
PSYCHOLOGY

9698/12

Paper 1 Core Studies 1

May/June 2017

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.

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SECTION A

Question	Answer	Marks
1	The study by Loftus and Pickrell (false memories) used self report data.	
1(a)	<p>Explain what is meant by ‘self report data’ using this study as an example.</p> <p>results obtained straight from the participant; by questionnaire / interview about recall of stories; i.e. by asking them written or spoken questions; in this study they <u>filled in</u> booklets;</p> <p>1 mark partial (explanation not in context) 2 marks full (explanation in context, however brief)</p>	2
1(b)	<p>Suggest <u>one</u> disadvantage of collecting self report data in this study.</p> <p>participants may lie / respond to demand characteristics / display a social desirability bias; e.g. say they recall all the stories even if they don't</p> <p>1 mark partial (disadvantage only, however detailed) 2 marks full (disadvantage and context, however brief) Credit any reasonable suggestion.</p>	2

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Question	Answer	Marks
2	The study by Milgram (obedience) used observations to collect some data.	
2(a)	<p>Describe <u>one</u> way that observations were used to collect data in this study.</p> <p>“Occasional photographs were taken through one-way mirrors. Notes were kept on any unusual behaviour occurring during the course of the experiments. On occasion, additional observers were directed to write objective descriptions of the subjects' behaviour. The latency and duration of shocks were measured by accurate timing devices.”</p> <p>(observers watched) through one-way mirrors;</p> <p>measured the latency and duration of shocks;</p> <p>wrote descriptions of participants' behaviours;</p> <p>and of what they said;</p> <p>for example sweat / tremble / stutter / bite their lip / groan / dig their fingernails into their flesh / nervous laughter and smiling / seizures / twitching / pulling earlobe / twisted hands / pushed his head into his hands</p> <p>1 mark partial (brief description, e.g. one of the points above), 2 marks full (elaborated description, some detail)</p>	2
2(b)	<p>Suggest <u>one</u> reason why it was useful to conduct these observations.</p> <p>It gave more detailed information (more so than just voltage reached) / gave qualitative data (as well as quantitative);</p> <p>provided evidence that participants were distressed (by the procedure, which was not obvious from the voltage level alone);</p> <p>1 mark partial (brief explanation, e.g. one of the points above – it can be an example alone), 2 marks full (elaborated explanation, some detail) Credit any reasonable suggestion.</p>	2

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Question	Answer	Marks
3	The study by Haney, Banks and Zimbardo (prison simulation) referred to ‘pathological prisoner syndrome’.	
3(a)	<p>Describe what is meant by ‘pathological prisoner syndrome’.</p> <p>The negative effects on prisoners of the prison regime; e.g. social disintegration among prisoners; feelings of isolation; also physical symptoms;</p> <p>1 mark partial (brief description, e.g. one of the points above) 2 marks full (elaborated description, some detail)</p>	2
3(b)	<p>Explain what caused ‘pathological prisoner syndrome’ using an example from this study.</p> <p>Loss of identity; e.g. having numbers (not using names); not being able to wear their own clothes / having a uniform / all wearing the same clothes;</p> <p>Arbitrary control; being told when they could wear glasses / go to the toilet etc.;</p> <p>Dependency and emasculation; having to wear the smock / no underpants; which made them sit like women; having to rely on the guards; e.g. for food;</p> <p>1 mark partial (identification of a cause), 2 marks full (contextualised explanation)</p>	2

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Question	Answer	Marks
4	The study by Tajfel (intergroup categorisation) used a repeated measures design because the responses of all participants were measured for ‘own’ and ‘other’ group choices.	
4(a)	<p>Describe the difference between a repeated measures design and an independent groups design.</p> <p>In repeated measures any one participant / group performs in each / every condition / levels of the independent variable; whereas in independent groups each person / group only performs in one condition / levels of the independent variable;</p> <p>1 mark partial = a correct but unclear description e.g. only one design explained 2 marks full = both designs explained (may be contextualised, but does not have to be)</p>	2
4(b)	<p>Explain <u>one</u> advantage of using a repeated measures design in this study.</p> <p><i>Most likely</i> overcomes individual differences; so if one individual is more generous / mean, then this will even out over the conditions;</p> <p>accept: uses less participants; which is more ethical if the boys were going to be upset by being (falsely) told they were underestimators / inaccurate;</p> <p>1 mark partial (advantage described, however detailed) 2 marks full (link between the advantage and the study, however brief)</p>	2

