

### Psychology Paper 2 Mark Scheme

Question Number	Answer	Mark
<b>1(a)</b>	<p style="text-align: center;"><b>AO1 (2 marks)</b></p> <p>One mark for naming A as the suprachiasmatic nucleus One mark for naming B as the pineal gland</p> <p>Accept A as hypothalamus.</p>	<b>(2)</b>

Question Number	Answer	Mark
<b>1(b)</b>	<p style="text-align: center;"><b>AO1 (3 marks)</b></p> <p>One mark for describing that the SCN sends signals to the pineal gland. One mark for describing how the pineal gland responds. One mark for describing how melatonin affects sleep.</p> <p>For example:</p> <p>When light levels fall the SCN sends signals to the pineal gland (1) which induces the production of the hormone melatonin (1). This inhibits the brain mechanisms that promote wakefulness causing sleep to occur (1).</p> <p><b>Look for other reasonable marking points.</b></p>	<b>(3)</b>

Question Number	Answer	Mark
<b>2(a)</b>	<p style="text-align: center;"><b>AO2 (2 marks)</b></p> <p>One mark for the correct difference of 1.4, between a typical 11/12-year-old child from Switzerland (10) and a typical 15/16-year-old child from Finland (8.6). One mark for the correct answer of 16.3 % (<math>1.4/8.6 \times 100</math>).</p> <p><b>Only accept answer to one decimal place as above.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
<b>2(b)</b>	<p style="text-align: center;"><b>AO2 (4 marks)</b></p> <p>One mark for each point describing the results up to a maximum of four marks, providing a logical description of sleep duration for children in different countries.</p> <p><b>Answers must relate to the data provided in Table 1.</b></p> <p>For example:</p> <p>There is a variation in the amount of sleep duration that children have between different countries (1) however the younger children (11/12-year-olds) within a country always have more sleep than the older children (15/16-year-olds) (1). Children from Finland have less sleep at each age compared to the other countries (1) in particular the 11/12-year-olds have only slightly more sleep than the oldest children from Switzerland (1).</p> <p><b>Look for other reasonable marking points.</b></p>	<b>(4)</b>

Question Number	Answer	Mark
<b>2(c)</b>	<p style="text-align: center;"><b>AO3 (2 marks)</b></p> <p>One mark for recognising that the children of the same age should have the same sleep duration.</p> <p>One mark for recognising a relevant factor, which could include social, cultural, gender and genetics.</p> <p>For example:</p> <p>If the external zeitgeber of light controlled sleep duration then the children should have similar patterns of sleep duration, since in the study it stated that the countries all had similar patterns of day length (1). Since this is not the case, there must be some other factors, e.g. cultural that are influencing the sleep duration (1).</p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
<b>2(d)</b>	<p style="text-align: center;"><b>AO2 (3 marks)</b></p> <p>One mark for each suitable question, up to a maximum of three marks. Do not accept questions that elicit closed responses.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• How do you think your ability to concentrate in lessons is affected when you do not get enough sleep? (1)</li> <li>• How does the lack of sleep affect your relationships with friends? (1)</li> <li>• What is the effect on your mood when you have not had a good night's sleep? (1)</li> <li>• How is your performance in a test affected if you have not slept well the night before? (1)</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(3)</b>

	Answer	Mark
<b>3(a)(i)</b>	<p style="text-align: center;"><b>AO2 (3 marks)</b></p> <p>One mark for describing that for below seven hours of sleep for both men and women the hazard ratio is greater than one. One mark for describing that for above seven hours of sleep for both men and women the hazard ratio is greater than one. One mark for describing a directional correlation.</p> <p>Maximum one mark for describing a directional correlation.</p> <p>For example:</p> <p>As the number of hours of sleep decrease below seven for men and women, the hazard ratio increases (1), similarly as the number of hours increase above seven hours the hazard ratio increases (1). There is a positive correlation above seven hours sleep (1).</p> <p><b>Look for other reasonable marking points.</b></p>	<b>(3)</b>

Question Number	Answer	Mark
<b>3(a)(ii)</b>	<p style="text-align: center;"><b>AO2 (1 mark)</b></p> <p>One mark for stating Spearman rank correlation Cco-efficient. Accept Spearman.</p> <p><b>Reject all others.</b></p>	<b>(1)</b>

