

# Mark Scheme (Results)

## Summer 2009

GCE

GCE Psychology (6PS02/01)

## General Guidance on Marking

All candidates must receive the same treatment.

Examiners should look for qualities to reward rather than faults to penalise. This does NOT mean giving credit for incorrect or inadequate answers, but it does mean allowing candidates to be rewarded for answers showing correct application of principles and knowledge.

Examiners should therefore read carefully and consider every response: even unconventional answers may be worthy of credit.

Candidates must make their meaning clear to the examiner to gain the mark. Make sure that the answer makes sense. Do not give credit for correct words/phrases which are put together in a meaningless manner. Answers must be in the correct context.

Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the Team Leader must be consulted.

### Using the mark scheme

The mark scheme gives:

- an idea of the types of response expected
- how individual marks are to be awarded
- the total mark for each question
- examples of responses that should NOT receive credit (where applicable).

- 1 / means that the responses are alternatives and either answer should receive full credit.
- 2 ( ) means that a phrase/word is not essential for the award of the mark, but helps the examiner to get the sense of the expected answer.
- 3 [ ] words inside square brackets are instructions or guidance for examiners.
- 4 Phrases/words in **bold** indicate that the meaning of the phrase or the actual word is **essential** to the answer.
- 5 TE (Transferred Error) means that a wrong answer given in an earlier part of a question is used correctly in answer to a later part of the same question.

### Quality of Written Communication

Questions which involve the writing of continuous prose will expect candidates to:

- show clarity of expression
- construct and present coherent arguments
- demonstrate an effective use of grammar, punctuation and spelling.

Full marks can only be awarded if the candidate has demonstrated the above abilities.

Questions where QWC is likely to be particularly important are indicated "QWC" in the mark scheme BUT this does not preclude others.

## Unit 2: Understanding the Individual.

### Section A.

Question Number.	Question.	
1	Robyn has just studied Freud in her psychology class. She realises her friend Liz may be stuck in one of Freud's stages as Liz bites her nails, smokes and is cynical. Which stage might Liz be fixated in?	
	Answer.	Mark
	<b>A</b> The oral stage. <b>B</b> The anal stage. <b>C</b> The phallic stage. <b>D</b> The latency period/stage.	1 (AO1)

Question Number.	Question.	
2	Repression is a defence mechanism that	
	Answer.	Mark
	<b>A</b> directs hatred at someone else. <b>B</b> acts in a way to make a person look good. <b>C</b> motivates us to forget. <b>D</b> expresses the opposite of what we really feel	(1 AO1)

Question Number.	Question.	
3	Negative reinforcement refers to	
	Answer.	Mark
	<b>A</b> giving something unpleasant after an undesired behaviour. <b>B</b> taking away something unpleasant after a desired behaviour <b>C</b> giving something pleasant after a desired behaviour. <b>D</b> taking away something pleasant after an undesired behaviour.	(1 AO1)

Question Number.	Question.	
4	A hormone mainly associated with males is	
	Answer.	Mark
	<b>A</b> oestrogen. <b>B</b> testosterone <b>C</b> adrenaline <b>D</b> progesterone	(1 AO1)

Question Number.	Question.	
5	Which two of the following statements are correct?	
	Answer.	Mark
	<p>A Neurotransmitters send messages around the body in the blood.</p> <p>B Hormones send messages around the body in the blood.</p> <p>C Neurotransmitters send messages more slowly than hormones</p> <p>D Hormones send messages more slowly than neurotransmitters</p> <p>E Neurotransmitters and hormones send messages around the body at the same speed.</p>	2 (AO1)

Question Number.	Question.	
6	While at school Thomas noticed an increase in aggressive behaviour at break time when more people were outside. This is an example of	
	Answer.	Mark
	<p>A negative correlation</p> <p>B no correlation</p> <p>C positive correlation</p>	1(AO3)

Question Number.	Question.	
7	Which sampling method gives an equal chance of a participant being selected?	
	Answer.	Mark
	<p>A Opportunity</p> <p>B Random</p> <p>C Self-selected</p> <p>D Volunteer</p>	1(AO3)

