re-structuring was used when necessary;	**3**

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Question	Answer	Marks
2(a)	**From the study by Pepperberg (parrot learning):** **Outline <u>one</u> aim of the study.** 2 marks full aim 1 mark partial/brief aim e.g. To test if an avian species can understand the concept of same and different (2 marks); To see if a bird knew same/different (1 mark); To test same and different in a bird (0 marks);	**2**
2(b)	**Describe <u>one</u> result from the tests on familiar objects. You <u>must</u> use data in your answer.** 1 mark for the result 1 mark for the use of data Alex's score was 76.6% (99/129) for all trials (2 marks); Alex's score was 69.7% (69/99) on first-trial-only (2 marks); Alex performed well above chance in this test (1 mark); Alex performed worse for familiar than for novel objects (1 mark);	**2**
2(c)	**Outline <u>one</u> ethical guideline that was important for Pepperberg to consider when designing this study.** 1 mark for identifying a guideline for the use of animals in research 1 mark for linking it to the study e.g. Housing (1 mark) Pepperberg had to ensure that Alex's cage had enough space for him (1 mark) Numbers (1 mark) Pepperberg only used one parrot/only planned to use one parrot (1 mark)	**2**

Question	Answer	Marks
3(a)	**From the study by Dement and Kleitman (sleep and dreams):** **Identify <u>three</u> features of the sample used in this study.** 1 mark per correct statement made N = 9; Adults; Predominantly male; Five were studied intensely; Four were used to confirm results of main participants;	**3**

Question	Answer	Marks
3(b)	**Suggest <u>one</u> real-world application based on the results of this study.** 1 mark for what the application is about 1 mark for how it will be implemented/used e.g. The EEG readings could be used to help people with sleep disorders (1 mark: what); Readings could be analysed to see how much time people are in REM/NREM (1 mark: how) Could help with the study of sleep disorders/insomnia (1 mark: what)	**2**

Question	Answer	Marks
4(a)	**Describe <u>two</u> assumptions of the cognitive approach.** 2 marks full assumption 1 mark brief assumption e.g. Behaviour and emotions can be explained in terms of the role of thinking (cognitive) processes like attention, memory and language (2 marks) Behaviour can be explained in terms of processes like memory/language (1 mark) Similarities and differences between people can be understood via cognitions. These can be the way we process information/the way we store information (2 marks) Similarities/differences between people can be understood via cognitions (1 mark)	**4**
4(b)	**Explain how <u>one</u> finding from the study by Andrade (doodling) supports <u>one</u> of the assumptions of the cognitive approach that you have described in (a).** 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. e.g. The doodling group performed better on the monitoring task (compared to the control) (1 mark: finding). This shows that differences between the groups can be explained by cognitions/thinking processes, in this case, they were dual processing information (1 mark: link); doodling allowed access to optimal levels of cognitive processing/reduced daydreaming (alternative 1 mark: link)	**2**

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Question	Answer	Marks
5(a)	**From the study by Yamamoto et al. (chimpanzee helping):** **Identify <u>one</u> object that a chimpanzee could have chosen, other than the stick or straw.** 1 mark for the correct answer Hose; Chain; Rope; (Paint) Brush; Belt;	**1**
5(b)	**Describe the result from the chimpanzee Pan in the first 'Can See' condition. You <u>must</u> data in your answer.** 1 mark for the result 1 mark for using correct data e.g. Pan did not offer a potential tool significantly more than a nontool (1 mark: result); she offered the brush 79.5% on first trial attempts (1 mark: data)	**2**
5(c)	**Outline <u>one</u> strength of this study.** 1 mark for identifying the strength 1 mark for relating it to Yamamoto e.g. The procedure was standardised so could be replicated/tested for reliability (1 mark strength). For example, the same seven tools were always used in every trial (1 mark relating) All of the trials were video recorded so could be replayed to check for accuracy (1 mark relating). Therefore, the results should be valid and free from any bias (1 mark strength)	**2**

Question	Answer	Marks
6	**Describe the procedure of Experiment 2 in the study by Laney et al. (false memory) from when the participants began viewing slides of food until the end of the study.** 1 mark per correct procedural point They completed four ratings for each slide; These were of common foods (don't need to mention any to gain credit); Each slide was displayed for 30s; They rated how appetizing/disgusting they felt the food was; They also rated experience of photographer/artistic quality of photo; Ratings were on an 8 point scale/rated from 1-8; They then completed RQ/FPQ/FHI (for a second time); They also completed a Memory or Belief? Questionnaire; They were then debriefed about the study;	**5**

Question	Answer	Marks
7(a)	**From the study by Milgram (obedience):** **Identify <u>three</u> features of the experimenter in this study.** 1 mark per correct point made Male; High school teacher (of Biology); Early thirties; Manner was impassive; Appearance was stern; Dressed in (Grey) technician's coat; Provided prods to continue the study (if the participant wanted to stop);	**3**
7(b)	**At the start of the study, participants were told that 'we know very little about the effect of punishment on learning'.** **Describe what else each participant was told before they were assigned to the role of teacher.** 1 mark per correct point made. This is because almost no scientific studies have been conducted (on human beings); We don't know how much punishment is best for learning; We also don't know how much difference it makes as to who is giving the punishment; So in this study we are bringing together people from different occupations (to test this out); Some of them will be teachers and some will be learners; We want to know what effect different people have on each other as teachers and learners; And also what effect punishment will have on learning in this situation;	**3**

Question	Answer	Marks
8(a)	**Research has shown that children who watch violent television programmes are less likely to be aggressive.** **Explain <u>two</u> ways the study by Bandura et al. (aggression) differs from this research.** 1 mark for identifying a difference 1 mark for describing the element of the study supporting the difference e.g. The children did not watch a violent television programme (1 mark: identify) as they watched a live model being aggressive in a room (1 mark: describe) The children did not become less aggressive in Bandura (1 mark: identify) they became more aggressive especially with a same sex aggressive model (1 mark: describe)	**4**

Question	Answer	Marks
8(b)	**Explain <u>one</u> similarity and one difference between the study by Bandura et al. (aggression) and one other core study from the learning approach.** 4 marks available for the similarity 4 marks available for the difference Creditworthy points include: modelling, quantitative data, case study, ethics, species, sample size, type of conditioning. Difference: e.g. 4 marks The study of Pepperberg and Bandura used different species as the participant(s). The Pepperberg study used one African Grey Parrot (Alex). However, the Bandura study used (72) nursery children from a university nursery. e.g. 3 marks The study of Pepperberg and Bandura used different species as the participant(s). The Pepperberg study used one African Grey Parrot (Alex). e.g. 2 marks The study of Pepperberg and Bandura used different species as the participant(s) namely a bird and children. e.g. 1 mark The studies of Pepperberg and Bandura used different species. 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 similarity/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**

Question	Answer	Marks
9	**Evaluate the study by Schachter and Singer (two factors in emotion) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about ethics.** Suitable strengths include: quantitative data, internal validity, reliability Suitable weaknesses include: quantitative data, external validity, generalisability, 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**