

Mark Scheme

June 2017

GCE PSYCHOLOGY (9PS0/01)
PAPER 1: FOUNDATIONS IN
PSYCHOLOGY

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# General marking guidance

- All candidates must receive the same treatment. Examiners must mark the last candidate in exactly the same way as they mark the first.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than be penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme.
- Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification/indicative content will not be exhaustive.
- In a levels-based mark scheme there are two distinct parts the indicative content and the levels descriptors:
  - o Indicative content is exactly that they are factual points that candidates are likely to use to construct their answer. It is possible for an answer to be constructed without mentioning some or all of these points, as long as they provide alternative responses to the indicative content that fulfils the requirements of the question. It is the examiner's responsibility to apply their professional judgement to the candidate's response in determining if the answer fulfils the requirements of the question.
  - o The mark grid identifies which assessment objective is being targeted by each bullet point within the level descriptors, and describes the ways in which they will be evidenced across the ability range.
- When deciding how to reward an answer using a levels based mark scheme, a 'best fit' approach should be used:
  - Examiners should first decide which descriptor most closely matches the candidate answer and place it in that band.
  - o The mark awarded within the band according to each of the assessment objectives will be decided according to how securely all bullet points are displayed at that level.
  - o In cases of uneven performance, this will still apply. Candidates will be placed in the band that best describes their answer, and they will be awarded marks towards the top or bottom of that band depending how securely they have evidenced bullet points in that, or other descriptors.
- Detailed guidance how to apply all mark schemes, with exemplars for this unit, will be given at standardisation.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, a team leader must be consulted before a mark is given.
- Crossed-out work should be marked unless the candidate has replaced it with an alternative response.

## **SECTION A SOCIAL PSYCHOLOGY**

Question	Answer	Mark
Number		
1(a)	AO2 (1 mark)	(1)
	One mark for statement of the sampling method.	
	For example:	
	Opportunity/Opportunistic (sampling) (1).	
	Look for other reasonable ways of expressing the sampling method.	

Question Number	Answer	Mark
1(b)	AO2 (2 marks)	(2)
	One mark for partially operationalised directional hypothesis.  Two marks for a fully operationalised directional hypothesis.	
	For example:	
	<ul> <li>Female students will be more likely to (say they would) follow the teacher's instruction (1)</li> <li>Female students will be more likely than male students to (say they would) follow the female teacher's instruction to pick up the litter (2)</li> </ul>	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
1(c)	AO2 (1 mark), AO3 (1 mark)	(2)
	One mark for identification of an improvement in the context of Lauren and Adam's research (AO2) One mark for justification of improvement (AO3)	
	For example:	
	The sample could include people outside school instead of just students (1) to allow Lauren and Adam to generalise their findings beyond students to the target population (1).	
	Look for other reasonable marking points. Generic answers score 0 marks.	

Question	Answer	Mark		
Number 2	AO2 (4 marks)			
	One mark for each point explaining realistic conflict theory in relation to the scenario.			
	<ul> <li>Sherif's (1966) research found that competition, such as between the two schools of Elk and Seaside High, can cause intergroup conflict (1). Realistic conflict theory suggests that whenever Seaside High are in competition with Elk Manor for the hockey cup conflict will occur and prejudice follows (1). This means that Elk Manor may judge Seaside High as having an inferior sports team, therefore would try to be louder and more encouraging to their team (1). The schools could create superordinate goals to encourage the sports teams to work together which may reduce the hostility (1).</li> </ul>			
	Look for other reasonable marking points.			
	Answers must relate to the scenario.			
	Generic answers score 0 marks.			

Question Number	Indicative content		
3	<ul> <li>AO1 (4 marks), AO3 (4 marks)</li> <li>Research in social psychology should consider ethical guidelines such as the right to withdraw and distress.</li> <li>Ethical practice includes obtaining informed consent from participants in social research.</li> <li>Ethical guidelines include keeping participants from harm when they are involved in social psychology studies.</li> <li>Cohrs et al (2012) did not disclose the details of the participants or peer-raters in their study.</li> <li>Burger (2009) made reasonable assumptions about continued obedience from Milgram's (1963) work rather than making participants go to 450v, so social research can be ethical.</li> <li>Informed consent could increase demand characteristics and make research findings less valid, so studies such as Milgram (1963) may not have been as useful as they were.</li> <li>Reicher and Haslam (2006) had two independent clinical psychologists monitoring the study and they could contact the participants at any time.</li> <li>Where researchers do not disclose participant details their studies into prejudice/obedience can be carried out within ethical guidelines for confidentiality from The Code of Conduct (2009).</li> <li>Look for other reasonable marking points.</li> </ul>	(8)	