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Question	Answer	Marks
5	From the study by Bandura et al. (aggression):	
5(a)	<p>State how old the participants were.</p> <p>37 months / 3 years; to 69 months / 6 years; mean age of 52 months; 4 years (and 4 months);</p> <p>1 mark per correct age or mean ×2</p>	2
5(b)	<p>Suggest <u>one</u> effect on the results if participants of a different age had been used.</p> <p>The children would have had more exposure to ‘pre-existing’ aggression; so would have been more aggressive (even without the aggressive model);</p> <p>The children would have had more exposure to gender stereotypes; so there may have been more difference between the boys and girls;</p> <p>The children would have more highly developed morals; so may have been less affected by the aggressive model;</p> <p>1 mark partial (brief effect), 2 marks full (elaborated effect, e.g. reason and effect on results) Credit any reasonable suggestion.</p>	2

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Question	Answer	Marks
6	The study by Freud used only one participant, little Hans.	
6(a)	<p>Suggest <u>one</u> reason why it might be possible to generalise some of the findings from little Hans to other children.</p> <p>Because Freud believed all children went through the same developmental / psychosexual stages / the phallic stage;</p> <p>so all boys would experience the Oedipus complex; and experience rivalry with their fathers / attraction to their mothers; and children typically resolve the Oedipus conflict at about the same age;</p> <p>1 mark partial (brief explanation), 2 marks full (elaborated explanation) Credit any reasonable suggestion.</p>	2
6(b)	<p>Suggest <u>one</u> reason why it might <u>not</u> be possible to generalise some of the findings from little Hans to other children.</p> <p>little Hans was only one child; he was a boy so it would not apply to girls; Freud believed he was an unusual boy; not all children have phobias;</p> <p>1 mark partial (brief explanation), 2 marks full (elaborated explanation) Credit any reasonable suggestion.</p>	2

Question	Answer	Marks
7	Outline two aims from the study by Langlois et al. (infant facial preference).	
	<p><i>General (allow each mark only once)</i></p> <ul style="list-style-type: none"> • to show that babies preferred attractive over unattractive faces • to test whether the results generalised to other types of faces <p><i>Study 1 aimed to:</i></p> <ul style="list-style-type: none"> • replicate previous results...; • ...with adult (white female facial stimuli); • check reliability; • test male (white facial stimuli); (i.e. to make gender comparisons) • test the effect of order (of presentation of male and female faces); <p><i>Study 2 aimed to:</i></p> <ul style="list-style-type: none"> • test black (female facial stimuli); • test effect of maternal attractiveness <p><i>Study 3 aimed to:</i></p> <ul style="list-style-type: none"> • test infant preferences for babies' faces (3 month olds); • test gender preferences for baby faces; <p>1 mark for aim + 1 mark for elaboration ×2</p>	4

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Question	Answer	Marks
8	The study by Nelson (children’s morals) was an experiment.	
8(a)	<p>Explain why this was an experiment using an example from the study</p> <p>it had an IV and DV; e.g. DV was child’s judgment of whether the boy was good or bad;</p> <p>IV manipulated / comparison between groups / looking for differences; e.g. age; picture / story (verbal only); good / bad; motive / outcome; implicit / explicit;</p> <p>controls; e.g. same experimenter for all children, pictures standardised</p> <p>it investigated causal relationships (e.g. age affects moral understanding, motive / outcome order affects moral understanding)</p> <p>1 mark for characteristic + 1 mark for contextualisation</p>	2
8(b)	<p>Suggest <u>one</u> disadvantage of using the experimental method for this study.</p> <p>(by controlling variables) demand characteristics might be introduced; e.g. the children were asked about good / bad in lots of ways so might have worked out the study was about goodness and badness;</p> <p>although they controlled the levels of the IV, they couldn’t be sure the children understood; they might have not have understood the idea of motive / outcome coming first / last (so the IV did not ‘work’)</p> <p>the IV of intention was manipulated by the story, but this might not have worked; the participants did not actually know what the boy’s intention was; there might be ethical issues;</p> <p>the children might be upset by the story / copy throwing the ball at another child;</p> <p>1 mark partial (suggestion without reference to study, however detailed), 2 marks full (suggestion with reference to study, however brief). Credit any reasonable suggestion.</p>	2

