

Mark Scheme (Results)

June 2014

GCE Psychology (6PS02/01)
Unit 2: Understanding the Individual

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#### **General Guidance on Marking-GCE Psychology**

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 <u>meaning</u> of the phrase or the actual word is **essential** to the answer.
- 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.

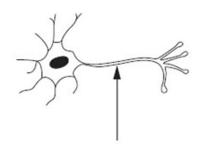
# Unit 2: Understanding the Individual

# **Section A**

Question Number	Question	
1	Jessica had trained her hamster to stand up at the front of the cage on hearing the theme music to a popular television show. Then she stopped giving her hamster a treat when it heard the music, and the hamster stopped standing up at the front of the cage when the music was playing.  The hamster stopping its behaviour is an example of	
	Answer	Mark
	A positive reinforcement  B spontaneous recovery  C punishment	(1 AO1)
	D extinction	

Question Number	Question	
2	Two weeks later Jessica"s hamster heard the theme music and started to stand up at the front of the cage. It had not had any more training.  This is an example of	
	Answer	Mark
	A positive reinforcement	(1 AO1)
	B spontaneous recovery	
	C punishment	
	D extinction	

Question Number	Question	
3	Neurotransmitters are chemicals which allow neurons to communicate with one another.  Neurotransmitters send messages across the	
	Answer	Mark
	A axon B receptor	(1 AO1)
	C synapse	
	D dendrite	



Question Number	Question	
4	Look at the diagram below.	
	Identify the structure the arrow is pointing to.	
	Answer	Mark
	A Axon  B Receptor	(1 AO1)
	C Synapse	
	D Dendrite	

Question Number	Question	
5	Zack is eight years old. His group of friends are all male, and he is focusing on doing well at school and playing football.  Which psychosexual stage is Zack in according to Freud?	
	Answer	Mark
	A Oral  B Anal	(1 AO1)
	C Phallic	
	D Latency	

Question Number	Question	
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6	According to Freud, defence mechanisms are	
	Answer	Mark
	A conscious processes	(1.401)
	B preconscious processes	(1 AO1)
	C unconscious processes	

Question Number	Question	
7	One similarity between the psychodynamic explanation of gender and the learning explanation of gender is that they both focus on the influence of	
	Answer	Mark
	A parents	(1 AO2)
	B friends	
	C siblings	
	D celebrities	

Question Number	Question	
8	Beryl has conducted a study for a local health authority looking at the development of play in infants aged one to two years old. As the local population includes many different ethnic groups, Beryl has made sure that she has included the same percentage of each ethnic group in her sample as there is in the target population.  Beryl's sampling method is	
	Answer	Mark
	A volunteer  B opportunity  C stratified	(1 AO3)
	D random	

Question Number	Question	
9	The local health authority also decided it wanted Beryl to carry out a detailed study on the language development of ten pairs of twins from when the twins were six months to six years old.  The research method Beryl would use is	
	Answer	Mark
	A experimental  B correlational	(1 AO3)
	C cross-sectional	
	D longitudinal	

Question Number	Question	
10	Mrs Black was teaching Mr Scarlett's class of 6 year olds as he was away on a course. She decided to give them a maths test. When Mr Scarlett returned he said that the maths test did not show his pupils' mathematical ability as the test was designed for eight year old pupils.  This is an issue of	
	Answer	Mark
	A validity  B reliability	(1 AO3)
	C generalisability	
	D subjectivity	

Question Number	Question	
11	Researchers often compare the concordance rates of monozygotic (MZ) and dizygotic (DZ) twins to see if a characteristic can be explained by nature or nurture.  If the concordance rate for a characteristic is higher for monozygotic twins than for dizygotic twins (even when they were brought up separately) it means it is probably due to	
	Answer	Mark
	A the environment  B genetics	(1 AO3)
	C both the environment and genetics	
	D neither the environment nor genetics	

Question Number	Question		
12	Researchers carried out a Mann W data from a study. Their observed  Table to show the critical value of U is the lower of the two values.		
	Critical value at 0.05   N1 = 10 N2 = 10   27    The observed value of U is significant if it is equal to or less than the critical value.  Using the information in the table, the researchers would have concluded that there was		
	Answer	Mark	
	A a significant difference  B no significant difference  C a significant correlation  D no significant correlation		(1 AO3)