Question Number.	Question.	
8	IV is the independent variable and DV is the dependant variable. Identify which of the following statements is correct.	
	Answer.	Mark
	<p>A The IV is manipulated to see the effect on the DV.</p> <p>B The DV is manipulated to see the effect on the IV.</p> <p>C The IV is kept constant so it does not affect the results.</p> <p>D The DV is kept constant so it does not affect the results.</p>	1(AO3)

Question Number.	Question.	
9	An independent groups design is when	
	Answer.	Mark
	<p>A Different participants take part in different experimental conditions.</p> <p>B Different participants are matched and they take part in different conditions.</p> <p>C The same participants take part in all the experimental conditions.</p> <p>D Half the participants do condition 1 first then condition 2, the other half do condition 2 first then condition 1.</p>	1(AO3)

Question Number.	Question.	
10	In order to carry out a Mann Whitney U Test on data which two of the following statements must be correct?	
	Answer.	Mark
	<p>A The data can be nominal.</p> <p>B <b>The data can be ordinal.</b></p> <p>C The design must be correlational.</p> <p>D <b>The experimental design must be independent groups.</b></p> <p>E The experimental design must be matched pairs.</p> <p>F The experimental design must be repeated measures.</p>	2(AO3)

Section B.

Question Number.	Question.	
11 (a)	<p>A study was carried out to investigate whether kicking off from the starting block with the right foot or left foot gave sprinters an advantage. 20 participants were asked to take part in two sprints; in one trial they kicked off with their left foot and in another with their right. It was found that on average kicking off with their right foot gave them an advantage of 80 ms (milliseconds).</p> <p>Give a non-directional (two-tailed) experimental hypothesis for the study.</p>	
	<b>Answer.</b>	<b>Mark</b>
	<p>2 marks for an appropriate experimental hypothesis.                      Partial mark if only the IV or the DV given.                      A non-directional (two-tailed) hypothesis <b>must</b> be given.                      0 marks for a directional or a null hypothesis.</p> <ul style="list-style-type: none"> <li>• There is a difference in the time taken to sprint/eq; (1 mark)</li> <li>• There is a difference between whether it was the left or right foot/eq; (1 mark)</li> <li>• There will be a difference in the speed/time taken from the starting blocks, depending which foot the sprinters use/eq; (2 marks)</li> <li>• Either moving off with the left foot or the right foot will lead to a decrease in the time taken to push off the starting blocks/eq; (2 marks)</li> </ul> <p>Look for other reasonable ways of expressing a hypothesis.</p>	<b>2(AO3)</b>

Question Number.	Question.	
(b)	State the design used in the study.	
	<b>Answer.</b>	<b>Mark</b>
	<p>Reject methods or 'same participants'.</p> <p>If more than one answer given accept the first one.</p> <ul style="list-style-type: none"> <li>• repeated measures</li> <li>• related design</li> <li>• Within groups design</li> <li>• related [single word only]</li> <li>• repeated [single word only]</li> </ul>	<b>1(AO3)</b>

Question Number.	Question.	
c	State the independent variable (IV) for the study.	
	Answer.	Mark
	<p>The IV gets 1 mark. The IV is which foot they kick off from the starting block with. Just the word foot isn't enough, they have to mention left and right, or 'which foot' to get the mark.</p> <p><b>IV</b></p> <ul style="list-style-type: none"> <li>• Whether they sprinters kicked off with the left or right foot/eq;</li> <li>• Which foot they used to kick off from the block, left or right/eq;</li> </ul> <p><b>Look for other reasonable ways of expressing the IV.</b></p>	1(AO3)

