OCR
RECOGNISING ACHIEVEMENT

GCE

Psychology

Advanced GCE **A2 H568**

Advanced Subsidiary GCE **AS H168**

Mark Scheme for the Units

January 2009

H168/H568/MS/R/09J

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Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

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MARK SCHEMES FOR THE UNITS

G541 Psychological Investigations

Section A

A psychologist is interested in investigating people's belief in the paranormal (e.g. ghosts, telepathy and unidentified flying objects) and decides to use a self-report measure to conduct their study.

1 Describe how a self-selecting sampling technique could be used to obtain participants for this study. [3]		
A self-selecting sampling technique is one in which participants volunteer themselves to take part. This can arise as a consequence of many different methods – e.g. response to a newspaper advertisement, poster placed in a public place or announcement on a radio station etc.		
0 marks	The candidate has not provided any creditworthy information	
1 mark	A self-selecting sampling method has been described, but this is brief, lacks detail or clarity and is not in the context of the research outlined in the source material	
2 marks	A self-selecting sampling method has been clearly described, but not in the context of the research outlined in the source material	**OR** A self-selecting sampling method has been described, but this is brief, lacks detail or clarity, but is in context of the research outlined in the source material
3 marks	A self-selecting sampling method has been clearly described in the context of the research outlined in the source material	

2 (a) Explain what is meant by an 'open question' and a 'closed question'. [4]	
An open question is one in which individuals can respond in any way they like and are not restricted in any way. A closed question is one in which individuals select their response from a choice of predetermined options.	
2 marks for what is meant by an 'open' question, 2 marks for what is meant by a 'closed' question	
0 marks	The candidate has not provided any creditworthy information
1 mark	The candidate has attempted to explain what is meant by an open/closed question but answer lacks detail/clarity
2 marks	The candidate has clearly explained what is meant by an open and closed question

2(b) Outline one strength and one weakness of using open questions in a study investigating peoples' belief in the paranormal. [4]		
Strengths include: responses are not restricted; can refer to any aspects of the paranormal; allows elaboration of how/why people believe in the paranormal; more likely to generate rich qualitative data; less chance of ambiguity (respondents can say what they like). Weaknesses include: responses may be difficult to interpret/analyse; harder to compare with other peoples' responses;		
2 marks for strength, 2 marks for weakness		
0 marks	The candidate has not provided any creditworthy information	
1 mark	Strength/weakness outlined in general – not in the context of a study investigating peoples' belief in the paranormal	**OR** Strength/weakness outlined in context, but lacks detail/clarity
2 marks	Strength/weakness clearly outlined in the context of a study investigating peoples' belief in the paranormal	

2(c) Outline one strength and one weakness of using closed questions in a study investigating peoples' belief in the paranormal. [4]		
Strengths include: easy to interpret/analyse; can compare with other peoples' responses directly; generates quantifiable data. Weaknesses include: forced choice response may not reveal full extent of people's beliefs; and, does not allow elaboration on how/why people believe in the paranormal or not; limited response range;		
2 marks for strength, 2 marks for weakness		
0 marks	The candidate has not provided any creditworthy information	
1 mark	Strength/weakness outlined in general – not in the context of a study investigating peoples' belief in the paranormal	**OR** Strength/weakness outlined in context, but lacks detail/clarity
2 marks	Strength/weakness clearly outlined in the context of a study investigating peoples' belief in the paranormal	

3(a) Suggest a question using a rating scale that participants could be asked in this study. [2]		
The response here must include some form of rating scale and not simply be an open or closed question. However, this may take one of many different formats. For example, a likert style (or summated ratings) scale (5 'strongly agree' to 1 'strongly disagree'). It may also not involve numbers, as in a semantic differential scale (where respondents simply mark a scale somewhere between two bi-polar opposite adjectives (*active* ---------- *passive* etc).		
0 marks	The candidate has not provided any creditworthy information	
1 mark	The candidate has suggested a question involving the use of a rating scale related to investigating paranormal beliefs, but this lacks clarity	**OR** The candidate has suggested a question involving the use of a rating scale that is clear, but in general and not related to investigating paranormal beliefs
2 marks	The candidate has suggested a question involving the use of a rating scale that is clear and in the context of the research outlined in the source material	

3(b) Outline one advantage of using a question involving a rating scale in this study. [3]		
The main advantage is the ability to quantify responses and compare across different individuals		
0 marks	The candidate has not provided any creditworthy information	
1 mark	A brief suggestion has been made but this is lacking in detail or clarity and is not related to investigating beliefs in the paranormal.	
2 marks	A detailed and clear response but not related to investigating beliefs in the paranormal	**OR** Response is lacking in detail/clarity but attempt to answer in context
3 marks	The candidate has clearly outlined an advantage of using a question involving a rating scale related to investigating beliefs in the paranormal	

Section B

Researchers want to conduct an observation investigating the use of mobile phones by students in their free time in college.