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Question	Answer	Marks
9	Describe the sample of participants used in the Schachter and Singer study (emotion). NB OUT OF 4	4
	<p>184 (accept 170–200) male; college / university students; taking introductory psychology; all cleared by student health service;</p> <p>1 mark per point ×4</p>	

Question	Answer	Marks
10	In the study by Dement and Kleitman on sleep and dreaming, an EEG (electroencephalograph) was used to record data.	
10(a)	<p>Explain what is measured by an EEG. EEG: produces a readout of brain waves; amplitude (height) and frequency; e.g. alpha and beta waves; which indicates whether the participant is in REM or nREM sleep;</p> <p>EOG: relates to eye movements; to detect how much movement/which direction;</p> <p>1 mark partial (brief explanation related to study) 2 marks full (elaborated explanation related to study).</p>	2
10(b)	<p>Describe how the EEG is used with participants. EEG; (recording) electrodes stuck to head; wires from head to EEG machine; wires collected together in a pony tail; (EEG used as) EOG; (recording) electrodes stuck beside eyes; wires from head to EEG machine;</p> <p>1 mark per piece/element of description, including name. Can describe one piece in detail or two pieces briefly.</p>	2

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Question	Answer	Marks
11	In the study by Maguire et al. (taxi drivers), quantitative data and qualitative data were collected.	
11(a)	<p>Explain what is meant by ‘quantitative data’, using an example from this study.</p> <p>quantitative = numerical data;</p> <p>PET scan data / brain activity / regional cerebral blood flow / (r)CRB;</p> <p>MRI data / brain pixels / brain volumes;</p> <p>Speech duration (in seconds) (e.g. participants’ descriptions of routes, landmarks, film plots and film frames and the duration of the baseline number repetition);</p> <p>1 mark partial (explanation of quantitative) 2 marks full (explanation linked to example from study)</p>	2
11(b)	<p>Explain <u>one</u> advantage of collecting <u>both</u> quantitative and qualitative data.</p> <p>balance between objectivity and validity;</p> <p>quantitative data is more objective but qualitative data may be more valid;</p> <p>Quantitative data easy to compare conditions / use statistics but qualitative data helps with explanations / reasons why;</p> <p>1 mark partial (advantage of only one type of data), 2 marks full (advantage of both types of data).</p>	2

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Question	Answer	Marks
12	Demattè et al. studied smells and facial attractiveness.	
12(a)	<p>Explain <u>one</u> problem with the smells Demattè chose to use.</p> <p><i>Most likely:</i></p> <p>Because geranium / rubber is not a smell associated with the body; so low ecological validity;</p> <p>'Gravity' might not be familiar; so it would not be associated with men;</p> <p>'Gravity' might not be liked; so would not be a pleasant association;</p> <p>Rubber might be liked; so would not be an unpleasant association;</p> <p>1 mark partial – identification of problem 2 marks full – explanation of problem</p>	2
12(b)	<p>Using the results of the study, suggest why some men choose to use fragranced products.</p> <p>They found women preferred faces when there was a pleasant smell; So the men would be more attractive to women if they smelled nice;</p> <p>1 mark partial (either reporting evidence from study or suggesting benefit to men), 2 marks full (reporting evidence from study and suggesting benefit to men) Credit any reasonable suggestion.</p>	2

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Question	Answer	Marks
13	Thigpen and Cleckley (multiple personality disorder) described a case study of Eve.	
13(a)	<p>What is meant by a ‘case study’?</p> <p>study of one individual / instance; collecting in-depth /detailed data using many different techniques (e.g. interviewing the participant, relatives, observations, tests etc.)</p> <p>1 mark partial (e.g. ‘study of one individual’) 2 marks full (study of one individual plus any correct expansion e.g. ‘in-depth study of one individual’).</p>	2
13(b)	<p>Explain <u>one</u> disadvantage of using the case study method in this investigation.</p> <p><i>Most likely:</i></p> <p>the researchers developed a relationship with the participant / Eve over a long period of time; which may have biased in their interpretation if they had decided on a certain explanation; and this may have had ethical implications e.g. dependency of Eve on the researchers; can’t generalise; e.g. because Eve’s early experiences were unique;</p> <p>1 mark partial (brief disadvantage), 2 marks full (elaborated disadvantage, contextualised to study)</p>	2