Question Number.	Question.							
12 (a)	<p>Researchers carried out a correlational study to see if there was a relationship between eating breakfast and students' scores on a math test. They carried out a Spearman's rho test on the data and found that the observed value of rho was +0.519, N = 20.</p> <p style="text-align: center;"><b>Table to show the critical values for Spearman's test</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td><math>p \leq 0.05</math></td> <td><math>p \leq 0.025</math></td> </tr> <tr> <td>N = 20</td> <td>0.380</td> <td>0.447</td> </tr> </table> <p>What is meant by the term <math>p \leq 0.05</math>?</p>		$p \leq 0.05$	$p \leq 0.025$	N = 20	0.380	0.447	
	$p \leq 0.05$	$p \leq 0.025$						
N = 20	0.380	0.447						
	Answer.	Mark						
	<p>A full answer must refer to the probability the results are due to chance and the answer must also refer to the correct probability (1/20, 5%). This can be expressed either as a figure, or as 5%, for 2 marks.</p> <ul style="list-style-type: none"> <li>• The results are significant at 5%/eq; <b>1 mark</b></li> <li>• <math>p &lt; 0.05</math> means that we can be at least 95% confident that the results did not occur by chance/eq; <b>1 mark</b>.</li> <li>• The probability the results are due to chance is equal or less than to 5%/ 5/100/ 1/20 /eq; <b>2 marks</b></li> <li>• There is a 95% or more probability the results are not due to chance/eq; <b>2 marks</b>.</li> <li>• The probability the results are due to chance is equal or less than 5/100 /eq; <b>2 marks</b>.</li> <li>• There is a 1/20 or less probability the results are due to chance/eq; <b>two marks</b>.</li> </ul>	2(AO3)						

Question Number.	Question.	
(b)(i)	State whether the researchers would reject their null hypothesis.	
	Answer.	Mark
	<p>0 marks for accept. A one word answer is acceptable.</p> <ul style="list-style-type: none"> <li>• Reject/eq;</li> <li>• Reject the null hypothesis/eq;</li> <li>• Yes/eq;</li> </ul> <p>Look for other reasonable ways of expressing this answer.</p>	1(AO3)

Question Number.	Question.	
(b)(ii)	Explain your answer to (b)(i) above.	
	Answer.	Mark
	<p>T.E. - If 12bi is blank or incorrect and bii clearly refers to the rejection of the null hypothesis then max marks can be given.</p> <p>A full answer must refer to the observed value and the critical value and must mention the actual figures. One mark for a weak answer and two marks when an answer is elaborated.</p> <ul style="list-style-type: none"> <li>• The observed value is bigger than the critical value/eq; <b>1 mark.</b></li> <li>• 0.519 is bigger than 0.38/eq; <b>1 mark.</b></li> <li>• the observed value of rho is greater than the critical value at both .05 and .01 so it would not matter which level of significance was chosen so the null would be rejected/eq; <b>2 marks</b></li> <li>• The observed value of 0.519is bigger than the critical value of 0.38/0.447/eq; <b>2 marks.</b></li> <li>• The critical value is 0.38/0.447 which is smaller than the observed value of 0.519/eq; <b>2 marks.</b></li> </ul>	2 (AO3)



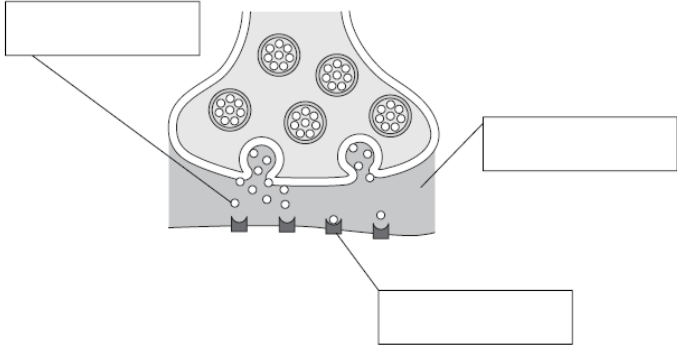
Question Numbers	General Instructions
13 - 14 (a)(ii)	Marking points are indicative, not comprehensive and other points should be credited. In each case consider 'or words to that effect'. Each bullet point is a marking point unless otherwise stated, and each point made by the candidate must be clearly and effectively communicated.

Question Number.	Question.	
13 (a)	Oedipus was a man who had been raised by foster parents and did not know his real parents. He killed his father during a battle, and, as the victor, married his mother. Describe Freud's theory of how boys develop through the Oedipus Complex.	
	Answer.	Mark
	<p>The answer must focus on the Oedipus complex in relation to boys.. If it focuses on girls (Electra Complex) only credit points that could also be true of the Oedipus Complex.</p> <p>E.g.</p> <ul style="list-style-type: none"> <li>• The conflict occurs in the phallic stage at around the age of 5/eq;</li> <li>• Freud thought that boys unconsciously had feelings for their mothers/eq;</li> <li>• This meant that they now saw their fathers as rivals for their mothers affections/eq;</li> <li>• Boys would become afraid that their fathers would punish them by castrating them/eq;</li> <li>• Boys need to resolve their unconscious feelings about their fathers to reduce anxiety/eq;</li> <li>• They do this by identifying with their fathers and so become him/eq;</li> <li>• This resolves their feelings of hate and fear for their fathers/eq;</li> </ul> <p>Look for other reasonable marking points</p>	4(AO1)