Question Number	Question	
13	$p \le 0.05$ means the probability that the results are due to chance is	
	Answer	Mark
	A equal to or less than 0.05%	
	B equal to or less than 0.5%	(1 AO3)
	C equal to or less than 5%	
	D equal to or less than 50%	

# **Section B**

Question Numbers	General Instructions
	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	
14a	Jamila is conducting a practical investigation to look at gender differences in carrying out visuo-spatial tasks. She decides to give males and females a jigsaw puzzle and will time them to see who completes it the fastest. She uses a random sample of pupils from a local school to get her participants.  Write a fully operationalised directional (one tailed) hypothesis	
	for Jamila's study.	
	Answer	Mark
	No credit for a non directional (two tailed) hypothesis.  No credit for a null hypothesis.  I mark for a partial directional hypothesis 2 marks for an hypothesis where both the IV and DV have been operationalised.  There will be a difference between males and females and how fast they complete a jigsaw with males taking less time/eq; (1 mark)  Females will take less time to do a jigsaw/eq; (1 mark)  Females will take more time than males to finish a jigsaw/eq; (1 mark)  Males will take fewer seconds/minutes to complete a jigsaw than females/eq; (2 marks)  Males will take fewer seconds completing a visuo-spatial task compared to females/eq; (2 marks)  Look for other reasonable marking points.	(2 AO3)

Question Number	Question	
14b	Outline <b>one</b> strength and <b>one</b> weakness of the random sampling method. You may refer to Jamila's use of this type of sampling in your answer.	
	Answer	Mark
	Max 2 marks for a strength.  Max 2 marks for a weakness.  If more than 1 strength/weakness, mark all and then credit the best.  Strength.  • The sample is representative of the population (1st mark) as everyone in the target population has an equal chance of being chosen (2nd mark)/eq;  • Results can be generalised to the target population (1st mark) because the sample should be an accurate reflection of the whole population (2nd mark)/eq;  • The results can be generalised to everyone/eq; (1 mark)  • It gives an unbiased sample/eq; (1 mark)  • As every person has an equal chance of being picked it avoids bias (1st mark) e.g. Jamila won"t pick a sample of slightly older males (2nd mark)/eq;  • It"s better than opportunity sample as it is not just people who are available (1st mark) this means its more representative of the target population (2nd mark)/eq;  Weakness.  • It can take a long time to create the sample (1st mark) because you need to get a list of everyone in the target population (2nd mark) /eq;  • You may not know everyone who is in the target population (1 mark) which means that it is not representative of everyone (2nd mark)/eq;  • Some small minority groups may not be in your sample/eq;(1 mark)  • You may not know everyone who is in the target population (1 mark) e.g. Jamila may not include home schooled children so results can"t be generalised to them (2nd mark)/eq;	(4 AO3)
	Look for other reasonable marking points.	

Question	Question	
Number		
15a	Tim has gone into the kitchen to help his mother by washing up the dishes after dinner.	
	Using concepts from social learning theory, explain how Tim might have learned to help his mother by washing up the dishes.	
	Answer	Mark
	Max 2 for generic comments. All other marking points must refer to the scenario explicitly eg Tim/washing up/he/parent. No marks for attention, retention, reproduction, motivation unless there is some explanation of them.	(6 AO2)
	<ul> <li>SLT says Tim observes a role model carry out a behaviour and he then repeats that behaviour/eq;</li> <li>Tim is motivated to copy the behaviour due to vicarious reinforcement /eq;</li> <li>Tim has seen his father help his mother and wash up the pots/eq;</li> <li>Tim has noticed that his mother rewards his father for washing up by making him a cup of tea/eq;</li> <li>Tim's father is a role model to Tim as they are the same sex/eq;</li> <li>Tim is more likely to copy his mother as she has certain characteristics e.g. being likable/eq;</li> <li>Tim has remembered the actions involved in washing up such as putting washing up liquid in the running water/eq;</li> <li>He has then copied his father and has cleaned some cups/eq;</li> <li>He is motivated to carry on washing up because he gets extra pocket money for doing the chore/eq;</li> <li>His mother/father praises him for doing the job and this motivates him to do it again/eq;</li> <li>He is intrinsically motivated to wash up because it makes him feel good/eq;</li> </ul>	
	Look for other reasonable marking points.	

