

Mark Scheme (Results)

June 2011

GCE Psychology (6PS02) Paper 01 Understanding the Individual

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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).
- / 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.
- 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	Mandy and Mary carried out an observation of children playing in the local park. They conducted their observation one afternoon, at the same time as each other. Mandy found that more girls played on the swings than boys, whilst Mary found that equal numbers of girls and boys played on the swings. This means there is a problem with	
	Answer	Mark
	A ecological validity	(
	B reliability	(1 AO3)
	C generalisability	
	D ethics	

Question Number	Question	
2	The term 'subjectivity' can be defined as being that	
	Answer	Mark
	A researchers are influenced by their own opinions	
		(1 AO3)
	B researchers are not influenced by their own opinions	
	C the conclusions of a study are incorrect	
	D the conclusions of a study are correct	

Question Number	Question	
3	Which of the following statements is a directional (one-tailed) hypothesis?	
	Answer	Mark
	A There will be no difference in aggression towards an inflatable toy between boys and girls.	(1 AO3)
	B Men and women will have different scores on a crossword.	
	C There will be a difference in tidiness of the bedroom depending on gender.	
	D Men are better at map reading than women.	

Question Number	Question	
4	Order effects occur when	
	Answer	Mark
	A participants guess the aim of the study and this affects their results	(1 AO3)
	B participants' scores improve the second time they do the study	
	C participants only do the study once (so the results are not affected).	
	D participants do not know the aim of the study (so the results are not affected.)	

Question Number	Question	
5	Alfie is training his cat to open the cupboard door, so every time Alfie's cat opens the cupboard door Alfie gives him a cat treat. This is an example of	
	Answer	Mark
	A positive reinforcement	(1 AO1)
	B negative reinforcement	
	C vicarious reinforcement	

Question Number	Question	
6	In classical conditioning the term 'spontaneous recovery' means the	
	Answer	Mark
	A conditioned response disappears when the conditioned stimulus is presented	(1 AO1)
	B conditioned response occurs to several similar stimuli	
	C conditioned response reoccurs after it has disappeared	
	D conditioned response only occurs when one specific stimulus is presented	

Question Number	Question	
7	According to Freud's theory of psychosexual development the superego develops in the	
	Answer	Mark
	A oral stage	
	B anal stage	(1 AO1)
	C phallic stage	
	D latency stage	

Question Number	Question	
8	Barry bullied his little brother when they were both children but now, as an adult, has no memory of this behaviour.	
	This is an example of	
	Answer	Mark
	A repression	(1 AO1)
	B Oedipus complex	(= : : : = 7
	C the superego	
	D the conscious	

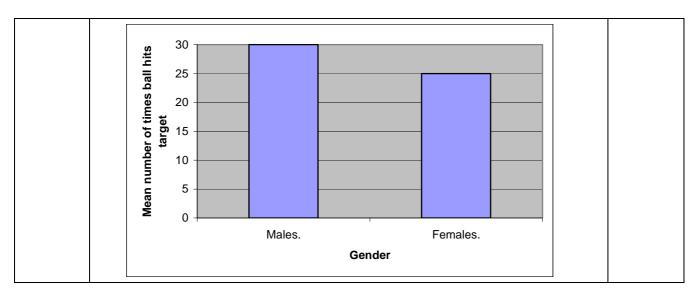
Question Number	Question	
9	The aim of Money's (1975) study was to see if gender	
	Answer	Mark
	A was determined by the media	
	B was determined by neurotransmitters C could be reassigned after puberty	(1 AO1)
	D could be reassigned after birth	

Question Number	Question	
10	Two criticisms of Money's (1975) study are	
	Answer	Mark
	A the study lacks ecological validity, as it was an unnatural setting	(2 AO2)
	B no consent was given for the study to be carried out	
	C it lacks reliability as it would be hard to replicate the study	
	D Brenda may have shown demand characteristics	
	E it was a case study so the results may not be true for everyone	
	F there was no control to compare Brenda's behaviour with	

Section B

Question Numbers	General Instructions
11b to 17	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.