4 Describe and evaluate an appropriate procedure that could be used in this study. [10]		
For full marks candidates must provide a detailed description of an appropriate procedure and evaluate it. Both must be in the context of the information outlined in the source material		
0 marks	The candidate has not provided any creditworthy information	
1-2 marks	Minimal information – attempt to describe procedure only – replication not possible	**OR** Attempt to evaluate a procedure that has not been described (i.e. attempted evaluation only)
3-4 marks	Attempt to describe procedure, but minor omissions make replication difficult. No evaluation	**OR** Attempt to describe procedure, but not replicable (more than minor omissions) and attempt to evaluate
5 marks	Description of procedure that is replicable, but no evaluation	**OR** Attempt to describe procedure, but minor omissions make replication difficult. Attempt at evaluation
6 marks	Detailed description of procedure that is replicable, with attempt at evaluation	**OR** Attempt to describe procedure, but minor omissions make replication difficult, but detailed evaluation
7-8 marks	Detailed description of procedure that would allow replication, and detailed evaluation, but not in context	**OR** Attempt to describe procedure, but minor omissions make replication difficult, but detailed evaluation *mainly* in context
9-10 marks	Detailed description of procedure that would allow replication and clear, detailed evaluation with reference to at least two appropriate evaluation issues in context	

5 Explain the difference between time sampling and event sampling in observational research. [4]	
Time sampling involves observations at set lengths of time at set intervals (e.g. in a traffic survey 3 hourly observations between 08.00-09.00, 12.00-13.00 and 17.00-18.00). Event sampling involves observations of a specific event each time it occurs throughout the duration of the observation period.	
2 marks for time sampling, 2 marks for event sampling	
0 marks	The candidate has not provided any creditworthy information
1 mark	The candidate has attempted to describe what is involved in time sampling/event sampling, but lacks clarity/detail
2 marks	Clear/detailed description of what is involved in time sampling/event sampling

6 Outline one strength and one weakness of conducting observational research in this study. [6]		
Strengths include: sampling natural, genuine behaviour; high validity; un-restricted response categories. Weaknesses include: reactivity if participants become aware they are being observed; interpreting behaviour accurately; ethical issues (e.g. lack of consent); missing key behaviours due to people obscuring view.		
3 marks for strength, 3 marks for weakness		
0 marks	The candidate has not provided any creditworthy information	
1 mark	Brief attempt to outline strength/weakness but lacks clarity/detail (e.g. strength = high EV, weakness = ethics) and not in context	
2 marks	Clear/detailed outline of strength/weakness but not in context of	**OR** strength/weakness lacking in clarity/detail, but attempt to discuss in

	the research outlined in the source material	context
3 marks	Clear/detailed outline of strength/weakness discussed in context of the research outlined in the source material	

Section C

A researcher has conducted an independent measures design experiment to investigate whether chewing gum influences concentration. She recorded how many changes are detected in a 'spot-the-difference' puzzle by people chewing gum when completing the task compared to those who were not.

Number of differences detected in a 'spot-the-difference' puzzle (max = 12)	
Chewing gum whilst completing task	**Not chewing gum whilst completing task**
11	**9**
10	**7**
8	**5**
4	**7**
12	**6**

7 Suggest an appropriate alternate hypothesis for this experiment. [4]	
An appropriate alternate hypothesis could be … 'there is a difference in the number of differences found in a spot the difference puzzle between those chewing gum and those not chewing gum'. Some candidates may phrase this as one-tailed (directional), some as two-tailed (non-directional). Either is fine.	
0 marks	The candidate has not provided any creditworthy information, **or has cited a null hypothesis**
1 mark	The candidate has written an appropriate alternate hypothesis but has simply stated 'there will be/is a difference'. There is no indication of either the IV or DV
2 marks	The candidate has written an appropriate alternate hypothesis but has only referred to one variable (e.g. 'there will be/is a difference between those chewing gum and those who are not')
3 marks	The candidate has written an appropriate alternate hypothesis referring to both variables, but there is a lack of clarity for either the IV, the DV or both
4 marks	The candidate has written a clearly stated appropriate alternate hypothesis referring to both variables and in doing so has indicated how they were operationalised

8(a) Identify the independent variable (IV) and dependent variable (DV) in this experiment. [2]	
IV = chewing gum or not. DV = number of differences noted in spot the difference puzzle	
0 marks	The candidate has not provided any creditworthy information
1 mark	One variable correctly identified
2 marks	Both variables correctly identified

8(b) Describe an alternative way to operationalise the dependent variable in this experiment. [4]	
Alternatives could include variations on the existing measure of concentration (e.g. suggesting timing how long it takes to find the differences), or completely new measures of concentration (e.g. performing a letter cancellation task etc). The suggestion must be fully replicable for maximum marks.	
0 marks	The candidate has not provided any creditworthy information
1-2	Brief response lacking clarity and detail. Replication not possible (e.g. 'use a

marks	reading test' = 1 mark, or 'get participants to read a passage from a book out loud = 2 marks). May be unclear how the alternative measures concentration specifically
3 marks	Increasing level of detail and clear idea how/why concentration would be assessed but minor omissions make replication difficult
4 marks	Clear and detailed suggestion allowing replication