Question Number	Question	
15b	Operant conditioning can also offer an explanation for Tim learning to help his mother by washing up the dishes.  Use operant conditioning principles to explain how Tim might have learned to help his mother by washing up the dishes.	
	Answer	Mark
	<b>Max 2</b> for generic comments. All other marking points must refer to the scenario explicitly eg Tim/washing up/he/parent.	(4 AO2)
	<ul> <li>Tim's mother may reward him for washing up/eq; OR Tim's mother may positively reinforce him for washing up by letting him play on his games console/eq; 1 mark for either or both of them.</li> <li>This means Tim will repeat the behaviour hoping to be rewarded again/eq;</li> <li>Tim stops his mother nagging at him by doing the washing up/(1st mark) this is an example of negative reinforcement because something undesirable/the nagging has been removed (2nd mark) /eq;</li> <li>Tim is punished and has pocket money taken off him if he does not wash up/eq;</li> <li>To avoid this punishment Tim does the washing up/eq;</li> <li>Tim's behaviour may have been shaped, he would be rewarded in stages until he was finally rewarded for doing the washing up/eq;</li> <li>E.g. Tim's mother would praise him for putting the dishes in the sink at first/eq; (1 mark only for egs of stages for shaping.)</li> <li>Look for other reasonable marking points.</li> </ul>	

Question		Question				
Number						
16	Fre	eud's theory can exp	lain many differer	nt kinds of behaviour.		
	In	the box below there	are eight terms fr	om Freud's theory.		
		Oral Stage	Ego	Unconscious		
		Superego	Id	Anal Stage		
		Conscious	Preconscious			
	the Yo	e behaviour describe u <b>must not</b> use the	ed.	te the term that <b>best</b> ident		
	ea	ch example. Answer			Ma	ark
		Max 1 mark per e	xample.			_
		unless it is clearly of	crossed out. orrectly more thar	e mark the first answer on once do not give it a mar	(5	5 01)
		Example		Term		
		Natalie does not about her holiday recall it if she thin enough.	though she can	Preconscious		
		Mike is one year of suck his dummy.	old and likes to	Oral Stage/id/conscious		
		Paul knows where Helen before going with her.		Conscious/ego		
		Jason wants to ha cheeseburger but to be dieting so de healthy sandwich	he is supposed ecides to have a	Ego/superego/conscious		
		Rosie has the urge necklace she want afford.		Id/ego/conscious/unconsc	ious	

Question Number	Question	
17a	In the Learning Approach you have learned about a study other than the one by Bandura, Ross and Ross (1961).  Describe <b>one</b> study from the Learning Approach <b>other than</b> the one by Bandura, Ross and Ross (1961).  Answer	Mark
	Max 3 marks each for the aim, the procedure, the results and the conclusion.  No credit for a description of Bandura, Ross & Ross (1961).  No credit for a description of a study not from the learning approach.  Examples below are indicative and other studies may gain credit. They do not have to be from this list. If you are not sure a study is from the learning approach ask your team leader.  Watson & Rayner (1920)/Little Albert  They aimed to see if emotional responses could be conditioned using a small child/eq;  They wanted to see if they could make Little Albert afraid of a neutral stimulus/white rat/eq;  Little Albert was presented with a variety of objects such as a rabbit, fire, a white rat to see what he was afraid of/eq;  Initially the only thing that scared him was the banging of a hammer on a steel bar/ he was not at first afraid of rats/eq;  At 11 months old when Albert went near the rat they banged the hammer on metal behind him/eq;  They paired the rat with the noise 7 (+/- 1) times/eq;  To calm him down they gave him blocks to play with/eq;  Albert was also shown white furry objects such as a rabbit/Santa Claus mask/eq;  Eventually Albert would whimper when the rat was present without the noise/eq;  He would move away from the rat when it went towards	Mark (6 AO1)
	<ul> <li>him/eq;</li> <li>Albert also showed fear towards other objects such as the dog/seal pelt/eq;</li> <li>Watson and Rayner concluded that fear could be learnt/eq;</li> </ul>	
	<ul> <li>Skinner (1948)/superstitious pigeons.</li> <li>Skinner aimed to see if he could teach pigeons superstitious behaviour/eq;</li> <li>He wanted to see if he could use operant conditioning to teach pigeons to be superstitious/eq;</li> <li>He used 8 pigeons who were hungry/eq;</li> <li>He placed them in separate cages for a few minutes every</li> </ul>	

day/eq;

- Whilst they were in the cages they would be presented with food at set times/e.g.every minute/eq;
- This food was presented to the pigeons no matter what they did/was not a reward for any specific behaviour/eq;
- Skinner found that 6 of the pigeons did seem to develop superstitious behaviour/eq;
- One pigeon thrust its head into the corner of the cage just before the food appeared/eq;
- Two pigeons would swing their head from side to side/like a pendulum before the food appeared/eq;
- Skinner concluded that the pigeons had associated a behaviour with the appearance of the food/eq;
- He thought the pigeons had learnt a superstitious behaviour/eq;

Pickens & Thompson (1968)/ Cocaine reinforcing rats' behaviour.