Question	Answer	Marks
14	From the study by Billington et al. (empathising and systemising):	
14(a)	<p>Identify <u>two</u> variables that were <u>not</u> controlled.</p> <p>tests could be completed in any order;</p> <p>participants would have been in different environments because they completed the tests online;</p> <p>tests did not have to be done together;</p> <p>1 uncontrolled variable = 1 mark ×2</p>	2
14(b)	<p>Explain why it would have been important to have controlled <u>one</u> of these variables.</p> <p><i>order of tests:</i></p> <ul style="list-style-type: none"> • could have been a practice effect; • so participants' scores would have seemed better on the second test (if lots of them chose the same order); • could have been a fatigue effect / boredom; • so participants' scores would have seemed worse on the second test (if lots of them chose the same order); <p><i>tests not all done in the same environment:</i></p> <ul style="list-style-type: none"> • some participants could have been in quiet places, others noisy; • the quiet place ones could concentrate better; <p><i>tests did not have to be done together:</i></p> <ul style="list-style-type: none"> • so some participants could have done them both, others just one at a time; • the ones who did them separately might have been able to concentrate better / rushed less; <p>1 mark partial (brief explanation), 2 marks full (elaborated explanation)</p>	2

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Question	Answer	Marks
15	The study by Veale and Riley (mirror gazing):	
15(a)	<p>Describe how the ethical issue of ‘protection of participants from harm’ was raised by this study.</p> <p>participants may be distressed by thinking about their body / image / mirror use; ‘forcing’ them to answer questions; raising awareness that their problem involved more things than they thought it did.</p> <p>1 mark partial (e.g. what the harm was or how harm could have been/was caused) 2 marks full (harm or cause elaborated or combination of both/1 mark for each)</p>	2
15(b)	<p>Explain how <u>one other</u> ethical issue in the study was resolved.</p> <p>privacy; <ul style="list-style-type: none"> • the participants did not have to complete the questionnaire; • so if they felt the questions were too private they could stop; • there could have been a statement on the questionnaire saying they didn’t have to answer all the questions; right to withdraw; <ul style="list-style-type: none"> • tell participants they don’t have to finish the questionnaire; confidentiality; <ul style="list-style-type: none"> • don’t record participants’ names informed consent; <ul style="list-style-type: none"> • tell participants about what they will do and get their agreement; <p>1 mark partial (e.g. identifying ethical issue) 2 marks full (elaborated description e.g. identification with detail)</p> </p>	2

Section B

Questions	Answers	Marks												
16	<p>Evaluate <u>one</u> of the studies listed below in terms of its usefulness.</p> <p>Piliavin et al. (subway Samaritans) Rosenhan (sane in insane places) Billington et al. (empathising and systemising)</p>													
	<p>No marks for description of study. Max 5 if only about strengths or weaknesses.</p> <table border="1" data-bbox="376 584 1832 1147"> <thead> <tr> <th data-bbox="376 584 1729 651">Comment</th> <th data-bbox="1729 584 1832 651">Mark</th> </tr> </thead> <tbody> <tr> <td data-bbox="376 651 1729 715">No answer or incorrect answer.</td> <td data-bbox="1729 651 1832 715">0</td> </tr> <tr> <td data-bbox="376 715 1729 815">Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled.</td> <td data-bbox="1729 715 1832 815">1–3</td> </tr> <tr> <td data-bbox="376 815 1729 916">Either points limited to illustrating usefulness / lack of usefulness or lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.</td> <td data-bbox="1729 815 1832 916">4–5</td> </tr> <tr> <td data-bbox="376 916 1729 1050">Both usefulness and lack of usefulness 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.</td> <td data-bbox="1729 916 1832 1050">6–7</td> </tr> <tr> <td data-bbox="376 1050 1729 1147">Balance of detail between usefulness and lack of usefulness and both are focused on the study. Discussion is detailed with good understanding and clear expression.</td> <td data-bbox="1729 1050 1832 1147">8–10</td> </tr> </tbody> </table>	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	Either points limited to illustrating usefulness / lack of usefulness or lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.	4–5	Both usefulness and lack of usefulness 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 usefulness and lack of usefulness and both are focused on the study. Discussion is detailed with good understanding and clear expression.	8–10	10
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Questions	Answers	Marks
	<p>Examples of possible discussion points:</p> <p>Piliavin et al.</p> <ul style="list-style-type: none"> • <i>useful</i> because helps to raise awareness of what might stop people helping others • so might offer ways to increase altruistic behaviours, like blood donation • because big sample so lots of different types of people so results should generalise • because conducted in real world situation so more likely to be valid than lab studies of helping • <i>not useful</i> as participants might have realised it wasn't a real drunk / sick person so ignored them because of that • the research was done in 1969 and attitudes to race / gender have changed since then so the findings might not apply to helping now; <p>Rosenhan</p> <ul style="list-style-type: none"> • <i>useful</i> because helps to warn clinicians about biases created by context • because raised awareness of limitations of diagnostic practices (of the day) • because conducted in actual mental hospitals rather than a simulation to results should generalise to other hospitals more than if done in an artificial setting • because range of hospitals so findings likely to be typical of hospitals in general • <i>not useful</i> as patients don't usually self-admit to mental hospitals • because patients don't normally have a single symptom <p>Billington et al.</p> <ul style="list-style-type: none"> • <i>useful</i> because can help to guide subject choices for E and S type people • because it might help to reduce gender discrimination • because looking at university course choice using a large sample of university students, so the sample is relevant, increasing generalisability • because people do use eyes to gauge the emotions of others in the real world • <i>not useful</i> because although the FC-EFT measures systemising, it isn't an everyday task, we don't look for embedded figures in normal life. • all tests were conducted online and although systemising might be associated with online procedures, empathising usually involves direct contact with a person. 	10