9 Outline one strength and one weakness of using an independent measures design in this experiment. [6]		
Strengths include the lack of order (or carry over) effects when participants are only involved in one condition and that the aim of the research is less likely to be assumed by participants (lowering demand characteristics). Also, the task can remain the same across conditions controlling for complexity etc. Weaknesses include participant variables and the need for more participants overall.		
3 marks for strength, 3 marks for weakness		
0 marks	The candidate has not provided any creditworthy information	
1 mark	Appropriate strength/weakness outlined briefly but lacks clarity/detail (e.g. simply stating 'no order effects') and not in context	
2 marks	Appropriate strength/weakness clearly outlined, but not in the context of the research outlined in the source material	**OR** outline of strength/weakness lacks clarity/detail but attempt to discuss in context
3 marks	Appropriate strength/weakness clearly outlined and in the context of the research outlined in the source material	

10 Outline two findings from the data collected in this study. [4]	
Findings could include: in general, participants performed better when chewing gum; only one participant spotted all 12 differences; no one spotted fewer than four differences; anomalous data/individual differences – e.g. one participant chewing gum only spotted 4 differences (lower than anyone else), whereas a participant not chewing gum spotted nine) etc.	
2 marks for each finding	
0 marks	The candidate has not provided any creditworthy information
1 mark	The candidate has stated a finding, but this lacks clarity, or is not in the context of the research outlined in the source material.
2 marks	The candidate has stated a clear finding and this is in the context of the research outlined in the source material.

G542 Core Studies

Section A		
Question Number	**Answer**	**Max Mark**
1 (a)	**Identify the independent variable (IV) in the first experiment conducted by Loftus and Palmer on eyewitness testimony**. The verb used in the critical question (smashed / collided / hit / bumped / contacted.) **I mark** –Partial identification of IV only e.g. the way the question was asked, example only or the verb used in the critical question. **2 marks** Full identification of IV as shown above.	**[2]**
1 (b)	**Outline how the independent variable (IV) was manipulated in this experiment.** Each participant had to answer a question estimating how fast the cars were going when the accident happened. The question was, 'About how fast were the cars going when they ----- each other? The verb was one of smashed / collided / hit / bumped / contacted. **1 mark** – Partial or vague answer e.g. participants were asked to estimate how fast the cars were going when the incident occurred. **2 marks** – Full description of how the IV was measured as described above.	**[2]**
2	**The study by Baron-Cohen, Jolliffe, Mortimore and Robertson on autism involved three groups of participants. Describe two of these groups.** Any two from: • 16 adult autistics (high functioning autistics + 12 Aspergers' Syndrome, 13 males + 3 females) • 50 'normal' (25 female + 25 male) adults matched by age with autistics • 10 adults with Tourette Syndrome (8 males, 2 female) also matched by age to autistics. **1 mark** - Identification of group only e.g. autistics. **2 marks** – Clear description of group including at least 2 of the characteristics identified above.	**[2+2] [4]**
3	**From the study by Savage-Rumbaugh identify two pieces of evidence that suggest pygmy chimpanzees have a greater aptitude for symbol acquisition than common chimpanzees.** Any two from: • Kanzi & Mulika formed associations between lexigrams and objects whereas Sherman & Austin didn't. • Kanzi & Mulika used words correctly from the start whereas Sherman & Austin didn't. • Kanzi & Mulika's understanding was not context dependent, Sherman & Austin's was.	

	• Kanzi & Mulika were able to differentiate between items in a category (e.g. coke, juice) whereas Sherman & Austin only acquired broad differentiations for categories (e.g. drinking). • Kanzi was able to request that A act on B when he was neither A nor B whereas Sherman & Austin were never able to form requests in which someone other than themselves was the beneficiary.	

Section A		
Question Number	**Answer**	**Max Mark**
	1 mark – Partial or vague answer e.g. Kanzi & Mulika's understanding was not context dependent. **2 marks** – Well described piece of evidence as detailed above.	**[2+2]** **[4]**
4	**The table below represents the mean number of errors made in the three conditions manipulated by Samuel and Bryant to test children's ability to conserve.** **Results by mean number of errors** **Standard / One - question / Fixed array** **5-year-olds** 8.5 / 7.3 / 8.5 **6-year-olds** 5.7 / 4.3 / 6.4 **7-year-olds** 3.2 / 2.5 / 4.8 **8-year-olds** 1.6 / 1.3 / 3.3	
4(a)	**Outline one conclusion that can be drawn from this table**. Any one from: • The ability to conserve increases with age: less errors were made by children aged 8 in all three conditions compared to children aged 5. • Children are more able to show their ability to conserve when they are not asked the same question twice: children of all ages made fewer errors in the one question condition than in the two question condition. • Children of all ages have difficulty conserving (mass, number & volume) if they do not witness a transformation: the fixed array condition produced the highest number of errors in all age groups. **1 mark** – Partial or vague answer e.g. conclusion not linked to the study, results only. **2 marks** – Well described conclusion, linked to the study as shown above.	**[2]**
4(b)	**Explain the purpose of the 'one-question' group.** To show that children who fail the traditional conservation task do not always fail because they cannot conserve. They fail because the repetition of the question makes them think they should give a different answer the second time. To show Piaget's methodology of asking the same question twice was flawed. **1 mark** – Partial or vague answer e.g. To show Piaget was wrong. **2 marks** – Full explanation of why only one question was asked as explained above.	**[2]**