Question Number.	Question.	
(b)	Evaluate Freud's theory of psychosexual development.  You may find it helpful to include: <ul style="list-style-type: none"> <li>• application to real life</li> <li>• comparison with other explanations</li> <li>• methodology</li> <li>• research evidence.</li> </ul>	
	Answer.	Mark
	No credit for description of Freud's theory.  E.g. <ul style="list-style-type: none"> <li>• The case of Little Hans showed that his fear of horses was due to the Oedipus Conflict/eq;</li> <li>• There are problems generalising from Freud's sample as they tended to be neurotic, female patients/eq;</li> <li>• It has been found that meanness, obstinacy and tidiness are correlated, suggesting an anal personality/eq;</li> <li>• Freud's theory stops at adolescence and doesn't explain development in adulthood/eq;</li> <li>• Unlike Erikson's theory which says we carry on developing into old age/eq;</li> <li>• The unconscious can't be measured using scientific methods/experiments so it can't be scientifically measured/eq;</li> <li>• Psychoanalysis offered treatment to people with mental disorders such as hysteria that had previously been untreatable/eq;</li> <li>• His method of dream analysis is subjective, so one dream may be interpreted in different ways by different analysts/eq;</li> <li>• Social Learning Theory explains development differently, using observational learning/eq;</li> <li>• Biological Theory explains development differently using the concepts of genes, hormones and brain differences/eq;</li> </ul> Look for other reasonable marking points.	5(AO2)

Question Number.	Question.	
14 (a) (i)	Manpreet's family are proud of their daughter's 10 A grade GCSEs. Her grandmother thinks Manpreet has inherited her intelligence, whilst her parents think it is due to the extra stimulation she had as a child. Outline the term <b>nature</b> using the example above.	
		Mark
	<p>No credit for an outline and meaning of the term nurture unless (i) and (ii) are clearly indicated by the candidate as the wrong way round.</p> <p>If the answer does not refer to the text at least once <b>MAX 2 marks</b>.</p> <p>E.g.</p> <ul style="list-style-type: none"> <li>• The nature approach says that our characteristics are determined by our biology/eq;</li> <li>• It says that genes affect our brains and nervous system/eq;</li> <li>• These in turn affect our physical and psychological characteristics/eq;</li> <li>• E.g. Manpreet's grandmother thinks her intelligence has been passed down through her parents' genes/eq;</li> </ul> <p><b>Look for other reasonable marking points</b></p>	<p>(AO1 = 2) (AO2 = 1)</p>

Question Number.	Question.	
a (ii)	Outline the term <b>nurture</b> using the example above.	
		Mark
	<p>No credit for an outline of the term nature unless (i) and (ii) are clearly indicated by the candidate as the wrong way round.</p> <p>If the answer does not refer to the text at least once <b>MAX 2 marks</b>.</p> <p>E.g.</p> <ul style="list-style-type: none"> <li>• Nurture refers to the influence of our environment on our characteristics/eq;</li> <li>• It can include factors such as poor diet whilst a child/eq;</li> <li>• Nurture can include the influence of our relationship with our parents/eq;</li> <li>• Manpreet had extra stimulation as a child which could include reading which may have affected her IQ/eq;</li> </ul> <p><b>Look for other reasonable marking points</b></p>	<p>(AO1 = 2) (AO2 = 1)</p>

Question Number.	Question.	
(b)	<p>The diagram shows a synapse. Label the diagram using the terms below.</p> <ul style="list-style-type: none"> <li>• Synaptic gap</li> <li>• Receptor</li> <li>• Neurotransmitter</li> </ul>	
<b>Answer.</b>		<b>Mark</b>
	<p>1 mark for each correct answer</p> <ul style="list-style-type: none"> <li>• Top left = neurotransmitter,</li> <li>• middle right = synaptic gap/synaptic cleft</li> <li>• bottom = receptor.</li> </ul> <p>Accept all reasonable spellings and S/R/N. If more than one answer in a box accept the first answer unless it is clearly crossed out.</p> 	3(A01)

Question Numbers	General Instructions
15 (a)(i)	Marking points are indicative, not comprehensive and other points should be credited. In each case consider 'or words to that effect'. Each bullet point is a marking point unless otherwise stated, and each point made by the candidate must be clearly and effectively communicated.