Question Number	Answer	Mark																																								
3(b)(i)	<div>AO2 (4 marks)</div> <table><tr><td></td><td></td><td>observed</td><td>expected</td><td>O-E</td><td>(O-E)<sup>2</sup></td><td>(O-E)<sup>2</sup>/E</td></tr><tr><td rowspan="2">Females</td><td>&lt;7 hours</td><td>202</td><td>199</td><td>3</td><td>9</td><td>0.045</td></tr><tr><td>&gt;7 hours</td><td>480</td><td>483</td><td>3</td><td>9</td><td>0.019</td></tr><tr><td rowspan="2">Males</td><td>&lt;7 hours</td><td>191</td><td>194</td><td>3</td><td>9</td><td>0.046</td></tr><tr><td>&gt;7 hours</td><td>471</td><td>468</td><td>3</td><td>9</td><td>0.019</td></tr><tr><td colspan="4"></td><td></td><td></td><td>0.129</td></tr></table> <p>One mark for accurate completion of O-E column. One mark for accurate completion of (O-E)<sup>2</sup> column. One mark for accurate completion of (O-E)<sup>2</sup>/E column. (allow four decimal places if offered 0.0452, 0.0186, 0.0463, 0.0192). One mark for correct answer 0.129 (0.1293). Accept answer 0.13. Award all four marks for a correct answer to chi-squared value if the table is not used to aid the calculation.</p>			observed	expected	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E	Females	<7 hours	202	199	3	9	0.045	>7 hours	480	483	3	9	0.019	Males	<7 hours	191	194	3	9	0.046	>7 hours	471	468	3	9	0.019							0.129	(4)
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Question Number	Answer	Mark
<b>3(b)(ii)</b>	<p style="text-align: center;"><b>AO2 (1 mark)</b></p> <p>X<sup>2</sup> is 3.84</p> <p><b>Reject all others.</b></p>	<b>(1)</b>

Question Number	Answer	Mark
<b>3(b)(iii)</b>	<p style="text-align: center;"><b>AO3 (1 Mark)</b></p> <p>One mark for using the figures to justify that the duration of sleep is not significantly different between males and females.</p> <p>For example:</p> <p><math>X^2</math> calculated is 0.130 and the critical value is 3.84 (<math>p \leq .05</math>, <math>df=1</math>, two-tailed), as 0.130 is less than 3.84 (1) there is no significant difference.</p>	<b>(1)</b>

Question Number	Indicative content	Mark
4	<p style="text-align: center;"><b>AO1 (4 marks), AO3 (4 Marks)</b></p> <p><b>Example case studies</b></p> <ul style="list-style-type: none"> <li>• Studies on synchronisation of menstrual cycles when women live closely together, e.g. Sabbagh and Barnard 1984</li> <li>• Studies on pheromones, e.g. lint on lip study Russell et al. 1980</li> <li>• Cave studies, e.g. Reinberg 1967</li> <li>• Onset of menarche varying with seasons and with blind girls</li> <li>• Variation in conception rates with season</li> </ul> <p><b>AO1: Knowledge of one piece of research, e.g. Cave studies Reinberg (1967)</b></p> <ul style="list-style-type: none"> <li>• A young woman</li> <li>• Spent three months in a cave with only dim light from a lamp.</li> <li>• Her menstrual cycle shortened to 25.7 days.</li> <li>• Her circadian sleep-wake cycle lengthened to 24.6 hours.</li> <li>• It took a year to return to its normal frequency.</li> </ul> <p><b>AO3: Evaluation points may include:</b></p> <ul style="list-style-type: none"> <li>• limited sample sizes</li> <li>• cultural variations being subject to biological differences as well as external zeitgebers</li> <li>• evolutionary advantage in support</li> <li>• evidence that the male monthly cycle also exists</li> <li>• controlled experiment approach</li> <li>• supporting circadian evidence of sleep-wake cycle</li> <li>• use of research studies into internal pacemakers to show that internal factors can over-ride the external zeitgeber, e.g. universality of PMS.</li> </ul> <p><b>For example: Cave study</b></p> <ul style="list-style-type: none"> <li>• Only one woman used so might exhibit bias.</li> <li>• Carried out in controlled environment so other variables are controlled but might not be ecologically valid.</li> <li>• Other isolation studies have been done and support the outcome, showing external validity.</li> <li>• The woman used was Caucasian and may not be generalised to other cultures.</li> <li>• Low light levels have been shown to affect the reproductive cycle, such as affecting the onset of menarche and levels of fertility.</li> <li>• Blind girls reach menarche earlier than sighted ones.</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	(8)

