

Cambridge International Examinations Cambridge International Advanced Subsidiary and Advanced Level

#### PSYCHOLOGY

9698/11 May/June 2017

Paper 1 Core Studies 1 MARK SCHEME Maximum Mark: 80

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 will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2017 series for most Cambridge IGCSE<sup>®</sup>, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

® IGCSE is a registered trademark.

#### Section A

Question	Answer	Marks
1	The study by Mann et al. (lying) used videos of interviews with suspects. All the suspects had English as their first language or were fluent in English.	
1(a)	Describe why it was important that all the suspects spoke English fluently.	2
	Because the video coders had to be able to understand them clearly; as this would have mattered to judging whether they were lying or telling the truth; e.g. they might have 'ummed' more if English wasn't their first language / might have had different or more or less non-verbal behaviours;	
	Because the interviewers' (Kent) / coders' (Portsmouth) first language was probably English they needed to understand them. = 2 marks (as detailed)	
	1 mark partial = a plausible but brief explanation 2 marks full = <i>either</i> two plausible but brief explanations <i>or</i> one detailed explanation	
1(b)	Explain the generalisability of the results based on this aspect of the sample.	2
	The results might only apply / generalise to English speakers / English people / generalisations would be ethnocentric / the findings would not generalise to people without English as a first / fluent language; because lying in other cultures / languages might take a different form; for example if other languages speak faster, or pause more;	
	1 mark partial = an appropriate but brief comment 2 marks full = <i>either</i> two appropriate but brief comments <i>or</i> one detailed comment	

Question	Answer	Marks
2	The study by Loftus and Pickrell used an experimental method to compare participants' recall of true and false memories.	
2(a)	Explain why this study could be described as an experiment.	2
	has (manipulated) IV; true <b>and</b> false stories [this is equivalent to: comparison between conditions / levels of IV (true and false stories) / looking for differences (true and false stories)] has (measured) DV; recall <b>of stories</b> / confidence / clarity controls employed; e.g. false story always in same position / false story did not actually happen 1 mark partial (any reason, as above) 2 marks full (explanation in context, however brief)	
2(b)	Outline <u>one</u> disadvantage of experiments, using this study as an example.	2
	situation may not be realistic / low ecological validity; e.g. usually recall childhood events at home – where there are cues – not in a lab) / childhood memories usually recalled in a family situation where others can verify recall, not alone; task may not be realistic / low mundane realism; e.g. not usually <b>tested</b> on recall of childhood events / do not usually recall them in a <b>booklet</b> / do not usually recall them in a lab;	
	1 mark partial (disadvantage only, however detailed) 2 marks full (disadvantage and context, however brief)	

Question	Answer	Marks
3	One of the aims of the study by Baron-Cohen et al. (eyes test) predicted an 'inverse correlation' (negative correlation) between the scores on two of the tests.	
3(a)	Explain what is meant by an 'inverse correlation' (negative correlation), using this study as an example.	2
	As one variable goes up, the other goes down / correlation coefficient has a negative value; (1 mark)	
	AQ and eyes test score (1 mark) i.e. operationalisation of 'autism and detecting emotion'= 1 mark	
	description of inverse/negative correlation = 1 mark	
	identification of two variables = 1 mark	
	Note: Both 'inverse' and 'negative' are in the question, so no marks for repeating this. Note: No mark for identification of only one variable.	
3(b)	Explain why an inverse correlation (negative correlation) was predicted.	2
	AQ measures problems with social cognition so if they get a high score on this they tend to do badly on the eyes test because it measures how well they can put themselves into the mind of another person.	
	1 mark partial = brief description 2 marks full = elaborated description (as above)	

Question	Answer	Marks
4	Held and Hein (kitten carousel) compared the behaviour of different kittens in two conditions.	
4(a)	Explain the experimental design with reference to this study.	2
	Independent groups; because the animals were compared between active and passive conditions; because the animals were compared between X (dark) and Y (light) conditions; 1 mark for independent groups (between groups); 1 mark for explanation of comparison between active and passive / X and Y; (can earn this mark in isolation if it is clear that the candidate knows there were two different kittens, e.g. 'either')	
4(b)	Suggest one advantage of this experimental design in this study.	2
	Most likely: avoids order effects / fatigue effects / practice effects; once kittens had been deprived / had had experience, they were no longer young / naïve; 1 mark partial = an advantage described, however detailed 2 marks full = advantage linked to study, however briefly	
	Credit any appropriate suggestion	