Section A		
Question Number	**Answer**	**Max Mark**
5	**In this study by Bandura, Ross and Ross, all the participants were taken individually into a second room and subjected to mild aggression arousal.**	
5(a)	**Describe how the children's aggression was aroused in this room.** The children were taken into the room and allowed to play with attractive toys e.g. fire engine, jet fighter plane, colourful spinning top, dolls set with a wardrobe and baby crib. After about two minutes the experimenter said the toys had to be reserved for other children, so took them away. **1 mark** – Partial or vague answer e.g. children had toys taken away from them. **2 marks** – Clear description of the procedure as detailed above.	**[2]**
5(b)	**Explain why the researchers felt this was necessary**. Any one of: • Because observing aggressive behaviour may reduce the probability of behaving aggressively, so without provocation, those who had observed the aggressive model may have been less likely to behave aggressively. • Because the children who watched the non-aggressive model might be inhibited from behaving aggressively because of what they had observed. • To provide a common basis of arousal for all the children (as a control for aggression). **1 mark** – Partial or vague answer e.g. as a control for aggression. **2 marks** – Clear description of any reason as shown above.	**[2]**
6	**In this study by Freud, Little Hans is referred to as a 'little Oedipus'.**	
6(a)	**Identify two features of the Oedipus Complex.** Any two from: * During the phallic stage of development a boy subconsciously wants to sexually possess his mother. * He recognises there is a competition with his father. * So he wants his father out of the way because he fears that if his father finds out about this desire, he will be castrated. * He resolves this conflict by identifying with his father and adopting his values and behaviours. * Other appropriate answers. **1 mark** – for each appropriate feature identified.	**[1+1]** **[2]**

Section A		
Question Number	**Answer**	**Max Mark**
6(b)	**Outline one piece of evidence from the study which supports the suggestion that Hans was a 'little Oedipus'.** Any one from: • His phobia of horses because they resembled his father. • His jealousy of his baby sister / at her birth. • His fascination for his 'widdler' (links to phallic stage). • His fear of being bitten by a horse, symbolising his fear of castration. • His fantasy about the giraffes (explained). • His dream about being married to his mother (explained). • Wishing his father was dead. **1 mark** – Partial or vague answer e.g. giraffe fantasy. **2 marks** – Fully described piece of evidence as detailed above.	**[2]**
7 **7(a)** **7(b)**	**The Maguire et al study on taxi drivers used MRI scans (Magnetic Resonance Imaging).** **Explain what an MRI scan measured in this study.** (Magnetic fields rotated around the head via the scanner, produced a 3-dimensional picture of the structures of the brain), measured the volume of grey matter in the hippocampi of taxi and non taxi drivers. **1 mark** – Partial or vague answer e.g. grey matter in the hippocampus, size of the part of the brain used for navigation. **2 marks** –What the MRI scan measured as detailed above. **Outline one piece of evidence that suggests the brains of taxi drivers are different from the brains of non-taxi drivers.** One from: • The posterior hippocampi of taxi drivers were larger. • The anterior hippocampi of non-taxi drivers were larger. **1 mark** – Partial or vague answer e.g. the hippocampi of taxi drivers / non-taxi drivers were different. **2 marks** – Clear difference correctly identified as identified above.	**[2]** **[2]**
8	**Outline two ways in which Dement and Kleitman's laboratory experiment into sleep and dreaming can be said to be low in ecological validity.** Any two from: • Participants were not allowed alcohol or caffeine on the day of the experiment. • Participants had to sleep with electrodes attached near eyes and on scalp.	

	• Participants had to sleep in a sleep laboratory. • Participants were woken at various times during the night. • Participants were woken by a doorbell. • On waking, participants had to report their dreams into a tape recorder. **0 marks** – Laboratory experiment. **1 mark** – Partial or vague answer e.g. no alcohol or caffeine. **2 marks** – Clear description of appropriate factor as outlined above.	**[2+2]** **[4]**

