Cambridge International AS & A Level

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PSYCHOLOGY **9990/13**

Paper 1 Approaches, issues and debates **May/June 2019**

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 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U 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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Question	Answer	Marks
1(a)	**From the study by Schachter and Singer (two factors in emotion):** **Outline <u>one</u> aim of the study.** 2 marks detailed aim; 1 mark partial / brief aim. e.g. To test out the two factor theory of emotion (1 mark); To test out the two factor theory of emotion which is that an emotional experience comes from a cognitive label and some physiological arousal (2 marks); To test out the role of cognitive labels in emotions (1 mark).	**2**
1(b)	**Describe what the participants in the epinephrine-misinformed (Epi-Mis) condition were told immediately after agreeing to the injection.** 1 mark per correct point. They were told to expect some side effects (from Suproxin); The side effects would be short-lived / transitory; The side effect would last for 15–20 minutes; Your feet will probably go numb; You will get an itching sensation over your body; You may get a headache.	**3**

Question	Answer	Marks
2(a)	**From the study by Yamamoto et al. (chimpanzee helping):** **Identify <u>two</u> characteristics of the sample used, other than that they were chimpanzees.** 1 mark per correct point. **Do not accept chimpanzees**. e.g. Five pairs; Each paired with kin / mother; Three were juveniles; Socially housed at a Primate Research Institute; Had participated in previous research that was similar; Had demonstrated sharing behaviour before.	**2**

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Question	Answer	Marks
2(b)	**Describe the results from the second 'Can See' condition. You must use data in your answer.** 1 mark per correct point. Maximum of 2 if no data is used in answer. e.g. There was an object offered in 97.9% of cases (1 mark: data); The three chimpanzees offered potential tools more frequently than nontool objects (2 marks) with Ai doing this 81.3% of the time (1 mark: data); They offered a relevant tool more frequently than a irrelevant tool for both the stick and straw tasks (2 marks).	**3**

Question	Answer	Marks
3(a)	**From the study by Dement and Kleitman (sleep and dreams):** **Outline <u>one</u> conclusion about eye movement during REM sleep.** 2 marks detailed conclusion. 1 mark partial / brief. No credit for any actual results. Must be generic. e.g. 2 marks Eye movements during REM tend to fit with what the dreamer is looking at suggesting eye movements are not 'random' at all. e.g. 1 mark Eye movements during REM tend to fit with what the dreamer is looking at.	**2**
3(b)	**Describe <u>one</u> strength of this study.** 1 mark identifying strength. 1 mark contextualising with study. e.g. There was a standardised procedure (which increases reliability) (1 mark); For example, the participant was always in a quiet dark room which makes replication easier to test for reliability (2 marks). There are other creditworthy answers including objectivity, scientific, controls etc.	**2**

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Question	Answer	Marks
4	**Describe the Restaurant Questionnaire completed by participants in the study by Laney et al. (false memory).** 1 mark per correct point. Assessed desire to eat 32 dishes; There was a critical item of 'sautéed asparagus (spears)'; Formatted to look like a menu; Five categories (e.g. appetisers, desserts – need to name 2); They had to imagine they were out for a special dinner; Then decide how likely they would order each item; Each choice was rated from 1–8; 1 = definitely no and 8 = definitely yes (require both to gain this available mark).	**5**

Question	Answer	Marks
5(a)	**From the study by Andrade (doodling):** **Identify <u>two</u> examples where a response would be recorded as a 'false alarm' for the recall of names** 1 mark per correct point. Names mentioned on the tape as lures; Any new name.	**2**
5(b)	**Suggest <u>one</u> problem with the sample used in this study.** 1 mark suggesting problem. 1 mark for contextualising with study. e.g. Might not be a representative sample (1 mark: problem); All were members of a Psychology Unit participant panel so might be more motivated (1 mark: context). The sample was gender biased (1 mark: problem); There were many more females so the results may not generalise to males doodling and remembering (1 mark: context)	**2**

Question	Answer	Marks
6	**Simone is a student who never uses a spoon to eat with at lunchtime because he has a phobia of spoons.** **Outline how Simone could be helped to overcome his phobia of spoons, using your knowledge of the study by Saavedra and Silverman.** 1 mark per correct piece of advice given based on *any* element of the study (does not have to be explicit). e.g. Simone might ask the child if he can remember any negative experiences with spoons; This will enable Simone to identify a potential cause to help the student reverse the experience; Simone could get the student to rate different spoons on a Fear / Disgust Hierarchy; Whichever has the lowest fear / disgust rating can be presented to the student; They can be rewarded for being able to touch or use the spoon; The feelings of the student can be measured using a Feelings Thermometer.	**4**