Level	Mark	Descriptor			
Candida	AO1 (4 marks), AO3 (4 marks)  Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.				
Level 0	0	No rewardable material.			
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1)			
		A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)			
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1)			
		Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)			
Level 3	5–6	Demonstrates accurate knowledge and understanding. (AO1)			
	marks	Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)			
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1)			
		Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)			

## **SECTION B COGNITIVE PSYCHOLOGY**

Question Number	Answer	Mark
4	AO1 (4 marks)	(4)
	One mark for each point describing the multi-store model.	
	<ul> <li>Information primarily enters the system through a sensory experience and into the sensory register which is modality specific (1). Information is then passed to short term memory where it can be held for around 18-30 seconds before it decays (1). If this data is rehearsed to maintain the information it can be transferred to long term memory (1). Long-term memory is said to have a potentially infinite capacity and duration (1).</li> <li>Look for other reasonable marking points.</li> </ul>	

Question Number	Answer	Mark
5(a)	AO2 (2 marks)	(2)
	One mark for the range for the pictures recalled by children with dyslexia.	
	One mark for the range for the pictures recalled by children without dyslexia.	
	Range of number of pictures recalled by children with dyslexia  • 12	
	Range of number of pictures recalled by children without dyslexia  • 14	
	Look for other reasonable marking points.	

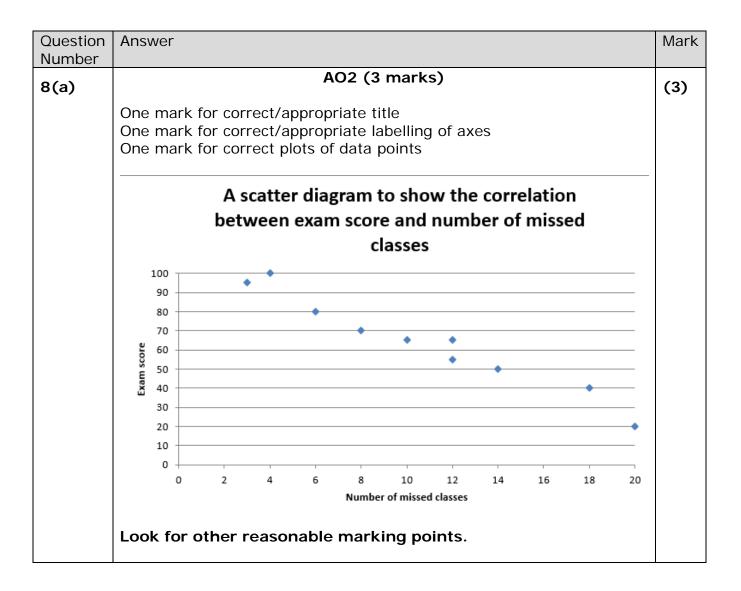
Question Number	Answer	Mark
5(b)	AO2 (4 marks)	(4)
	One mark for squaring the values of the number of pictures recalled by children with dyslexia minus the mean (10.9) for each score, $(x-\bar{x})^2$ 5.1 <sup>2</sup> , -2.9 <sup>2</sup> , -5.9 <sup>2</sup> , 1.1 <sup>2</sup> , 3.1 <sup>2</sup> , 6.1 <sup>2</sup> , -3.9 <sup>2</sup> , 0.1 <sup>2</sup> , -4.9 <sup>2</sup> , 2.1 <sup>2</sup>	
	One mark for calculating the sum of these values = 160.9	
	One mark for dividing this by 9 (n-1) = <b>17.87777778</b>	
	One mark for calculating the square root = 4.228212125 / <b>4.23</b> to two decimal places	

Question Number	Indicative content		
	<ul> <li>AO1 (4 marks), AO3 (4 marks)</li> <li>AO1 <ul> <li>Laboratory experiments in cognitive psychology are conducted under highly controlled conditions.</li> <li>The experimental method manipulates an IV and measures the DV to find out about memory.</li> <li>Laboratory experiments often used unnatural tasks to test participant recall and memory, such as word lists.</li> <li>Laboratory experiments in cognitive psychology can be replicable as they have a standardised procedure.</li> </ul> </li> <li>AO3 <ul> <li>It could be difficult to generalise findings from studies such as Peterson and Peterson (1959) to real life memory situations from experiments because of low validity so they may not be fully useful.</li> <li>Standardised procedures increase reliability so studies such as Baddeley (1966b) can be replicated, making them useful because results can be checked.</li> <li>Steyvers and Hemmer (2012) used a naturalistic scenes for testing the effect of prior knowledge so experiments can be conducted with some ecological validity and be useful to cognitive psychology.</li> </ul> </li> </ul>	(8)	
	Bartlett (1932) used serial reproduction to test reconstructive memory so his research is difficult to replicate to retest the results, therefore experiments are more useful for providing empirical evidence about memory.		
	Look for other reasonable marking points.		