Level	Mark	Descriptor
<b>A01 (4 marks), A03 (4 marks)</b> <b>Candidates must demonstrate an equal emphasis between knowledge and understanding versus evaluation/conclusion in their answer.</b>		
	0	No rewardable material.
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (A01) Generic assertions may be presented. Limited attempt to address the question. (A03)
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (A01) 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. (A03)
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (A01) 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. (A03)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (A01) 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. (A03)

Question Number	Answer	Mark
<b>5(a)</b>	<p style="text-align: center;"><b>AO1 (3 marks)</b></p> <p>One mark describing the unconditioned stimulus-response (UCS–UCR).            One mark describing the use of a new conditioning stimulus (CS).            One mark for describing the link of the new conditioned stimulus (CS) to the now conditioned response (CR).</p> <p>For example:</p> <p>Classical conditioning uses a stimulus-response that already exists such as when dogs salivate at the sight of food (1). A bell is rung when presenting food and the response of salivation is seen (1). After several times the bell alone can produce salivation and the response is now considered a conditioned response to the new condition stimulus of a bell (1).</p> <p><b>Look for other reasonable marking points, using an appropriate example.</b></p>	<b>(3)</b>



Question Number	Answer	Mark
<b>5(b)</b>	<p style="text-align: center;"><b>AO1 (2 marks), AO3 (2 marks)</b></p> <p>One mark for a description of negative reinforcement strategy and one mark for a description of punishment strategy, up to two marks.            One mark for providing each justification of how the two strategies differ, up to a maximum of two marks.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• In negative reinforcement strategy the aversive stimuli is removed when a change occurs in the person's behaviour to a more desired form, for example, a school pupil might be allowed back into class after exclusion for disruptive behaviour when they promise to behave appropriately (1).</li> <li>• A punishment strategy such as exclusion is administered with no requirement for the person to change their behaviour (1).</li> <li>• The use of negative reinforcement strategy involves exhibiting the more desired behaviour, for example, commitment from a pupil to not misbehave, whereas in using punishment strategy there is no such requirement (1).</li> <li>• The person is more likely to develop a deceitful nature, such as manipulating people in the class so as to shift the blame for their own poor behaviour, when a punishment strategy is used rather than negative reinforcement, to avoid being caught and punished (1).</li> </ul> <p><b>Look for other reasonable marking points, using an appropriate example.</b></p>	<b>(4)</b>

Question Number	Answer	Mark
<b>6(a)</b>	<p style="text-align: center;"><b>AO2 (1 mark)</b></p> <p>One mark for stating qualitative data from the text.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• He had difficulty concentrating when he thought insects were present.</li> <li>• He was teased by his classmates.</li> <li>• He said ladybirds and crickets were his most feared insects.</li> </ul>	<b>(1)</b>

Question Number	Answer	Mark
<b>6(b)</b>	<p style="text-align: center;"><b>AO2 (1 mark)</b></p> <p>One mark for identifying the boy's behaviour of pulling his hood over his head.</p> <p><b>The answer must make reference to the boy's behaviour.</b></p>	<b>(1)</b>

Question Number	Answer	Mark
<b>6(c)</b>	<p style="text-align: center;"><b>AO2 (2 marks)</b></p> <p>A logical description linking the reward to the reduction in anxiety, up to two marks.</p> <p>For example:</p> <p>The boy was suffering anxiety when he was in the presence of insects and was not able to succeed in his school-work, using rewards gained from completing mathematical problems (1).</p> <p>He was able to associate the reward with his success which replaced his previous anxiety in the presence of insects (1).</p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
<b>7(a)</b>	<p style="text-align: center;"><b>AO1 (1 mark)</b></p> <p>One mark for identifying the use of media to ask for volunteers (1).</p>	<b>(1)</b>