Question	Answer	Marks
5	From the study by Milgram (obedience):	
5(a)	Describe the sampling technique used in this study.	2
	Name / description: Volunteer / self-selected sampling; participants respond to request from researcher;	
	links to study: participants obtained by advertisement (in newspaper); and direct mail;	
	1 mark partial = sampling method named or briefly described 2 marks full = sampling method with detail, can be linked to study	
5(b)	Suggest one disadvantage of the sampling technique used in this study.	2
	non-representative / low generalisability; (mainly) by local newspaper / from local area;	
	volunteers may be quite similar; people who self-select may be more educated etc.; (mainly) by local newspaper / from local area;	
	so may all have had similar levels of obedience; people who are more educated tend to be less obedient; the area / New Haven may have particularly obedient people;	
	participants may feel obliged to stay (because they volunteered); so they would carry on shocking making themselves very stressed;	
	1 mark partial = a disadvantage described, however detailed 2 marks full = disadvantage linked to study, however briefly	
	Credit any appropriate suggestion	

Question	Answer	Marks
6	From the study by Haney, Banks and Zimbardo (prison simulation):	
6(a)	Explain how <u>one</u> ethical guideline was broken in this study.	2
	Most likely: right to withdraw; power of guards prevented this; as they felt they couldn't take their parole because they had lost their identity; protection from harm; the guard participants could have been distressed by their experience /the prisoner participants were distressed by their experience / embarrassed about being arrested at home / got a rash / emasculated; deception; means the unit of the	
	guards thought only prisoners were being observed; 1 mark max for identifying / naming / describing a guideline 1 or 2 marks explaining <b>how</b> the guideline was broken i.e. link to study (the guideline may be implicit in this case)	
6(b)	Suggest why this ethical guideline was broken in this study.	2
	Authenticity / make it seem real; to make the prisoners feel like they had no choice / had to submit from the start; because Zimbardo (the warden) became personally involved;	
	so did not recognise that the participants were suffering; 1 mark partial (brief explanation, e.g. one of the points above – but there are others), 2 marks full (elaborated description that links to the study)	
	Credit any appropriate suggestion	

Question	Answer	Marks
7	In the study by Piliavin et al. (subway Samaritans) qualitative data were collected.	
7(a)	(a) Outline what is meant by 'qualitative data', using an example from this study.	2
	Detailed / in-depth data / descriptive data / data as words;	
	e.g. the comments people made / their actions / the discomfort observers displayed <u>:</u> "It's for men to help him" "I wish I could help him—I'm not strong enough" "I never saw this kind of thing before—I don't know where to look"	
	"You feel so bad that you don't know what to do"	
	they talked more to other passengers	
	1 mark partial ( <b>either</b> reference to detailed data <b>or</b> an example of a comment) 2 marks full ( <b>both</b> reference to detailed data <b>and</b> an example of a comment)	
7(b)	Describe <u>how</u> the qualitative data were collected in this study.	2
	"Each observer spoke to the person seated next to her after the incident took place. She also noted spontaneous comments and actions by those around her. A content analysis of these data was performed."	
	"Both observers <b>recorded</b> comments spontaneously made by nearby passengers and attempted to elicit comments from a rider sitting next to them."	
	1 mark partial (brief) 2 marks full (some detail)	

Question	Answer	Marks
8	Give the conclusions from the study by Tajfel (intergroup categorisation).	4
	Most likely: even minimal groupings / flimsy differences = 1 mark produce in-group favouritism / out-group bias / discrimination = 1 mark even minimal groupings produce in-group favouritism = 2 marks a preference for members of one's own group / out-group bias / discrimination against members of another group; = 2 marks if minimal groups can produce discrimination, then identities could fuel more serious prejudices; = 2 marks To maximise out-group bias, individuals will suffer costs to the in-group = 2 marks Does not have to be 2 × 2 mark conclusions 1 mark per point or elaboration, up to a maximum of 4	

Question	Answer	Marks
9	In the study by Nelson (children's morals) only quantitative data were collected.	
9(a)	Describe <u>one</u> piece of quantitative data collected.	2
	choices on a 7-point scale; of sad to happy faces; to show how good or bad the boy was; the children retold the story; in their own words; coded for accuracy of motive and outcome information; 1 mark partial (brief description), 2 marks full (elaborated description)	
	Accept actual results collected: e.g. '40% of 3 year-olds rated actor negatively if (at least) one negative cue' = 1 mark	
9(b)	Suggest one disadvantage of using quantitative data in this study.         It is not very in-depth / descriptive; (1 mark for disadvantage) so gives less detail than qualitative data; (1 mark for disadvantage) for example it is less likely to be able to explain why something happens; (1 mark for disadvantage)         e.g. what the children thought / felt about the boys in the stories / why they chose 'good'/'bad'; (1 mark for link)         1 mark partial disadvantage, however detailed         2 marks full contextualised disadvantage, however brief         Credit any appropriate suggestion	2