Question Number.	Question.	
15 (a) (i)	In your course you will have studied Bandura, Ross and Ross's (1961) study in the Learning Approach.  Describe the aim(s) and procedure of Bandura, Ross and Ross.	
	Answer.	Mark
	Ignore reference to other Bandura studies specifically. Max 3 marks if only the aims or procedure are attempted in the answer. 0 marks for findings/results/conclusion.  E.g. <ul style="list-style-type: none"> <li>• The aim of the study was to see if children would copy an adults behaviour to a Bobo doll/eq;</li> <li>• They wanted to see if children are more likely to imitate the same sex adult/eq;</li> <li>• They were looking at whether boys would be more likely to copy the aggressive behaviour or not/eq;</li> <li>• 72 participants were split into equal groups of males and females/eq;</li> <li>• Original aggression levels were measured and split equally between the groups/eq;</li> <li>• One group of children saw a non aggressive model playing with some toys/eq;</li> <li>• An experimental group watched an adult hit, kick and punch a Bobo doll/eq;</li> <li>• The children in all groups started to play with some toys before they were told the toys weren't for them/eq;</li> <li>• They were taken to another room which included a Bobo doll as well as other aggressive toys/eq;</li> <li>• The children were watched through a one way mirror, and their behaviour recorded/eq;</li> </ul>	4(AO1)

Question Number.	Question.											
(ii)	<p>The statements in the table below may relate to the results and/or conclusions of the Bandura, Ross and Ross's (1961) study. Put a cross in the correct box (x) to indicate whether each statement is true or false.</p>											
	<b>Answer.</b>	<b>Mark</b>										
	<p>If both boxes crossed for one statement and one is not clearly crossed out then 0 marks for that statement.</p> <ul style="list-style-type: none"> <li>• 4 correct answers is 3 marks.</li> <li>• 3 correct answers is 2 marks.</li> <li>• 2 correct answers is 1 mark.</li> <li>• 1 or 0 correct answers is 0 marks.</li> </ul> <table border="1" data-bbox="373 860 1241 1272" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th data-bbox="373 860 999 896">Statement</th> <th data-bbox="999 860 1241 896">True/False</th> </tr> </thead> <tbody> <tr> <td data-bbox="373 896 999 999">The children who saw the aggressive model were more aggressive than those who saw the non aggressive model.</td> <td data-bbox="999 896 1241 999">True</td> </tr> <tr> <td data-bbox="373 999 999 1102">About 1/3 of the children who saw the aggressive model copied the model's behaviour.</td> <td data-bbox="999 999 1241 1102">True</td> </tr> <tr> <td data-bbox="373 1102 999 1205">Boys copied the behaviour of the male model more than the girls copied the behaviour of the female model.</td> <td data-bbox="999 1102 1241 1205">True</td> </tr> <tr> <td data-bbox="373 1205 999 1272">The researchers concluded that behaviour is only learned when it is reinforced.</td> <td data-bbox="999 1205 1241 1272">False</td> </tr> </tbody> </table>	Statement	True/False	The children who saw the aggressive model were more aggressive than those who saw the non aggressive model.	True	About 1/3 of the children who saw the aggressive model copied the model's behaviour.	True	Boys copied the behaviour of the male model more than the girls copied the behaviour of the female model.	True	The researchers concluded that behaviour is only learned when it is reinforced.	False	<b>3(AO1)</b>
Statement	True/False											
The children who saw the aggressive model were more aggressive than those who saw the non aggressive model.	True											
About 1/3 of the children who saw the aggressive model copied the model's behaviour.	True											
Boys copied the behaviour of the male model more than the girls copied the behaviour of the female model.	True											
The researchers concluded that behaviour is only learned when it is reinforced.	False											