Section A		
Question Number	**Answer**	**Max Mark**
9	**The study by Sperry investigated the psychological effects of hemisphere deconnection in split brain patients.**	
9(a)	**Describe how split-brain patients responded to visual material presented to their right visual field (RVF).** They were able to describe it in speech and writing. **1 mark** – Partial or vague answer e.g. they were able to describe it/write it. **2 marks** – Clear description of the two things they were able to do as outlined above.	**[2]**
9(b)	**Outline one conclusion from this study.** One from: * The right hemisphere controls emotional responses. * Language skills are based in the left hemisphere. * The left hemisphere controls words and the ability to speak. * The left hemisphere allows us to reason things out. * The right hemisphere is the 'pictures' hemisphere and specialises in tasks such as drawing, spatial awareness and intuitive tasks. * Information received by one hemisphere is not accessible to the other hemisphere in split-brain patients. * The individual has separate streams of consciousness. * Other appropriate answer. **1 mark** Partial or vague answer e.g. The hemispheres have different responsibilities. **2 marks** – Appropriate conclusion is clearly described.	**[2]**
10	**From Milgram's study of obedience**:	
10(a)	**Describe the sample used.** 40 middle class, mainly white, males, aged 20-50, drawn from the new haven area of America. **1 mark** – Partial or vague answer e.g. 40 males. **2 marks** - Clear description of sample including at least two of the characteristics identified above.	**[2]**

Section A		
Question Number	**Answer**	**Max Mark**
10(b)	**Outline one limitation of this sample.** Any one from: • Small sample (40) / all males / all from same area of America / all middle class; so can't generalise to the rest of the population. **1 mark** – Partial or vague answer e.g. all males. **2 marks** – Limitation identified and linked to the implication.	**[2]**
11	**Describe how the sample was recruited in Reicher and Haslam's (BBC) prison study.** Male participants were recruited through advertising in the national press and through leaflets. They then went through a 3-phase clinical, medical and background screening to ensure they were neither psychologically vulnerable nor liable to put others at risk. **1 mark** Partial or vague answer e.g. one aspect merely identified e.g. through advertising. **2 marks** – One aspect of the selection procedure accurately described as explained above. **3 marks** – Two aspects of the selection procedure identified, one being accurately described. **4 marks** – Full accurate description of how the sample was recruited as stated above.	**[4]**
12	**Outline two ethical issues raised by Piliavin, Rodin and Piliavin's subway Samaritan study**. Any two from: • Deception, informed consent, stress/psychological harm, risk of physical harm, no debriefing, invasion of privacy. **1 mark** – Identification of issue not linked to the study e.g. deception, **2 marks** – Identification of issue fully described in relation to the study e.g. Participants (travellers on the train) were deceived by the victim whom they thought was genuine, but who in fact was an actor pretending to be drunk or lame.	**[2+2]** **[4]**
13 **13(a)**	**In Rosenhan's study, 'On being sane in Insane Places', health professionals in the first experiment made a Type 2 error (a false positive) in their diagnosis of the pseudo patients.** **Describe the Type 2 error in this study**. Either one from: • Doctors classified the healthy pseudopatients as sick / insane. • Doctors made a false positive diagnosis by identifying healthy pseudopatients as sick / insane people.	

	• Wrong interpretation of normal behaviour e.g. oral acquisitive syndrome. **I mark** – Partial or vague answer e.g. doctors couldn't tell the sane from the insane. **2 marks** – Clear description of the Type 2 error made in this study as explained above.	**[2]**

Section A		
Question Number	**Answer**	**Max Mark**
13(b)	**Why does Rosenhan argue that it is worse to make a Type 2 error when diagnosing mental illness than physical illness?** Because psychiatric diagnoses carry personal, legal and social stigmas which are difficult/impossible to get rid of. **1 mark** – Partial or vague answer e.g. because of the stickiness of psychiatric labels. **2 marks** – Clear description of the reason as outlined above.	**[2]**
14	**Thigpen and Cleckley investigated multiple personality disorder in one patient. Outline two limitations of the findings of this study.** Any two from: • Interviewer bias/demand characteristics making the results invalid, explained in relation to the study. • Difficult to generalise from one person, explained in relation to the study. • Eve may have been lying / acting so findings are not valid. • Other appropriate answer. **1 mark** – Partial or vague answer e.g. Interviewer bias. **2 marks** – Clearly identified limitation explained in relation to the study e.g. Because Thigpen & Cleckley may have misinterpreted some of Eve's behaviours because they wanted to gather data to support their diagnosis that she was suffering from MPD.	**[2+2]** **[4]**
15 **15(a)**	**The study by Griffiths investigated cognitive bias and skill in fruit machine gambling**. **Identify two pieces of quantitative data gathered in this study.** Any two from: • Total time (in minutes) each participant was at a fruit machine. • Total number of gambles for each participant. • The amount of winnings for each participant. • The result of every gamble. • The number of irrational verbalisations made by each participant. • The number of rational verbalisations made by each participant. • Other appropriate answer **1 mark -** for each correctly identified piece of quantitative data as outlined above.	**[1+1]** **[2]**

15(b)	**Outline one advantage of quantitative data used in this study.** Any one from: • Numbers allow statistics to be applied and comparisons of participants in different conditions to be made. • Data is 'objective' and more 'scientific', more 'acceptable'. • Less open to bias and misinterpretation than qualitative data. **1 mark** – Partial or vague answer e.g. advantage identified but not linked to the study. **2 marks** – Advantage identified and linked to the study e.g. By counting the number of gambles each participant made Griffiths was able to make comparisons between participants in each of the groups.	**[2]**
	Section A Total	**[60]**