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Questions	Answers	Marks												
17	<p>Use <u>one</u> of the studies listed below to discuss the strengths and weaknesses of the cognitive approach.</p> <p>Loftus and Pickrell (false memories) Baron-Cohen et al. (eyes test) Held and Hein (kitten carousel)</p>													
	<p>No marks for description of study. Max 5 if only about nature or only about nurture.</p> <table border="1" data-bbox="376 483 1827 1046"> <thead> <tr> <th data-bbox="376 483 1727 549">Comment</th> <th data-bbox="1727 483 1827 549">Mark</th> </tr> </thead> <tbody> <tr> <td data-bbox="376 549 1727 614">No answer or incorrect answer.</td> <td data-bbox="1727 549 1827 614">0</td> </tr> <tr> <td data-bbox="376 614 1727 715">Anecdotal discussion, brief detail, minimal focus. Very limited range. Discussion may be inaccurate, incomplete or muddled.</td> <td data-bbox="1727 614 1827 715">1–3</td> </tr> <tr> <td data-bbox="376 715 1727 815">Either points limited to illustrating strengths or weaknesses of the cognitive approach or lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.</td> <td data-bbox="1727 715 1827 815">4–5</td> </tr> <tr> <td data-bbox="376 815 1727 948">Both strengths and weaknesses of the cognitive approach 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.</td> <td data-bbox="1727 815 1827 948">6–7</td> </tr> <tr> <td data-bbox="376 948 1727 1046">Balance of detail between strengths and weaknesses of the cognitive approach and both are focused on the study. Discussion is detailed with good understanding and clear expression.</td> <td data-bbox="1727 948 1827 1046">8–10</td> </tr> </tbody> </table>	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	Either points limited to illustrating strengths or weaknesses of the cognitive approach or lack of depth and/or breadth. The answer is general rather than focused on study but shows some understanding.	4–5	Both strengths and weaknesses of the cognitive approach 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 and weaknesses of the cognitive approach and both are focused on the study. Discussion is detailed with good understanding and clear expression.	8–10	10
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	<p>Examples of possible discussion points:</p> <p>Loftus and Pickrell</p> <ul style="list-style-type: none"> • lab experiments typical of cognitive approach allow for controls such as ensuring participants hadn't been lost in a mall • cognitive interpretations may have alternative explanations, Loftus and Pickrell note that they make 'no claims about the percentage of people who might be able to be misled in this way...' <p>Baron-Cohen et al.</p> <ul style="list-style-type: none"> • some cognitive functions can be readily assessed using visual / verbal tests such as the eyes test, providing extensive, valid, reliable data • Baron-Cohen et al. note that it is 'a challenge for psychology to develop tests that are sensitive to subtle cognitive dysfunction.' and that without such tests '...the investigator might erroneously conclude that the patient is 'recovered' or 'normal'.' <p>Held and Hein</p> <ul style="list-style-type: none"> • cognitive approach has applications, e.g. to dealing with perceptual difficulties such as squint arising from inadequate sensory stimulation • cognitive approach typically limited to what can be observed to indicate events in information processing e.g. behavioural differences in these kittens compared to normal (on the visual cliff) 	10