Question Number.	Question.	
(b)	Evaluate Bandura, Ross and Ross's (1961) study by filling in the blanks in the paragraph below.	
	Answer.	Mark
	<p>The study was not ecologically <u>valid</u> as the children were not in their normal nursery setting. The children were deliberately encouraged to be aggressive, so they may be aggressive to others after they left the study, which is an <u>ethical</u> issue. The sample size was 72 and was a mix of boys and girls so the results can be <u>generalised</u> to other children. Most of the situational variables were controlled as the study was conducted in a <u>laboratory/controlled setting/controlled environment/controlled situation/controlled nursery</u> .</p>	4(AO2)

Question Numbers	General Instructions
16 - 18	Marking points are indicative, not comprehensive and other points should be credited. In each case consider 'or words to that effect'. Each bullet point is a marking point unless otherwise stated, and each point made by the candidate must be clearly and effectively communicated.

Question Number.	Question.	
16	Classical and/or operant conditioning can be applied to the treatment of psychological disorders. Examples include, aversion therapy, flooding, systematic desensitisation and token economy. Evaluate <b>one</b> treatment/therapy from either classical or operant conditioning.	
	Answer.	Mark
	<p>If more than one therapy is evaluated mark all and credit the best. 0 marks for description.</p> <p>E.g. Aversion therapy</p> <ul style="list-style-type: none"> <li>• It can be criticised on ethical grounds as the patients are deliberately being made ill/sick/hurt/eq;</li> <li>• However the patients give full informed consent so know what will happen to them/eq;</li> <li>• It doesn't last long term as the patient may learn that having alcohol doesn't make you sick/eq;</li> <li>• It has been shown to be more effective for addictions than other treatments/eq;</li> <li>• It doesn't change the reasons for the behaviour so the underlying problem may still be there/eq;</li> </ul> <p>E.g. Flooding.</p> <ul style="list-style-type: none"> <li>• It is a quicker treatment than systematic desensitisation as they go straight to the feared object/eq;</li> <li>• It can cause a lot of distress to the patient when confronting their feared object/eq;</li> <li>• Wolpe found that flooding did cure a girl of her phobia of travelling in cars/eq;</li> <li>• If the patient stops the treatment half way through they will be more afraid of the object/eq;</li> <li>• It doesn't work as well on general phobias as it does on specific phobias/eq;</li> </ul>	4(AO2)



E.g. Systematic desensitisation.

- Because it goes up the hierarchy of fears it isn't as stressful as flooding/eq;
- Capafons has shown that it can be used to get rid of fear of flying/eq;
- It can only be used for phobias and not for other disorders such as schizophrenia.
- Psychoanalysts would say the reason for the fear hasn't been treated so the patient will still have issues/eq;
- Because the patient has learnt to relax the treatment can be applied to other situations/objects/eq;

E.g. Token Economy.

- It may not generalise to situations where there are no tokens as a reward for the desired behaviour/eq;
- It can be criticised as people are having basic rights taken away from them in order to earn them with tokens/eq;
- Ayllon found that it improved behaviour in long term patients in a psychiatric hospital/eq;
- It has been shown to cut down re-offending rates in prisoners/eq;
- However this has usually only been short term and doesn't have a long term effect on their behaviour/eq;