Questio	Question					
_	Question	Question				
n Normala a re						
Number						
11(a)	Caroline carried out an experiment to see if men were better at hitting a target with a ball than women. 10 men and 10 women threw 50 balls each. She counted how many balls hit the target for each participant. She then worked out the mean number of hits for males and the mean number of hits for females. Figure 1: Table to show the mean number of times the ball hit the target in three minutes.					
		Males	Females			
	Mean number of times the ball hit the target.	30	25			
	On the graph paper below represent the data in the tagraph free hand.	•				
	Answer			Mark		
	 0 marks if the graph is r the form of a bar chart 1 mark if either both bars or a bar and an axis is ac 	or (histogram). s are accurate or bo	th axes are accurate	(3 AO3)		



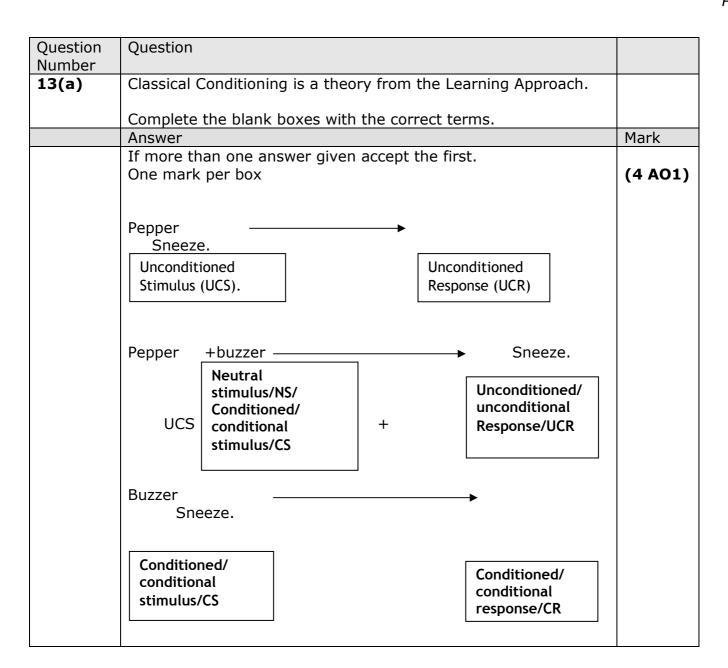
Question Number	Question	
11(b)(i)	What inferential (statistical) test could Caroline use on the results of her study?	
	Answer	Mark
	 If more than one answer given accept the first. Just 't' test 0 marks Mann Whitney. Mann Whitney U test. Independent t test. Unrelated t test. 	(1 AO3)

Question Number	Question	
11(b)(ii)	Give two reasons why Caroline would be able to use the inferential (statistical) test you identified in (b)(i.)	
	Answer	Mark
	2 marks if two correct reasons for the test mentioned in part bi) are given even if it is incorrect in part bi). 1 mark for one correct reason for the test given in part bi) is given.	(2 AO3)
	0 marks if the reason for the test do not match the test stated in part bi)	
	If more then one answer in a space, then take the first answer (e.g. level of measurement or design).	
	T.E. Part bi can be incorrect and bii can still get full marks as long as it relates to the answer given in part bi.	
	Answers for Mann Whitney U test include; • Looking for a difference. • Ordinal data/interval/ratio/interval ratio. • Independent groups/measures.	

 Interval/ratio/cardinal/parametric data. Independent groups/measures [do not award mark if unspecified `t' test]. Parametric.

Question Number	Question	
12(a)	In the Psychodynamic Approach you will have learned about Freud's study of Little Hans.	
	Describe the findings (results and/or conclusions) of Freud's study of Little Hans.	
	Answer	Mark
	No credit for a study other than Little Hans.	
	No credit for the aims or procedure.	(4 AO1)
	 Hans' fear of horses represented a fear of his father/eq; The black harness round the horses mouth represented his father's moustache/eq; The dream about the plumber replacing Hans' penis represented the resolution of the Oedipal complex/eq; Freud concluded that Hans was going through/successfully resolved the Oedipus complex/eq; Freud thought Hans was repressing his interest in his widdler and this was represented in his dreams/eq; His fear of drowning in the bath represented his wish for his sister to die/eq; Freud interpreted Hans's dreams about bottom wiping as being fixation at the anal stage/eq; 	