Question Number	Answer	Mark
<b>7(b)</b>	<p style="text-align: center;"><b>AO1 (4 marks)</b></p> <p>One mark for a valid example and one mark for justification, for each advantage and disadvantage.</p> <p>For example:</p> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>• Participants may have less ethical problems (1) owing to their volunteering at the outset (1).</li> <li>• The studies will be ecologically valid (1) since the participants have the phobic condition being explored (1).</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• The sample maybe biased (1) where the participants might be engaged for the wrong reason such as a need for attention (1).</li> <li>• Might not be representative (1) due to the target group of the campaign being too specific (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(4)</b>

Question Number	Answer	Mark
<b>7(c)</b>	<p style="text-align: center;"><b>AO3 (4 marks)</b></p> <p>Up to two marks for each explanation as to how psychoanalysis is an appropriate alternative to systematic desensitisation to treat phobias.</p> <p>For example:</p> <p>Psychoanalysis addresses the root cause of the phobia, whereas systematic desensitisation only treats the symptoms (1). Therefore the phobia is unlikely to spontaneously re-emerge (1).</p> <p>Psychoanalysis is more ethical (1) in that the client is engaged in an understanding of their problem and gains insight, whereas in systematic desensitisation the therapist does not attempt to allow the client to gain an understanding of their phobia and only takes them through the agreed hierarchy of exposure (1).</p> <p><b>Look for other reasonable marking points.</b></p>	<b>(4)</b>

Question Number	Answer	Mark
<b>8(a)</b>	<p style="text-align: center;"><b>AO1 (3 marks)</b></p> <p>Three marks for a description of how behavioural categories were created and recorded.</p> <p>For example:</p> <p>We initially observed the ..... to see what behaviours were visible (1). We made a list of these and compared lists between the different observers to agree on a complete list (1). We then grouped them into categories of similar activities, for example..... Once the record sheet was created we trialled it by independent observations to see if it was feasible to record these categories clearly (1).</p> <p><b>Look for other reasonable marking points relating to student's own observation investigations.</b></p>	<b>(3)</b>

Question Number	Answer	Mark
<b>8(b)</b>	<p style="text-align: center;"><b>AO3 (3 mark)</b></p> <p>One mark for each statement improving the observations.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• To increase reliability we could have modified the record sheet by .....(1).</li> <li>• Increased the time spent observing .....(1).</li> <li>• Repeat the observations in other situations such as .....(1).</li> <li>• Have more than one observer rating the same behaviour (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(3)</b>

Question Number	Indicative content	Mark
9	<p style="text-align: center;"><b>AO1 (4 marks), AO2 (4 marks)</b></p> <p><b>AO1: A description of the systematic desensitisation process</b></p> <ul style="list-style-type: none"> <li>• Constructing an anxiety hierarchy that is rated from lowest to highest.</li> <li>• Relaxation training is given so that complete relaxation is achieved at each stage of the therapy.</li> <li>• If anxiety arises at any stage then the previous stage is revisited.</li> <li>• The client must continue with sessions until the highest rated step has been achieved and no anxiety shown for the treatment to be considered complete.</li> </ul> <p><b>AO2: Examples used from the scenario such as</b></p> <ul style="list-style-type: none"> <li>• A set of stimuli involving birds such as photographs of feathers, progressing up to holding single feathers to contact with live birds.</li> <li>• Mrs Walker gives rating to the hierarchy that has been designed between her and the therapist.</li> <li>• Mrs Walker has to give her informed consent agreeing to continue to attend sessions until the therapist has taken her through the complete hierarchy.</li> <li>• Mrs Walker practises the relaxation techniques she had been taught.</li> <li>• The therapist gains her trust at the outset by reassuring her that at every step is she becomes anxious then the previous step will be revisited.</li> <li>• Mrs Walker will be informed that this process will need to be carried out over several sessions and will need her motivation to continue.</li> </ul> <p><b>Look for other reasonable marking points in the context of the scenario.</b></p>	(8)

Level	Mark	Descriptor
<b>AO1 (4 marks), AO2 (4 marks)</b>  <b>Candidates must demonstrate an equal emphasis between knowledge and understanding versus application in their answer.</b>		
	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)