## Section C

Question number	Question
17	<p>For part of your course you will have carried out a practical in the Psychodynamic Approach which was a correlation.</p> <p>Describe the procedure of your practical, and evaluate your practical. You may evaluate your investigation in terms of:</p> <ul style="list-style-type: none"> <li>• validity</li> <li>• reliability</li> <li>• credibility</li> <li>• generalisability.</li> </ul> <p style="text-align: right;"><b>10(A03)</b></p>
<b>Indicative content.</b>	
QWC i,ii,iii	<p><b>Refer to banding at the end of the indicative content.</b></p> <p>Appropriate answers might include some of the following descriptive points, but this list isn't exhaustive.  <b>No credit for the aim/hypothesis.</b>  <b>No credit for the findings (results/conclusions).</b></p> <ul style="list-style-type: none"> <li>• The sample consisted of 10 men and 10 women aged 18 as our participants/eq;</li> <li>• We used an opportunity sample, which consisted of 6<sup>th</sup> formers around when we carried out the experiment/eq;</li> <li>• Four of us worked together, each person collected results from either 5 females of 5 males/eq;</li> <li>• We briefed them and read out the instruction, then they were each given 5 minutes to answer the questions on their characteristics/eq;</li> <li>• Each participant carried out the test in a quiet room on their own to control participants talking/eq;</li> <li>• After the five minutes they were debriefed and asked not to tell anyone else about the study/eq;</li> </ul> <p>Appropriate answers might include the following evaluation points, but this list isn't exhaustive.  <b>They do not have to evaluate using the terms mentioned in the question.</b></p> <ul style="list-style-type: none"> <li>• Because the sample was opportunity we could have deliberately picked people we knew had the desired characteristics so we would find a correlation/eq;</li> <li>• We all used the same standardised instructions which increases the reliability of our study/eq;</li> <li>• It was carried out in a quiet classroom, which is a natural setting for the participant so increasing ecological validity/eq;</li> <li>• Some participants may have told others about the study so they may have tried to give us the results they thought we wanted/eq;</li> <li>• All participants were all participants were 16 to 18 so we cannot generalise the results to older people/eq;</li> <li>• As it was a correlation we don't know if the participants personality was caused by fixation in the anal stage/eq;</li> </ul>

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Level.	Mark.	Descriptor
		A03 - how science/psychology works
	0	No rewardable material/practical from another approach.
Level 1	1-4	<p>Candidates will produce brief answers, making simple statements, showing some relevance to the question.</p> <ul style="list-style-type: none"> <li>• Brief outline of aspects of procedure can get an increasing idea of what they did, with minimal evaluation.</li> <li>• Either procedure/evaluation absent or both very limited. Lack of relevant evidence.</li> </ul> <p>The skills needed to produce effective writing may not be present. The writing may have some coherence and will generally be comprehensible, but lack clarity and organisation. A high incidence of syntactical and/or spelling errors.</p>
Level 2	5-7	<p>Limited attempt at both practical and evaluation OR one is in less detail than the other.</p> <ul style="list-style-type: none"> <li>• Both procedure and evaluation reasonably detailed.</li> <li>• One detailed and the other limited.</li> <li>• Indication of both variables gives possibility or partial replication.</li> </ul> <p>Candidates will produce statements with some development in the form of mostly accurate and relevant information. The candidates will demonstrate the use of skills needed to produce effective extended writing, but there will be lapses in organisation. Some syntactical and/or spelling mistakes are likely to be present.</p>
Level 3	8-10	<p>Candidate has attempted and answered both injunctions in the question well.</p> <ul style="list-style-type: none"> <li>• Both procedure and evaluation detailed.</li> <li>• Procedure to include: <ul style="list-style-type: none"> <li>• 2 variables;</li> <li>• method;</li> <li>• scoring system;</li> <li>• 1 other methodological point.</li> </ul> </li> </ul> <p>There does not need to be an equal split between describe and evaluate but the answer does need to have balance between the two. The skills needed to produce convincing extended writing are in place. Good organisation and clarity. Very few syntactical and/or spelling errors. Very good organisation and planning. Good use of relevant terminology. Given time constraint and limited number of marks full marks must be given when the answer is reasonably detailed, even if not all the information is present.</p>

Question Number.	Question.	
18 (a)	Describe how genes, hormones and/or brain lateralisation affect gender development.	
	Answer.	Mark
	<p>Max 2 for the use of studies to elaborate points.</p> <ul style="list-style-type: none"> <li>• Genetic sex is determined by the chromosomes in the egg and those in the sperm/eq;</li> <li>• The egg includes the X chromosome, the sperm contains either the X or the Y chromosome/eq;</li> <li>• If the sperm contains the X chromosome it will be a girl, if it's the y chromosome it will be a boy/eq;</li> <li>• The Y chromosome will cause the male foetus to develop testes at around 7 weeks/eq;</li> <li>• In a female other genes cause the foetus to develop ovaries/eq;</li> <li>• Hormones are released that stop the male foetus developing a uterus/fallopian tubes/eq;</li> <li>• Male speech and comprehension is controlled by the left hemisphere, whilst females tend to be across both hemispheres/eq;</li> </ul>	4(AO1)