Question	Answer	Marks
7	**Piliavin et al. (subway Samaritans) studied spontaneous helping of victims on a subway.** **Describe <u>one</u> result about the spontaneous helping of white victims and <u>one</u> result about the spontaneous helping of black victims. You must use data for <u>one</u> of these results.** Max. 4 for answers without data presented. Max. 1 mark for correct data in *one* of the answers. e.g. white victims: The highest incidence of help was for white victims being helped by white helpers in the cane condition (1 mark). This happened 34 times during the study (1 mark: data). Also, there was only one instance of a black participant helping a white drunk victim (1 mark: data). 68% of helpers were white (1 mark: data); There were the same levels of helping when the victim was drunk or ill (2 marks: comparison). This was 100% of the time (1 mark: data). e.g. black victims: More drunk black victims were helped by black helpers than white helpers (2 marks: comparison). Only two white helpers helped a black victim with a cane (1 mark: data). Overall, half of helpers were white though (1 mark: data); Black ill victims were helped more often than black drunk victims (2 marks: comparison). The latter was for 73% of trials (1 mark: data).	**5**

Question	Answer	Marks
8(a)	**Patty has learned about the study by Canli et al. (brain scans and emotions). She believes that the results support the nature side of the nature–nurture debate.** **Outline what is meant by 'the nature-nurture debate'.** 1 mark for the nature side of argument. 1 mark for the nurture side of argument. Do not credit tautological outlines. e.g. The nature side of the debate is about what behaviours etc. we are born with (1 mark) whereas the nurture side of the debate is about what we learn in our lives (1 mark).	**2**
8(b)	**Outline why Patty is correct, using evidence in your answer.** 1 mark per point made. 1 mark available for any result / example from the study itself. Max. 2 if no evidence from study presented. e.g. The study was about brain function which is a biological mechanism; The amygdala is a part of the brain hence it is biological / we are born with it; Blood-oxygen levels were measured which is biological in nature; Females were used in the study as they are likely to show emotional reactions which are a biological difference from men.	**4**

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>9(a)</td><td>Describe the psychology being investigated in the study by Pepperberg (parrot learning).

1 mark per correct point.

e.g.
She was testing cognitive skills (of a parrot);
To see we can teach an organism to distinguish between same and different;
The study also examined Social Learning Theory as a mechanism for learning;
This is when an organism pays attention to a role model;
The organism retains the information for later use;
The organism then reproduces the observed behaviour;
They organism must feel motivated to replicate / via vicarious reinforcement;
Operant conditioning is when you learn by the consequences of your behaviour.</td><td>4</td></tr>
<tr><td>9(b)</td><td>Studies in psychology can be assessed on ethical issues: whether they follow ethical guidelines or not. Four ethical guidelines relating to animals are listed below.

Explain whether each guideline was followed in the study by Pepperberg (parrot learning):

• Deprivation
• Housing
• Numbers
• Species

Use the following Levels marking for each guideline <u>separately</u>:

<table>
<tr><th>Level</th><th>Descriptor</th><th>Marks</th></tr>
<tr><td>2</td><td>The answer explicitly describes the ethical guideline and the example is contextualised from the named study
OR The ethical guideline is implicit from the use of a well argued example contextualised from the named study</td><td>2</td></tr>
<tr><td>1</td><td>The answer explicitly describes the ethical without correct contextualisation / no contextualisation
OR The ethical guideline is implicit from the use of a brief example contextualised from the named study
OR The ethical guideline is incorrectly described but the contextualised example from the named study is correct</td><td>1</td></tr>
<tr><td>0</td><td>The description of the ethical guideline is incorrect and/or the contextualised example is incorrect
OR no answer given</td><td>0</td></tr>
</table></td><td>8</td></tr>
</table>

Question	Answer	Marks
9(b)	e.g. Deprivation Animals should not have any food / water withheld in a study unless it is absolutely necessary; Alex would be given extra food if he asked / was not stopped from having food if he got an answer incorrect (not broken). e.g. Housing Housing should take into account the social behaviour of species (e.g. caging); Alex was housed alone which might be stressful as parrots are social (broken). e.g. Numbers Psychologists should use the least number of animals as possible to accomplish goals; Alex was the only participant (not broken). e.g. Species Researchers should choose an appropriate species for their study; Alex had been used for over 10 years in different studies about cognitive abilities so was an ideal participant (not broken).	

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Question	Answer	Marks
10	**Evaluate the study by Baron-Cohen et al. (eyes test) 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.** **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**