Question Number	Indicative content	Mark
10	<p style="text-align: center;"><b>AO1 (4 marks), AO2 (4 marks), AO3 (4 marks)</b></p> <p><b>AO1</b></p> <ul style="list-style-type: none"> <li>• SAD is more common in winter months.</li> <li>• Due to lack of light as day length shortens.</li> <li>• Melatonin is made later in the day and so reduces the production of serotonin and the quality of sleep.</li> <li>• Less REM is achieved.</li> <li>• This leads to many symptoms such as depression.</li> <li>• Light therapy is the usual treatment for SAD to increase the amount of light during the day.</li> </ul> <p><b>AO2</b></p> <ul style="list-style-type: none"> <li>• The boy is exhibiting poor sleep patterns.</li> <li>• He describes his problems as increasing in the winter months when day length is short.</li> <li>• He is falling asleep during the day showing that he is sleep deprived.</li> <li>• He is said to be exhibiting symptoms of depression.</li> <li>• His symptoms are serious enough to be of concern to him and his school to warrant the help of a counsellor.</li> </ul> <p><b>AO3</b></p> <ul style="list-style-type: none"> <li>• Given the serious nature of the boy's condition it would seem reasonable to try light therapy.</li> <li>• This therapy is non-invasive and so cannot harm the boy by trying it.</li> <li>• The application of light therapy is very precise with the light being used at the right duration and at the right timings.</li> <li>• He will need to follow a distinct schedule for it to be effective which he might not be able to maintain if he is distracted, for example, by his social life.</li> <li>• It is not clear as to whether the therapy brings about an effect because of physical changes in physiology or due to psychology (placebo effect) but since the therapy itself is not harmful it is irrelevant as to which it is.</li> <li>• Light equipment is expensive and there may not be enough funds to help him.</li> <li>• Alternative medication might bring about a quicker solution to his depression but does have side effects.</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(12)</b>

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



Question Number	Indicative content	Mark
11	<p style="text-align: center;"><b>AO1 (6 marks), AO3 (10 marks)</b></p> <p><b>AO1: Social learning theory</b></p> <ul style="list-style-type: none"> <li>• Learning of behaviour occurs through imitation of role models.</li> <li>• The observation of the role model being rewarded leads the observer to imitate.</li> <li>• Role models are people the observer respects, e.g. a parent, sibling, teacher or idol.</li> <li>• Refer to Bandura's study on aggression.</li> </ul> <p><b>AO1: Biological theory</b></p> <ul style="list-style-type: none"> <li>• Biological factors can control behaviour.</li> <li>• Aggression can be influenced by hormones such as testosterone and by anatomical structures in the brain such as the functioning of the amygdala.</li> <li>• Genes carry the information to produce biological variety which might be expressed as varying amounts of aggressive tendencies in humans.</li> <li>• Refer to monoamine oxidase A.</li> </ul> <p><b>AO3</b></p> <ul style="list-style-type: none"> <li>• Concordance studies of twins can show if there is a genetic factor involved in behaviour such as aggression.</li> <li>• If a concordance of 1 is found between two twins then a genetic factor might be indicated.</li> <li>• But twins live together and so share the same environment so they could have learnt their behaviour by observing violent role models.</li> <li>• By using identical and non-identical twins some of the environmental factors can be separated from the genetic factors.</li> <li>• If higher concordance between identical than non-identical twins then genetic factors more likely than SLT.</li> <li>• But twins who are identical tend to be treated more similarly so might have a similar SLT exposure, e.g. follow same idols.</li> <li>• Adoption studies can aid the separation of environmental factors from genetic factors. If identical twins reared apart have higher concordance than non-identical twins reared together, then genetic rather than SLT factors are highlighted.</li> </ul>	<b>(16)</b>

Question Number	Indicative content	Mark
<b>11</b> <b>(cont'd)</b>	<ul style="list-style-type: none"> <li>• But adoption might still not be unbiased and the twins may already have observed the same violent role models before the adoption or might still have access to the same violent role models.</li> <li>• If adopted from a violent home then even if reared apart they both might be subject to self-fulfilling prophecy and might seek out violent role models.</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	

Level	Mark	Descriptor
<b>AO1 (6 marks), AO3 (10 marks)</b>  <b>Candidates must demonstrate an equal emphasis between knowledge and understanding vs application versus evaluation/conclusion in their answer.</b>		
	0	No rewardable material.
Level 1	1-4 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	5-8 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	9-12 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	13-16 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)