- Pickens & Thompson aimed to see if cocaine would act as a reinforcer for rats/eq;
- They wanted to see if different reinforcement schedules would affect the rats' behaviour/eg;
- Three rats were caged separately and given free access to food and water/eq;
- They could also self administer a dose of cocaine on pressing a lever/eq;
- Continuous reinforcement was when the rats got the cocaine every time the lever was pressed/eq;
- There was also a fixed rate schedule where the rats had to press the lever 5 times up to 80 times before they got the drug/eg;
- Different dosages of the cocaine were given to the rats/eq;
- Pickens & Thompson found that the cocaine did act as a reinforcer when the rats were continuously reinforced/eq;
- They found that as the dosage of cocaine increased the pressing of the lever decreased/eg;
- The same amount of cocaine was self administered by the rats over the same time period regardless of dosage/eq;
- They concluded that cocaine does act as a reinforcer for lever pressing in rats/eq;

Look for other reasonable marking points.

Question Number	Question	
17b	Evaluate the study from the Learning Approach you have described in (a).	
	Answer	Mark
	Full marks are available if part a is blank but the evaluation is of a clearly identifiable study from the learning approach, other than Bandura, Ross and Ross (1961).  Max 2 if the study in a is Bandura, Ross and Ross (1961) and is correctly evaluated in b.  Max 2 for generic comments that could apply to several studies.  No credit if the evaluation does not match the study from part (a) or the study is not from the Learning Approach.  Watson & Rayner (1920)/Little Albert.  • The study was of one little boy so the results may not be the same for others/eq;  • There are some questions about whether Little Albert was a normal boy/ some think he may have had developmental issues affecting generalisability/eq;  • Watson & Rayner would argue that it is generalisable as they are looking at reflexes which we all have/eq;  • They had to assume that Albert's crying meant he was afraid of the rat affecting validity/eq;  • It was carried out in a children's hospital where Albert was living so the setting was not unusual to Albert/eq; or opposite argument.  • It is not a usual task to present an aversive stimulus with another stimulus so they may not be measuring how we actually develop fear/eq;  • There are ethical issues as Little Albert was deliberately upset and psychologically harmed when making his scared of rats/eq;  • There is now some debate about whether Little Albert was a normal child, if not it would make the results less valid/eq;  • There is now some debate about whether Little Albert was a normal child, if not it would make the results less valid/eq;  • The study has been useful because it gives us an understanding of how to reduce phobias through systematic desensitisation/eq;  • The study is reliable because they had a standardised procedure eg pairing the rat with the loud noise/eq;	(6 AO2)
	<ul> <li>There were only 8 pigeons so they may not be representative of all pigeons/eq;</li> </ul>	

- The pigeons were kept in a lab so results may not be true of wild birds/eq;
- There are ethical issues some people may question whether it is right to do this to pigeons as we would not do it to humans, e.g. keep them hungry over a period of time/eq;
- As pigeons are biologically/cognitively different from humans the results may not generalise to how humans become superstitious/eg;
- Skinner could not know that the pigeons thought their behaviour would lead to food/eg;
- The pigeons were kept hungry so this may not be valid behaviour for pigeons who aren't hungry/eq;
- The pigeons were bred for experimentation so being in a cage/lab was a natural setting for them/eq;
- The pigeon's behaviour may become extinct when no food is presented, however human superstitions are hard to extinguish/eq;
- There were 2 independent observers who cross checked their results, so increasing inter observer reliability/eg;

Pickens & Thompson (1968)/cocaine reinforcing rats behaviour.