Question number	Question
(b)	<p>Evaluate the biological explanation for gender.</p> <p>You may like to include comparisons with other explanations as well as other evaluation points.</p> <p><b>12(AO2)</b></p>
	Indicative content.
QWC I,ii,iii	<p>Refer to banding at the end of the indicative content.</p> <p>Appropriate answers might include the following evaluation/analytical points, but this list isn't exhaustive.</p> <ul style="list-style-type: none"> <li>• A family had boys who were thought to be girls until they reached puberty, and the boys had no problem becoming males, so supporting the biological approach/eq;</li> <li>• However, this may be because their community allowed them to become male as it had happened before/eq;</li> <li>• Donner destroyed sex centres in the brains of newborn male rats, and they behaved like female rats/eq;</li> <li>• However, we may not be able to generalise the findings of this study to humans as our brains are different from rats/eq;</li> <li>• Men are better at spatial tasks and women are better at verbal tasks suggesting there is a brain difference/eq;</li> <li>• A meta analysis on human brains failed to show gender differences in the corpus callosum/eq;</li> <li>• David Reimer was not happy when he was brought up as a girl, and had surgery to turn back to a male supporting the approach/eq;</li> <li>• Female rats who were injected with testosterone behaved like male rats/eq;</li> <li>• It can be argued that there are more similarities between the two sexes than there are biological differences/eq;</li> <li>• Female babies are more sensitive to noise from birth, so there must be biological differences/eq;</li> <li>• The learning approach would argue that gender development is due to your upbringing not your genes/hormones/eq;</li> <li>• The psychodynamic approach says we learn our gender appropriate behaviour by identifying with the same sex parent/eq;</li> <li>• The biological approach can't explain why in some cultures appropriate male behaviour would be seen as female behaviour in our culture/eq;</li> </ul>

	<ul style="list-style-type: none"> <li>Some cultures have more than two gender roles which would be hard to explain in terms of genetics/hormones/eq;</li> </ul>
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Level	Mark.	Descriptor
		<p><b>Marking guidance - all marks are AO2 marks, and a knowledge point can only be credited where there is a comparison or evaluation point.</b>  AO2: Application/evaluation of knowledge and understanding of science and how science works.</p>
	0	No rewardable material.
Level 1	1-3 marks	<p>Candidates will produce brief answers, making simple statements, showing some relevance to the question.</p> <ul style="list-style-type: none"> <li>Focus on one detailed biological study</li> <li>OR limited evaluation</li> </ul> <p>The skills needed to produce effective writing will not normally be present. The writing may have some coherence and will generally be comprehensible, but lack both clarity and organisation. High incidence of syntactical and/or spelling errors.</p>
Level 2	4-6 marks	<p>Thus there will be some attempt at evaluation with limited success. Limited evidence will be present.</p> <ul style="list-style-type: none"> <li>Focus on one detailed biological study and very limited evaluation</li> <li>OR limited general evaluation which may include a comparison.</li> </ul> <p>Candidates will produce statements with some development in the form of <b>mostly accurate</b> and relevant factual material. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and/or spelling errors are likely to be present. <b>Appropriate use of relevant terminology.</b></p>
Level 3	7-9 marks	<p>Candidates answers will show some good understanding of the focus of the question and will include analysis/evaluation.</p> <ul style="list-style-type: none"> <li>Uses a range of evidence.</li> <li>Some attempt to relate evidence to biological approach which may include reference to nature-nurture at the top end of the band.</li> </ul> <p>The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and/or spelling errors are likely to be present. <b>Appropriate use of relevant terminology.</b></p>
Level 4	10-12 marks	<p>Candidate has attempted to answer the question very well.</p> <ul style="list-style-type: none"> <li>Use a wide range of evidence.</li> <li>Some evidence is related to the biological approach.</li> <li>Evidence for and against the biological approach is included.</li> </ul> <p>The skills needed to produce convincing extended writing are in place. Very few syntactical and/or spelling errors. Very good organisation and planning.</p>

		Good use of relevant terminology. Given time constraint and limited number of marks full marks must be given when the answer is reasonably detailed, even if not all the information is present.
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