Question Number	Question	
12(b)	Evaluate Freud's study of Little Hans. When evaluating you could consider the strengths and weaknesses of the study. Answer	Mark
	No credit for use of a term on its own (e.g. it was valid). In such cases if a technical term is used correctly and explained it can gain 1 mark, if linking it to the study adds to the explanation then it can gain 2 marks. The explanation can gain a mark without the term. • The study lacked reliability as there were few controls, so it cannot be easily replicated/eq; (1 mark.) • The study lacked reliability as there was not a set of standard questions to ask Little Hans, therefore it cannot be repeated easily/eq (2 marks.) • As it was a case study on one boy the results may not apply to everyone/be generalised/eq; (1 mark) • The data may be biased as it was collected by Hans' father who may only have included details that fit with Freud's theory/eq; • Freud had to interpret the information so increasing subjectivity/eq; • The study was done in Little Hans's natural environment so there was ecological validity/eq; • Freud had to interpret the information so increasing subjectivity as other analysts may come to different conclusions from the same data/eq; (2marks.) • Freud ignored other reasons for Hans' phobia, such as he saw a horse collapse in the street/eq; • It was considered ethical as he was under 16 so his parents gave consent for him to participate in the study/eq;	(5 AO2)



Question Number	Question	
13(b)	Define what is meant by the term 'extinction' in classical conditioning.	
	You must use an example in your answer.	
	Answer	Mark
	 Max 1 mark if no example is given. Max 1 mark for an example Elaboration of an example to explain extinction using terms gains credit This is when a conditioned stimulus (e.g. buzzer) no longer leads to a conditioned response (e.g. salivation) (the response is dormant)/eq; 1 mark It occurs when the UCS is no longer presented with the CS so the CR no longer occurs/eq; E.g. Pavlov's dogs no longer salivated to the bell (CR)/eq; 1 mark This is when a tin of dog food that previously led to a salivation response in the dog no longer produces that response, which is extinction because the conditioned stimulus, the tin, does not now produce the response (CR) in the dog/eq; 2 marks 	(2 AO1)
	Look for any other reasonable marking points.	

Question Number	Question	
13(c)	Another form of learning is operant conditioning.	
	Define what is meant by the term 'primary reinforcement' in operant conditioning. You must use an example in your answer.	
	Answer	Mark
	 Max 1 mark if no example is given. No marks for secondary reinforcement Max 1 mark for an example (more than one word). Possible primary reinforcers: food, sex, warmth, shelter, water, praise/attention. There are other ways of expressing these. Primary reinforcement satisfies a basic need/eq; Primary reinforcement satisfies a basic need, e.g. food/eq; 1 mark Food satisfies our hunger/eq; It can be given for a desired behaviour to motivate/eq; E.g. if you are given sweets for tidying your room/eq; Look for any other reasonable marking points. 	(2 AO1)
	Look for any other reasonable marking points.	

Question	Question	
Number		
14(a)	One research method used in the Learning Approach is the observational method. One type of observation is an overt observation. Outline the overt observational method.	
	Answer	Mark
	Credit points that relate to all observations up to Max 2	Mark
	marks.	(3 AO3)
	Ignore reference to covert observation.	
	0 marks for evaluative comments.	
	Max 1 mark for an example in so far as it adds to the outline	
	of the method.	
	 In overt observation participants know that they are being observed/eq; They can either be told directly that they are in an observation, or there could be a sign in the area saying it is being observed/eq; The observers should have clear definitions of the behaviour they are looking for/eq; When they see a relevant behaviour the observers should note it down/eq; The observer may be a member of the group they are studying, which makes it participant observation/eq; 	
1	Look for any other reasonable marking points.	

Question Number	Question			
14b	The following four statements evaluating method are either true or false. Put a cross indicate whether each statement is true or false.	in the corr		
	Answer			Mark
	If both boxes are crossed then 0 marks unlest crossed out. One mark per correctly checked/identified services.		learly	(4 AO3)
	Statement	True	False	
	The data may not be valid as participants' behaviour may change if they know they are being observed.	x		
	If the observer is part of the group being observed their data is more objective than if they were not a member of the group being observed.		x	
	Structured observations are more valid than natural observations as they are in a controlled environment.		x	
	If two or more observers have similar results then reliability is low.		x	

Ougation	Overhion	
Question Number	Question	
15a	Jaspreet has just started a new job as a nanny for a family with	
	two children aged six months and two years. She has asked you to explain what behaviour the children may show.	
	Explain what behaviour each child is likely to show with regard to Freud's psychosexual stages.	
	Answer	Mark
	If the answer does not refer to the stimulus at least once max	
	2 marks. Max 2 marks if only one child is referred to.	(4 AO2)
	0 marks for answers that do not focus on the first two of Freud's psychosexual stages.	
	0 marks for what happens if fixated in a stage. 1 mark for correctly fitting the ages/children to the stages (both)	
	 The 6 months old will be in the oral stage and the 2 year old in the anal stage/eq; The 6 month old will like putting things in its mouth as it is in the oral stage of development/eq; 	
	 It will want its demands satisfied at once as it is all id, it hasn't developed an ego yet/eq; 	
	 The 2 year old will be starting to realise it needs to balance what it wants with reality/eq; 	
	 So it may understand that it can't have sweets until after dinner/eq; 	
	 Pleasure will be focused around the anus, it may enjoy not going to the potty until it absolutely has to/eq; 	
	Look for any other reasonable marking points.	