Section B		
Question Number	**Answer**	**Max Mark**
16	**Choose one of the core studies below:** • **Samuel and Bryant: conservation** • **Milgram: obedience.** • **Baron-Cohen, Jollife, Mortimer and Robertson: advanced test of theory of mind: autism in adults** **and answer the following questions:**	
16(a)	**Briefly outline the previous research or event which was the stimulus for your chosen study.** Most likely answer: Samuel & Bryant = Piaget's research into conservation abilities. Milgram = The Nazi atrocities of WW2. Baron-Cohen = His research into autism in children using the Sally-Anne Test. **0 marks** – No or irrelevant answer. **1 mark** – Previous research/event is identified. Description is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **2 marks** - Description of previous research/event is accurate. Detail is appropriate and understanding is very good. Fine details may be added. Expression and use of psychological terminology is good.	**[2]**
16(b)	**Describe how the sample in your chosen study was selected and suggest one advantage of using this sample**. **Sample:** Most likely answers: Samuel and Bryant = 252 boys and girls aged between 5 and 8½ from primary schools in Devon Milgram = advertisement in local newspaper +direct mail drop. From original pool of 500, 40 American males selected to provide variety of occupations and educations. Participants were aged between 20 and 50. Baron-Cohen = 16 high functioning adults with autism or AS, recruited from a variety of clinical sources + advert in the National Autistic Society magazine (Communication), 50 normal adults (25 male4, 25 female) drawn from the general population of Cambridge, 10 adult patients with Tourette Syndrome recruited from a tertiary referral centre in London. **0 marks** – No or irrelevant answer. **1 mark** – Only the sample is identified, with little or no elaboration, or more reference to advertising. **2 marks** – Description of sample is basic and lacks detail. There is some reference to how the sample was selected. Some understanding may be evident. Expression is generally poor.	

	3 marks – Description of both the sample and how it was selected is accurate and has elaboration. Understanding is good e.g. numbers, ages, genders, target population. **Advantage:** Likely answers: Samuel and Bryant = Because children of various ages were used, researchers were able to note how conservation skills develop with age. Milgram = Because American males showed 'blind' obedience, Milgram was able to claim that the Germans were not actually any more obedient than anyone else in extreme/novel circumstances. Baron-Cohen = Because the adult autistics had difficulty with the Eyes Test, Baron-Cohen was able to show that adult autistics as well as autistic children have mindreading deficits. **0 marks -** No or irrelevant answer. **1 mark** – Peripherally relevant advantage is identified, with little or no elaboration e.g. Samuel & Bryant: showed conservation skills in children, Milgram: showed obedience in American/males, Baron-Cohen: showed adult autistics can't do the Eyes Test. **2 marks** – Appropriate advantage chosen. Description of advantage is basic and lacks detail. **3 marks** – Appropriate advantage is chosen. Description of advantage is accurate and has elaboration. Advantage supports description of sample e.g. adults, autistics.	**[3+3]** **[6]**
16(c)	**Explain why your chosen study can be considered a laboratory experiment.** Most likely answers will refer to: * Artificial environment. * Use of various controls. * The IV and DV (except Milgram which was a controlled observation. However Milgram originally claimed it was a laboratory experiment). * The ease of replicability. * The ability to identify cause and effect. **0 marks** – No or irrelevant answer. **1-2 marks** - Description of why the study can be considered a laboratory experiment is very basic and lacks detail (e.g. one or two general statements are identified). Some understanding may be evident. Only peripherally linked to the named study. Expression is generally poor. **3-4 marks** – Description of the reason is accurate. Some omissions though overall detail is sound. Some understanding is evident. Fine details occasionally present, but most often absent. Some good links to the named study. Expression and use of psychological terminology is reasonable.	

Section B		
Question Number	**Answer**	**Max Mark**
	5-6 marks – Description of reason is accurate. Very few or no omissions. Detail is appropriate to level and time allowed. Understanding is very good. Fine details (such as controls, replicability etc) may be added which are accurately linked to the named study. Expression and use of psychological terminology is good.	
16(d)	**Give one advantage and one disadvantage of conducting your chosen study in a laboratory.** **Advantage:** Likely answers: * Allows cause and effect to be identified. * High level of control allows study to be replicated. **0 marks** – No or irrelevant answer. **1 mark** – Advantage is identified, not linked to chosen study and with little or no elaboration. **2 marks** – Description of advantage is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **3 marks** – Description of advantage is accurate and has elaboration. Understanding is good. **Disadvantage:** Likely answers: * Controlled environment/unrealistic tasks make the study low in EV. * Possibility of demand characteristics influencing results. * Possibility of socially desirable responses being given. **0 marks** – No or irrelevant answer. **1 mark** – Disadvantage is identified, not linked to chosen study and with little or no elaboration. **2 marks** – Description of disadvantage is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **3 marks** – Description of disadvantage is accurate and has elaboration. Understanding is good.	**[3+3]**
16(e)	**Suggest how your chosen study could be improved.** Answers are likely to refer to: * Improve the methodology e.g. ecological validity. * Use a different sample and/or sampling method. * Improve any possible ethical issues. **0 marks** – No or irrelevant answer. **1-3 marks** –One or two changes suggested which are very basic and lack detail (e.g. one or two general statements are identified such as: do the study in a natural environment). Some understanding may be evident. Expression is generally poor. The answer is unstructured, lacks organisation, grammatical structure is poor and there are many	**[6]**