Question	Answer	Marks
10	The study by Schachter and Singer (emotion) was a test of the two-factor theory.	4
	Describe the two-factor theory, using examples of each component.	
	physiological component / relates to arousal; and physical effects like palpitations/tremor/pulse;	
	psychological component / relates to cognition / thinking; and psychological effects like feeling scared / angry / happy;	
	For each factor: 1 mark partial (description or example) 2 marks full (description and example) × 2	
	Note: Examples from study can earn marks	

Question	Answer	Marks
11	The study by Dement and Kleitman (sleep and dreaming) used controls.	
11(a)	Identify two variables that were controlled before the study began.	2
	arrive just before normal bedtime; eat normally; no alcohol; no caffeine (caffeine-containing drinks – accept 'coffee');	
	1 mark per control identified × 2	
11(b)	Explain why <u>one</u> of these variables was controlled in this study.	2
	to be sure that only the IV was affecting the DV;	
	e.g. only waking in REM or nREM was affecting dream recall;	
	e.g. coffee might stop people falling asleep; coffee might affect sleep quality; coffee might affect the amount they sleep;	
	e.g. alcohol might make people fall asleep; alcohol might affect sleep quality; alcohol might affect the amount they sleep;	
	e.g. if they eat more they might sleep more/less;	
	1 mark partial (brief explanation) 2 marks full (explanation related to study)	

Question	Answer	Marks
12	In the study by Maguire et al. (taxi drivers) four experimental tasks were used.	
12(a)	Give <u>one</u> similarity and <u>one</u> difference between the route task and film plot task.	2
	Similarity: both sequential	
	Difference: film plot was non-topographical (spatial)/route task was topographical;	
	1 mark for similarity, 1 mark for difference	
	Note: For 2 marks it must be clear which is the similarity and which is the difference.	
12(b)	Give <u>one</u> similarity and <u>one</u> difference between the route task and the landmark task.	2
	Similarity: both topographical (= 'geographical')	
	Difference: landmark was non-sequential / route task was sequential;	
	1 mark for similarity, 1 mark for difference	
	Note: For 2 marks it must be clear which is the similarity and which is the difference.	

Question	Answer	Marks
13	Demattè et al. (smells and facial attractiveness) suggested that the results might have technological application such as adding smells to text messages, pictures or virtual reality.	ns
13(a)	Explain what effect smells could have in <u>one</u> of these applications.	2
	<i>messaging</i> : (body) smells would make the text seem more real; so messages with nice smells; would be more acceptable / the sender would seem more attractive;	
	<i>pictures</i> : nice (body) smells on pictures would make them seem more real; so pictures with nice smells; would look more attractive;	
	VR Because experiences with nice smells; would seem more effective; a person seen in VR would seem more attractive;	
	1 mark partial (brief explanation of effect) 2 marks full (detailed explanation of effect on application)	
13(b)	Suggest how the effectiveness of smells in <i>this</i> technological application could be measured.	2
	DV is attractiveness / how effective, nice etc. the message / picture / VR is; so measured by rating of attractiveness / seeing how immersed the participant gets in VR;	
	1 mark partial (e.g. identification of DV or way to measure), 2 marks full (e.g. identification of DV and way to measure)	
	Credit any appropriate suggestion	

Question	Answer	Marks
14	From the study by Thigpen and Cleckley (multiple personality disorder):	4
	Explain two differences between the forgetting experienced by the participant and ordinary forgetting.	
	we often remember again things we have forgotten; but Eve White didn't ever remember the things she had forgotten / the shopping trip/the letter; so the amnesia is much deeper;	
	The things we normally forget are our own memories; The things forgotten by Eve White were not her memories; they were things that had been done by another personality / by Eve Black / could only be accessed when she changed personality; they were in her unconscious;	
	Normal forgetting is caused by factors such as interference; the cause was her forgetting multiple personality disorder it was amnesia (not just everyday forgetting)	
	1 mark partial (brief explanation, may be related to study) 2 marks full (explanation related to study) $\times$ 2	

Question	Answer	Marks
15	The study by Veale and Riley (mirror gazing) collected data by self report.	
15(a)	Describe the self-report method.	2
	data gained directly from the participant (rather than indirectly via observations / tests); e.g. through interview (asking questions face-to-face); or questionnaire (asking questions on paper); the questions can be open or closed; they can generate qualitative or quantitative data;	
	1 mark partial (simple description) 2 marks (elaborated description, can be contextualised but does not have to be)	
	the researcher asks the participants questions and they answer (1 mark)	