Level	Mark	Descriptor					
	AO1 (4 marks), AO3 (4 marks)						
Candida		demonstrate an equal emphasis between Knowledge and nding vs assessment/conclusion in their answer.					
Level 0	0	No rewardable material					
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1)					
		Generic assertions may be presented. Limited attempt to address the question. (AO3)					
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1)					
		Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)					
Level 3	5–6	Demonstrates accurate knowledge and understanding. (AO1)					
	marks	Arguments developed using mostly coherent chains of reasoning leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)					
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1)					
		Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)					

#### SECTION C BIOLOGICAL PSYCHOLOGY

Question Number	Answer	Marks
7	AO1 (2 marks)	(2)
,	One mark for each point describing how recreational drugs change how neurotransmitters operate.	(2)
	For example:  • Recreational drugs work by increasing or decreasing	
	neurotransmitters at the synaptic gap. (1) If a drug increases the level of dopamine, the user experiences an intense feeling of pleasure or euphoria (1).	
	Look for other reasonable marking points.	



		7
Question	Answer	Mark

Number		
8(b)	AO2 (1 mark)	(1)
	One mark for correctly identifying the correlation they have drawn	
	For example:	
	Negative / Negative correlation (1)	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
8(c)	AO2 (2 marks)	(2)
	One mark for each reason stating why Spearman's rho would be an appropriate statistical test	
	For example:	
	<ul> <li>They are looking for a relationship (1).</li> <li>They have ordinal data (1).</li> </ul>	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
9	AO2 (2 marks)	(2)
	One mark for an appropriate similarity between the two explanations of aggression. One mark for an appropriate difference between the two explanations of aggression.	
	For example:	
	<ul> <li>A similarity is that they both share that there is an internal component of aggression Freud says this is an unconcious processes but biological psychology claims it is testosterone (1). However, a difference is that the biological approach to aggression is supported by objective findings whereas the psychodynamic approach is based on subjective material (1)</li> <li>Look for other reasonable marking points.</li> </ul>	

AO1 (4 marks) AO3 (4 marks)  For example: Gottesman and Shields (1966)  AO1  • Twins were assessed for their zygosity (e.g. blood	(8)
AO1	
grouping).  There was a higher concondance rate for MZ twins for schizophrenia compared to DZ twins.  To determine the presense of a mental disorder qualitative and quantitative methods were used (e.g. case histories)  Twins were sampled using opportunity sampling from twins seen by the Maudsley and Bethlem Royal Joint hospital.  AO3  While twins share genetic information it is difficult to separate environmental factors so studies cannot establish genetics as a causal factor for behaviour.  The predisposition of schizophrenia was not 100% twin studies are not able provide conclusive evidence of genetic influences on human behaviour.  If the same measures of schizophrenia (e.g. MMPI) are used then a twin study could be easily replicated.  Twin studies have small sample sizes as twins are not common, so findings may not be representative of a wider population.  Look for other reasonable marking points.	

Level	Mark	Descriptor			
Candid	AO1 (4 marks), AO3 (4 marks)  Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.				
	0	No rewardable material.			
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)			
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1)  Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)			
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)			
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)			

## **SECTION D LEARNING THEORIES**

Question Number	Answer	Mark
11	AO1 (2 marks)	(2)
	One mark for each definition	
	For example:	
	<ul> <li>Unconditioned response (UCR)</li> <li>A response that is naturally occurring without any prior learning (1).</li> </ul>	
	<ul> <li>Extinction</li> <li>The loss of a conditioned response to the conditioned stimulus (1).</li> </ul>	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
12	AO1 (2 marks), AO3 (2 marks)	(4)
	One mark for identification of each practical issue (AO1) One mark for justification/exemplification of each practical issue (AO3)	
	<ul> <li>Rats are more practical to use than humans, as their gestational period is very short (1). This will help to investigate characteristics across generations which is harder using humans (1).</li> <li>Environmental factors can be better controlled when using animals in research than humans (1). This would make studies more internally valid as extraneous variables should not impact on research (1).</li> <li>Look for other reasonable marking points.</li> </ul>	

Question Number	Answer	Mark
13	AO2 (3 marks)	(3)
	One mark for each point describing an observation in the supermarket.	
	For example:	
	<ul> <li>A standardised list of behaviours that demonstrate the helping behaviours could be used (1). A participant observation would be used which involves the researcher asking for help to reach the top shelf (1). Helping and not helping behaviour in the supermarket could be recorded using a tally chart (1).</li> </ul>	
	Look for other reasonable marking points.	
	Answers must relate to the scenario.	
	Generic answers score 0 marks.	