	spelling errors. **4-6 marks** – Description of one or more appropriate changes is accurate. Detail is good and some understanding is evident. Expression and use of psychological terminology is reasonable. The answer has some structure and organisation, is mostly grammatically correct and has few spelling errors. **7-8 marks** – Description of at least two appropriate changes is accurate. Detail is appropriate to level and time allowed. Understanding is very good. Expression and use of psychological terminology is good. The answer is competently structured and organised and is grammatically correct with only occasional spelling errors.	
16(f)	**Outline the implications of the improvements you have suggested for your chosen study.** Answers are likely to refer to: • Improved validity/ecological validity. • Improved reliability. • Improved generalisability. • Improved usefulness. **0 marks** – No or irrelevant answer. **1-3 marks** – Implications are very basic and lack detail (e.g. one or two general statements are identified such as increased EV, no demand characteristics). Some understanding may be evident. Expression is generally poor. The answer is unstructured, lacks organisation, grammatical structure is poor and there are many spelling errors. **4-6 marks** – Description of implications is accurate. Detail is good and some understanding is evident. Expression and use of psychological terminology is reasonable. The answer has some structure and organisation. The answer is mostly grammatically correct with some spelling errors. **7-8 marks** – Description of implications is accurate. Detail is appropriate to level and time allowed. Understanding is very good. Expression and use of psychological terminology is good. The answer is competently structured and organised. The answer is grammatically correct with occasional spelling errors.	
	Section B Total	**[36]**

Section C		
Question Number	**Answer**	**Max Mark**
EITHER	**Outline one assumption of the developmental approach.**	
17(a)	Likely answer: It assumes there are clearly identifiable systematic changes that occur in an individual's behaviour from conception to death. **0 marks** – No or irrelevant answer. **1 mark** – Assumption is identified. Description is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **2 marks** – Description of assumption is accurate. Detail is appropriate and understanding is very good. Fine details may be added. Expression and use of psychological terminology is good.	**[2]**
17(b)	**Describe how the developmental approach could explain aggression.** Likely answer: As children grow, through social learning processes, they learn to be aggressive. **0 marks** – No or irrelevant answer. **1-2 marks** – Description is generally accurate, but is basic and lacks detail. Some understanding and or elaboration may be evident. Expression generally poor. No link to a core study = maximum 2 marks. **3-4 marks** – Description is accurate. Detail is appropriate and understanding is good. Elaboration (e.g. specific detail or example) is evident. Expression and use of psychological terminology is good.	**[4]**
17(c)	**Describe one similarity and one difference between any developmental approach studies.** **Similarity:** E.g. Both Bandura and Samuel & Bryant used a laboratory experiment….. **0 marks** No or irrelevant answer. **1 mark** – Similarity is identified, with little or no elaboration. **2 marks** – Description of similarity is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **3 marks** – Description of similarity is accurate and has elaboration. Understanding is good. **Difference:** E.g. Samuel & Bryant used a fairly large sample (252 boys and girls) whereas Freud studied only one little boy (Hans)….. **0 marks** No or irrelevant answer.	

	1 mark –Difference is identified, with little or no elaboration. **2 marks** – Description of difference is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **3 marks** – Description of difference is accurate and has elaboration. Understanding is good.	**[3+3]** **[6]**

Section C		
Question Number	**Answer**	**Max Mark**
17(d)	**Discuss strengths and weaknesses of the developmental approach using examples from any developmental approach studies.** Strengths may include: * Offers and explanation on why individuals of differing ages demonstrate different intellectual abilities, social skills and emotional responses…. * It adds to the continuing nature versus nurture debate…. Weaknesses may include: * It is often claimed to be reductionist…. * Many proposals in relation to age-related development have been shown to be too rigid…. **0 marks** – No or irrelevant answer or study specific answers. **1-3 marks** – There may be some strengths or weaknesses which are appropriate or peripheral to the question, or there may be an imbalance between the two. Discussion is poor with limited or no understanding. Expression is poor. Analysis is sparse and argument may be just discernible. Sparse or no use of supporting examples. **4-6 marks** – There may be some strengths and weaknesses which are appropriate to the question, or there may be an imbalance between the two. Discussion is reasonable with some understanding though expression may be limited. Analysis is effective sometimes and argument limited. Sparse use of supporting examples. **7-9 marks** – There may be a range of strengths (2 or more) and weaknesses (2 or more) which are appropriate to the question, or there may be an imbalance between the two. Discussion is good with some understanding and good expression. Analysis is reasonably effective and argument is informed. Some use of supporting examples. Maximum mark of 7 for strengths or weaknesses only. **10-12 marks** – There is a good range of strengths (2 or more) and weaknesses (2 or more) which are appropriate to the question. There is a good balance between the two. Discussion is detailed with good understanding and clear expression. Analysis is effective and argument well informed. Appropriate use of supporting examples. The answer is competently structured and organised. Answer is mostly grammatically correct with occasional spelling errors. **Question Total [24]**	**[12]**