- 3 rats is too small a sample to say the results are representative/eg;
- They only used albino rats so this further limits the sample and ability to generalise/eq;
- Rats are biologically different to humans so the results may not generalise to humans/eq;
- It could be seen as unethical as rats became addicted to cocaine/eq;
- Because it was carried out in a laboratory other factors, such as no access to other drugs could be controlled/eq;
- The dosage of cocaine was carefully controlled making the study more reliable/eq;
- They carefully recorded the dosage and number of times a rat pressed the lever increasing the validity of their findings/eg;
- It is not a valid measurement of how cocaine acts as a reinforcer for humans as humans don't have an unlimited supply of cocaine/eq;

Look for other reasonable marking points.

Question Number	Question	
18a	Outline what is meant by the term "nature" in psychology.  Answer	Mark
	Allowei	Mark
	No credit for answers relating to nurture. One mark per point/elaboration Max 1 for a psychological example.  Our behaviour is caused by our biological make-up such as the genes we inherit from our parents/eq; Genes are responsible for our characteristics/behaviour /eq; We inherit our behaviour from our parents/eq; E.g. if our parents are intelligent then we may inherit the genes for intelligence from them/eq; E.g. What sex we are is determined by whether we have the Y chromosome/eq; Nature is what we are born with eg how our hormones affect us/eq;  Look for other reasonable marking points.	(2 AO1)

Question Number	Question	
18b	Explain <b>one</b> difference between the nature and nurture explanations of behaviour.	
	Answer	Mark
	<ul> <li>Nature says behaviour is due to genes, nurture says it is learnt (1 mark)/eq;</li> <li>Nature says that behaviour is due to our biology/genes/hormones whilst nurture says our behaviour is due to the environment/eq; (1 mark)</li> <li>According to the nature argument our gender is determined before we are born whilst the nurture argument says it is determined after we are born/eq; (1 mark)</li> <li>According to the nature argument our gender is determined before we are born due to whether we have a Y chromosome or not whilst the nurture argument says we are born gender neutral and it is determined after we are born/eq; (2 marks)</li> <li>Hormones determine our gender according to nature, nurture argues we learn our gender/eq; (1 mark)</li> <li>Hormones such as testosterone or oestrogen determine our gender according to nature, nurture argues we learn our gender through observing and copying others/eq; (2 marks)</li> <li>Look for other reasonable marking points.</li> </ul>	(2 AO2)

# **Section C**

Question Numbers	General Instructions
	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	
19a	Describe the biological explanation of gender development by filling in the blanks in the paragraph below.	
	You <b>must not</b> use the same answer more than once.	
	Answer	Mark
	Max 1 mark per gap.  If more than 1 answer per gap mark the first answer given unless it is clearly crossed out.  If a term is used correctly more than once do not give it a mark the second time it is used.  Genes determine what sex we are born. If we have a/an	(5 AO1)

Describe the role of brain lateralisation with regard to gender development.  Answer  No credit for the role of genes or hormones in gender development. Descriptions which only minimise the role of brain lateralisation are acceptable.  Max 1 for comments not relating to gender/male/female  Brain lateralisation looks at how much each half of the brain is used for different activities/eq; Females' brains are less lateralised than male brains OR male brains are more lateralised than female brains/eq; Males use the right hemisphere more and females use both hemispheres equally/eq; Males use the left side of the brain more than the right side for language/eq; Males use the right side of the brain more than the left when doing visuo-spatial tasks/eq; Females use both sides of the brain equally for language and visuo-spatial tasks/eq; If the left hand side of a male brain is damaged they are more likely to have problems with language skills than females with the same damage/eq; Females have a larger corpus callosum which does improve connectivity between the two hemispheres/eq:	Question Number	Question	
No credit for the role of genes or hormones in gender development. Descriptions which only minimise the role of brain lateralisation are acceptable.  Max 1 for comments not relating to gender/male/female  Brain lateralisation looks at how much each half of the brain is used for different activities/eq; Females' brains are less lateralised than male brains OR male brains are more lateralised than female brains/eq; Males use the right hemisphere more and females use both hemispheres equally/eq; Males use the left side of the brain more than the right side for language/eq; Males use the right side of the brain more than the left when doing visuo-spatial tasks/eq; Females use both sides of the brain equally for language and visuo-spatial tasks/eq; If the left hand side of a male brain is damaged they are more likely to have problems with language skills than females with the same damage/eq; Females have a larger corpus callosum which does	19b		
development. Descriptions which only minimise the role of brain lateralisation are acceptable.  Max 1 for comments not relating to gender/male/female  Brain lateralisation looks at how much each half of the brain is used for different activities/eq; Females' brains are less lateralised than male brains OR male brains are more lateralised than female brains/eq; Males use the right hemisphere more and females use both hemispheres equally/eq; Males use the left side of the brain more than the right side for language/eq; Males use the right side of the brain more than the left when doing visuo-spatial tasks/eq; Females use both sides of the brain equally for language and visuo-spatial tasks/eq; If the left hand side of a male brain is damaged they are more likely to have problems with language skills than females with the same damage/eq; Females have a larger corpus callosum which does		Answer	Mark
Look for other reasonable marking points.		<ul> <li>development. Descriptions which only minimise the role of brain lateralisation are acceptable.</li> <li>Max 1 for comments not relating to gender/male/female</li> <li>Brain lateralisation looks at how much each half of the brain is used for different activities/eq;</li> <li>Females' brains are less lateralised than male brains OR male brains are more lateralised than female brains/eq;</li> <li>Males use the right hemisphere more and females use both hemispheres equally/eq;</li> <li>Males use the left side of the brain more than the right side for language/eq;</li> <li>Males use the right side of the brain more than the left when doing visuo-spatial tasks/eq;</li> <li>Females use both sides of the brain equally for language and visuo-spatial tasks/eq;</li> <li>If the left hand side of a male brain is damaged they are more likely to have problems with language skills than females with the same damage/eq;</li> <li>Females have a larger corpus callosum which does improve connectivity between the two hemispheres/eq;</li> </ul>	•