Question Number	Indicative content	Mark
14	AO1 (4 marks), AO2 (4 marks)	(8)
	For example: Key question: Is the influence of role models and celebrities something that causes anorexia?	
	<ul> <li>Anorexia is diagnosed when BMI falls below 17.5</li> <li>Anorexia costs the NHS money to treat the disorder so trying to prevent anorexia would save money.</li> <li>Ana Carolina Reston was a model who died from anorexia and could have learned this from her role models</li> <li>Symptoms of anorexia could lead to sufferers not working and this affects society as a whole.</li> </ul>	
	<ul> <li>Advertisers use classical conditioning to associate thinness/fashion with fame and popularity which encourages weight loss and reduced BMI.</li> <li>Operant conditioning suggests if someone is complimented on initial weight loss they would continue losing weight and this makes them ill.</li> <li>Celebrities and models are used to advertise products such as fashionable clothing so individuals will observe and imitate these role models.</li> <li>The link between celebrities and anorexia is purely correlational and there are other factors involved in the disorder that may be why they cannot work.</li> </ul>	
	Look for other reasonable marking points.	

Level	Mark	Descriptor			
Candida	AO1 (4 marks), AO2 (4 marks)  Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.				
Level 0	0	No rewardable material			
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1)  Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)			
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1)  Discussion is partially developed, but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)			
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)			
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1)  Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)			

## **SECTION E ISSUES AND DEBATES**

Question Number	Indicative content	Mark
	AO1 (4 marks), AO3 (4 marks)  AO1  Reductionism involves breaking aspects of human behaviour into individual parts. The multi-store model explains memory a simplistic processing system of three stores. Many models of memory in cognitive psychology consider how the brain operates in a similar manner to a computer. Cognitive psychology also used case studies of brain damaged patients which gather detailed information.  AO3  Research into cognitive psychology often uses simplified tasks, like word lists, which reduce memory to a system of information processing. Multi-store model assumes attention and rehearsal is required for memory which is reductionist as it ignores how people recall experiences they have not rehearsed. Bartlett's (1932) reconstructive memory relies on schemas which come from whole life experience therefore is holistic so not all cognitive psychology can be considered reductionist. The case of HM demonstrated the ability to learn procedural skills without rehearsal, showing that reducing memory to a set of stores is insufficient to explain how all memory works so cognitive psychology should be more holistic.	(8)
	Look for other reasonable marking points.	

Level	Mark	Descriptor			
AO1 (4 marks) AO3 (4 marks)  Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer.					
Level 0	0	No rewardable material.			
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1)  Coporis assertions may be presented. Limited attempt to address.			
		Generic assertions may be presented. Limited attempt to address the question. (AO3)			
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1)			
		Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)			
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)			
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)			

Question Number	Indicative content	
16	<ul> <li>AO1 (4 marks), AO2 (4 marks), AO3 (4 marks)</li> <li>AO1 <ul> <li>Obedience is the process of following a direct order from an authority figure.</li> <li>Social impact theory assumes multiplicative factor of strength, immediacy and number influence social behaviour.</li> <li>Biological psychology includes the evolutionary element of human behaviour.</li> <li>Hormones such as testosterone may lead to aggression.</li> </ul> </li> <li>AO2 <ul> <li>Matt may have been told by a gang leader to hit another person.</li> <li>Matt may be influenced by a high-status friend to be aggressive.</li> <li>He may be fighting to show that he is stronger than other males around him.</li> <li>As Matt is 16 years old, he has increased levels of testosterone.</li> </ul> </li> <li>AO3 <ul> <li>Blass (2012) suggests that obedient behaviour is similar cross-culturally and therefore is a plausible explanation of Matt's behaviour.</li> <li>Social impact theory does not consider individual differences like personality and sees humans as passive so may not fully explain behaviour.</li> <li>Raine (1997) suggests that brain activity is different in convicted murderers so biological explanations that focus on the brain rather than evolution may be a better explanation.</li> <li>Freud suggests that unconscious processes play a significant role in aggression not hormonal imbalances, therefore it may be that neither social or biological explanations can explain Matt's aggression.</li> </ul> </li> <li>Look for other reasonable marking points.</li> </ul>	(12)

Level	Mark	Descriptor			
AO1 (4 marks), AO2 (4 marks), AO3 (4 marks)  Candidates must demonstrate an equal emphasis between knowledge and understanding vs application vs evaluation/conclusion in their answer.					
Level 1	0	No rewardable material.			
Level 1	1–3 marks	Demonstrates isolated elements of knowledge and understanding. (AO1)			
		Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques & procedures).  (AO2)			
		A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)			
Level 2	4–6 marks	Demonstrates mostly accurate knowledge and understanding. (AO1)			
		Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2)			
		Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)			
Level 3	7–9 marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques & procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2)			
		Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)			
Level 4	10–12 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1)			
		Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2)			
		Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)			

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