Section C		
Question Number	**Answer**	**Max Mark**
OR 18(a)	**Outline one assumption of the physiological approach.** Likely answer: All that is psychological is first physiological – that since the mind appears to reside in the brain, all thoughts, feelings and behaviours ultimately have a physiological cause. **0 marks** – No or irrelevant answer. **1 mark** – Assumption is identified. Description is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **2 marks** – Description of assumption is accurate. Detail is appropriate and understanding is very good. Fine details may be added. Expression and use of psychological terminology is good.	**[2]**
18(b)	**Describe how the physiological approach could explain structural changes in the brain.** Likely answer: * People who use navigational skills constantly in their work show differences in the part of the brain (hippocampus) that deals with these skills compared to those who don't. * People who have had their corpus callosum severed have difficulty processing information compared to those who haven't. **0 marks** – No or irrelevant answer. **1-2 marks** – Description is generally accurate, but is basic and lacks detail. Some understanding and or elaboration may be evident. Expression generally poor. No link to a core study = maximum 2 marks. **3-4 marks** – Description is accurate. Detail is appropriate and understanding is good. Elaboration (e.g. specific detail or example) is evident. Expression and use of psychological terminology is good.	**[4]**
18(c)	**Describe one similarity and one difference between any physiological approach studies.** **Similarity:** E.g. Both Maguire and Sperry showed how differences in brain structure (Maguire = hippocampi of taxi and non-taxi drivers, Sperry = patients with severed corpus callosum and individuals with corpus callosum intact)) resulted in differences in behaviour…. **0 marks** No or irrelevant answer. **1 mark** – Similarity is identified, with little or no elaboration. **2 marks** – Description of similarity is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **3 marks** – Description of similarity is accurate and has elaboration. Understanding is good. **Difference:** E.g. Maguire used British (London-based) participants whereas Dement and Kleitman used American (Chicago area) participants….	

Section C		
Question Number	**Answer**	**Max Mark**
18(d)	**0 marks** No or irrelevant answer. **1 mark** –Difference is identified, with little or no elaboration. **2 marks** – Description of difference is basic and lacks detail. Some understanding may be evident. Expression is generally poor. **3 marks** – Description of difference is accurate and has elaboration. Understanding is good. **Discuss strengths and weaknesses of the physiological approach using examples from any physiological studies.** Strengths may include: * It provides strong counter-arguments to the nurture side of the nature-nurture debate… * Its research methods are very reliable… Weaknesses may include: * It is very reductionist * Research methods have low ecological validity **0 marks** – No or irrelevant answer or study specific answer. **1-3 marks** – There may be some strengths or weaknesses which are appropriate or peripheral to the question, or there may be an imbalance between the two. Discussion is poor with limited or no understanding. Expression is poor. Analysis is sparse and argument may be just discernible. Sparse or no use of supporting examples. **4-6 marks** – There may be some strengths and weaknesses which are appropriate to the question, or there may be an imbalance between the two. Discussion is reasonable with some understanding though expression may be limited. Analysis is effective sometimes and argument limited. Sparse use of supporting examples. **7-9 marks** – There may be a range of strengths (2 or more) and weaknesses (2 or more) which are appropriate to the question, or there may be an imbalance between the two. Discussion is good with some understanding and good expression. Analysis is reasonably effective and argument is informed. Some use of supporting examples. Maximum mark of 7 for strengths or weaknesses only. **10-12 marks** – There is a good range of strengths (2 or more) and weaknesses (2 or more) which are appropriate to the question. There is a good balance between the two. Discussion is detailed with good understanding and clear expression. Analysis is effective and argument well informed. Appropriate use of supporting examples. The answer is competently structured and organised. Answer is mostly grammatically correct with occasional spelling errors.	**[3+3]** **[6]** **[12]**
	Section C Total	**[24]**
	Paper Total	**[120]**

Grade Thresholds

Advanced GCE (Subject) (Aggregation Code(s))
January 2009 Examination Series

Unit Threshold Marks

Unit		Maximum Mark	A	B	C	D	E	U
G541	Raw	60	44	39	34	29	25	0
	UMS	60	48	42	36	30	24	0
G542	Raw	120	96	84	72	60	48	0
	UMS	140	112	98	84	70	56	0

Statistics are correct at the time of publication.

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