Question Number	Question	
19c	Evaluate the way in which the Biological Approach explains gender.	
	Answer	Mark
	Answer  Answers do not need to focus on brain lateralisation they can include evaluation of the role of genes and hormones.  Max 1 per alternative theory up to a total max of 3 marks.  Max 1 for evaluation points per study rather than Biological explanation.  O marks for description.  • Money (1975) claimed that gender was learnt as Brenda was happy as a girl though she was born male/eq;  • The follow up to Money's study showed that David was not happy having been brought up as a girl showing the influence of biology/eq;  • Daphne Went was genetically male but was happy as a female disagreeing with the Biological Approach/eq;  • Dorner (1972) found that disrupting the release of male sex hormones in rats made them act in a feminine manner/eq;  • However this study was carried out on rats so may not be true of humans as we are biologically different/eq;  • Pfeiffer (1936) showed how transplanting testes onto female rats with no gonads made them act in a masculine way/eq;  • The biological explanation ignores environmental factors such as the influence of our culture on our gender behaviour/eq;  • An alternative explanation is the Psychodynamic Approach which says that gender development is due to identifying with the same sex parent/eq;  • Members of the Batista family have been brought up as girls as they look feminine, but at puberty have no problems becoming male when their gonads develop/eq;  • The theory is scientific as it is supported by (evidence from) laboratory experiments/scans/eq;  • The Biological Approach has more scientific evidence compared to the Psychodynamic which is based on the unconscious mind/eq;  • The Biological Approach focuses on nature and ignores nurture so it is reductionist/eq;	Mark (6 AO2)
	Look for other reasonable marking points.	

Question Number	Question	
20ai	In the Psychodynamic Approach you carried out a practical investigation to test for a correlation.  Name the statistical test you carried out on your data from your investigation you conducted for the Psychodynamic Approach.	
	Answer	Mark
	No credit if the statistical test does not match the Psychodynamic Approach. No credit for Pearson's  • Spearman's test/Spearman's Rho/Spearman's/eq;	(1 A03)

Question Number	Question	
20aii	State <b>two</b> reasons for choosing the statistical test you named in (a)(i) for your Psychodynamic investigation.	
	Answer	Mark
	<b>TE No credit</b> if the reasons do not match the test stated in part i).	(2 AO3)
	<b>No credit</b> if the reasons correspond to the test stated in ai) but the test was not Spearman's or Pearson's	
	<b>TE</b> if the reasons correspond to the test stated in part i) and the test stated in part i was Pearson's or Spearman's then or i) is blank or does not name a statistical test eg. Levels of Significance, but the answer in ii) is correct for Spearman"s or Pearson"s <b>full marks</b> .	
	<ul> <li>It was to test for a correlation/relationship/association/eq;</li> <li>It was not a test of difference</li> <li>The data were ordinal/eq; (Spearman's only)</li> <li>The data were ordinal or better/it wasn"t nominal data/eq; (Spearman's only)</li> <li>The data were interval/ratio/eq</li> </ul>	
	Look for other reasonable marking points.	