Question	Answer	Marks
15(b)	Suggest why the self report method was used in this study rather than observations.	2
	observations might be distressing (because the participants could not stop it); but they could choose to stop filling out a questionnaire;	
	They might behave differently if aware / if they had consented to being observed; lowering the (ecological) validity;	
	observers could invade the participants' privacy; but they could miss out questions they did not want to answer;	
	if they were being observed they might change their behaviour / respond to demand characteristics; but in the questionnaire there was no-one there to see them;	
	observations cannot explain why someone does something; so they would not understand what caused mirror gazing (only how often they did it);	
	1 mark partial (brief suggestion) 2 marks (detailed suggestion or two separate points)	
	Credit any appropriate suggestion	

Question	Answer		Marks
16	Evaluate observation as a research technique using one of the studies listed below.		10
	Held and Hein (kitten carousel) Bandura et al. (aggression) Rosenhan (sane in insane places)		
	No marks for description of study. Max 5 if only about strengths or weaknesses.		
	Comment	Mark	
	No answer or incorrect answer.	0	
	Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled.	1–3	
	<b>Either</b> points limited to illustrating strengths or weaknesses of observations <b>or</b> lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.	4–5	
	Both strength(s) and weakness(es) of observations are considered and are focused on the study although they may be imbalanced in terms of quality or quantity. The answer shows good discussion with reasonable understanding.	6–7	
	Balance of detail between strengths or weaknesses of observations and both are focused on the study. Discussion is detailed with good understanding and clear expression.	8–10	

Question	Answer	Marks
16	Examples of possible discussion points:	
	<ul> <li>Held and Hein Strengths</li> <li>observations based on scientific procedures (visual cliff, paw placement etc.) so highly objective/reliable</li> <li>observations used visual cliff which simulates a real-life encounter with depth Weaknesses</li> <li>observations in lab context (e.g. visual cliff) so may be unrepresentative</li> <li>visual cliff equipment may not have provided all the cues a real drop would have provided (e.g. draughts) or may have given extra cues e.g. touch from the glass</li> </ul>	
	<ul> <li>Bandura et al. Strengths</li> <li>observations were covert so no demand characteristics</li> <li>observations used toys for children, a real-life behaviour Weaknesses</li> <li>observations in lab context (i.e. room at university) so may be unrepresentative because children usually play at home or at school</li> <li>some of the toys were unfamiliar and children may play differently with familiar toys</li> </ul>	
	<ul> <li>Rosenhan Strengths</li> <li>observations were based in 'real' situation of a mental hospital so highly valid</li> <li>observations were by covert participant observers to reflect real life in a mental hospital Weaknesses</li> <li>pseudopatients were not mentally ill so their interactions so may be unrepresentative</li> <li>observations were not structured so there would have been differences between observers, causing low reliability</li> </ul>	

Question	Answer		Marks
17	Use <u>one</u> of the studies listed below to discuss the nature/nurture debate.		10
	Freud (little Hans) Langlois et al. (infant facial preference) Billington et al. (empathising and systemising)		
	No marks for description of study. Max 5 if only about nature or only about nurture.		
	Comment	Mark	
	No answer or incorrect answer.	0	
	Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled.	1-3	
	<b>Either</b> points limited to illustrating nature or nurture <b>or</b> lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.	4-5	
	<b>Both</b> nature and nurture are considered and are focused on the study although they may be imbalanced in terms of quality or quantity. The answer shows good discussion with reasonable understanding.	6-7	
	Balance of detail between nature and nurture and both are focused on the study. Discussion is detailed with good understanding and clear expression.	8-10	
		<u> </u>	

May/June	2017

Question	Answer	Marks
17	Examples of possible discussion points:	
	<ul> <li>Freud</li> <li>nature: Eros drives love for mother</li> <li>nature: Thanatos drives hatred of father</li> <li>nurture: experience with horses gave fabric to fears</li> <li>nurture: interactions with parents gives three-way dynamic</li> </ul> Langlois et al. <ul> <li>nature: young infants' preference for attractive faces extends to females and male faces, Black faces and infants' faces</li> <li>nurture: increased interest in black and infant faces dissipates quickly suggesting familiarisation so some aspects of nurture involved</li></ul>	
	<ul> <li>Billington et al.</li> <li>nature or nurture: empathising theory says females stronger E</li> <li>nature or nurture: systemising theory says males stronger S</li> <li>nurture: intention to 'need to redress balance' of females in scientific disciplines implies belief it is/can be nurtured</li> </ul>	