Guidance	
Use the levels below to allocate marks according to how detailed the answer is and how thorough the information. Giving marks for elaboration where appropriate is particularly important where questions such as this are suitable to stretch and challenge candidates, so that the full range of marks is available. Please read the whole response before crediting.	

Question	Question	
Number		
20b	Evaluate your practical investigation from the Psychodynamic Approach in terms of strengths and/or weaknesses.  You must make it clear in your answer what your investigation was about.	
	Answer	Mark
	Refer to levels at the end of the indicative content.  No credit for description of the practical.  No credit for evaluation of a practical from another approach.  Appropriate answers might include the following evaluative points but the list is not exhaustive.  • My practical can't be generalised because we only had a sample of 20 participants.  • The sample were all 17 years old from the same area so the results may not be true of everyone.  • It was not reliable because some ppts had the television on whilst they were answering the questionnaire.  • We asked how strict their parents were and they may have given a different answer due to an argument with their parents that morning.  • Ppts may lie about how obstinate they are as they want to appear in a good light.  • We all used the same questionnaire and carried it out in a quiet room so there were some controls.  • Some ppts answered the questionnaires with their friends and talked about their answers possibly affecting their results/there may have been demand characteristics.  • Ppts were friends/family who knew we were doing apiece of school work so they may have answered to help us find the results we wanted/there may have  • We only looked at ppts folders to see how tidy they were, if we had looked at their bedroom we may have reached a different decision on tidiness.  • Someone's idea of a parent being strict may be different from another person's so there is some subjectivity in the answers we received.  • Because we used rating scales rather than qualitative data it was easier to analyse/more objective.  • It was ethical as our rating scales had a full brief at the top including their right to withdraw/it was confidential.  • This means the ppts knew what they were going to do and gave informed consent.	(12 AO3)

Level	Mark	Descriptor		
		AO3 How science works.		
	0	No rewardable material. Practical from the wrong approach		
Level	1-3	Candidates will produce <b>brief answers</b> , making simple		
1	marks	statements showing some relevance to the question.		
		<ul> <li>No evaluative comments that relate specifically to the</li> </ul>		
		Psychodynamic practical and what they did, they could relate to		
		any study/practical.		
		• Examiners are not clear what the practical was about <b>OR</b> it is all		
		description with no relevant evaluation points.		
		The skills needed to produce effective writing will not normally be		
		present. The writing may have some coherence and will be		
		generally comprehensible, but lack both clarity and organisation.		
		High incidence of syntactical and /or spelling errors.		
Level 2	4-6	Limited attempt at evaluation of the Psychodynamic practical,		
	marks			
		Generic comments that could apply to any practical, but      Sould also apply to the Psychodynamic practical, May be		
		could also apply to the Psychodynamic practical. May be mainly description that is not relevant to the evaluation.		
		<ul> <li>Examiners know what the practical was on.</li> </ul>		
		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.		
Level 3	7-9	Candidate has attempted and answered <b>the injunction</b> in the		
	marks	question <b>well</b> .		
		There may be some irrelevant description as well as		
		description helping the evaluation and/or the examiner"s		
		understanding about what the practical was investigating.		
		<ul> <li>Evaluation may be generic and true of the Psychodynamic</li> </ul>		
		practical but at least one point is specifically focused on		
		evaluation of the practical that they did.		
		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		
Level 4	10-12	be present.  Candidate has attempted and answered <b>the injunction</b> in the		
Level 4	marks	question <b>very well</b> .		
	marks	The answer is mainly focused on evaluation of the		
		psychodynamic practical that they did, any description is		
		to help the evaluation and/or the examiner's		
		understanding about what the practical was		
		investigating.		
		<ul> <li>A range of evaluative comments that could apply to the</li> </ul>		
		Psychodynamic practical amongst others with at least		
		three comments that are relevant to the Psychodynamic		
		practical only.		
		The skills needed to produce convincing extended writing are in		
		place. Very few syntactical and /or spelling errors may be found.		
		Very good organisation and planning. Given time constraints and		
		limited number of marks, full marks must be given when the		
		answer is reasonably detailed even if not all the information is		
		present.		