Question Number	Question	
15b	Outline one strength of Freud's psychosexual theory of development.	
	Answer	Mark
	 1 mark for identifying a strength of Freud's psychosexual theory of development. If more than one strength given, mark all and credit the best. 0 marks for weaknesses of the theory. 	(2 AO2)
	 ID. It allowed people with mental disorders to be treated/eq; It showed that the unconscious caused mental disorder so by using dream analysis to access the unconscious patients could be cured/eq; 	
	 ID. The case study of Little Hans gives supporting evidence/eq; Little Hans was going through the Oedipus complex where his fear of horses was really a fear of his father/eq; 	
	 ID. Studies have shown that anal characteristics are present in some people/eq; Fisher and Greenberg found that neatness, meanness and obstinacy do go together/eq; 	
	 ID. It helps people to break habits such as smoking/eq; By explaining that habits can link to early childhood trauma so exploring that link can help people/eq; 	
	Look for any other reasonable marking points.	

Question Number	Question	
16	The central nervous system has an important role in human behaviour. Describe the central nervous system.	
	Answer	Mark
	No credit for descriptions of the role of genes, PNS, or hormones. Max 1 for an example in so far as it adds to the description. Max 2 for a correct diagram fully labelled. Max 3 if no mention of the brain or spinal cord in some way	(4 AO1)
	 The central nervous system is made up of the brain and the spinal cord/eq; Nerves in our body send information via the spinal cord to the brain/eq; The brain then processes this information and sends a message to the body through the spinal cord/eq; E.g. our eyes send a message about a car coming towards us, the brain processes how far away it is and sends a message back telling us to cross the road/eq; Different areas of the brain are responsible for different functions, e.g. the hippocampus is important for memory/eq; Neurons in the brain pass messages along through electrical impulses/neurotransmitter/eq; Neurotransmitters are released and cross the synaptic gap to be picked up by receptor sites/eq; Look for other reasonable marking points 	

Question Number	Question	
•	Animal studies are often used in the Biological Approach. Evaluate the use of animals in psychological studies in terms of the ethical issues. Answer O marks for answers that evaluate animal studies in terms of their practical issues. O marks if just state animal ethics with no evaluation. Max 1 for an e.g. if it elaborates on the answer. No credit for human ethical guidelines. It is possible to do things to animals (such as cause brain damage) that would be unethical in humans/eq;	Mark (4 AO3)
	 E.g. Skinner gave electric shocks to the rats in the Skinner box, we wouldn't be able to give electric shocks to humans in the same way/eq; Some people argue that we should never do things to animals that we would not do to humans and all animal studies are unethical/eq; Minimum numbers of animals should be used in studies making them more ethical because any practices are not carried out unnecessarily/eq; Using Bateson's cube animal studies are ethical if we are certain there will be a benefit, their suffering is low and the research is of a high quality/eq; (2 marks) However, whilst we may expect a benefit to come from the research we cannot know there will be any benefit until after the research/eq; Results from animals such as rats may not be true for humans, meaning that they have been used in vain so making it unethical/eq; Look for any other reasonable marking points. 	
	Look for any other reasonable marking points.	

Section C

Question Numbers	General Instructions
19a and 19b	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	Question	
Number 18	Delia has heard somewhere that the number of horror films watched may be linked to the number of frightening dreams that people have. She has decided to carry out a correlational study to investigate this. Describe how Delia might carry out her correlational study. You could include: • sample • procedure • measurement of variables.	
	Answer	Mark
	Giving marks for detail and elaboration is important where appropriate so that the full range of marks is available. Answers must add to what has already been said to gain further marks Read the whole answer and then allocate the marks. Be aware the candidates may use terms from experiments but still be describing the correlation in the rest of the answer – so can gain marks – please credit points relevant to a correlation (e.g. data that can form a correlation). O marks Either no answer or a muddled answer where the examiner cannot determine how the study would be carried out - or it is not a correlational study (but please read the whole answer)	(5 AO3)
	1 mark 1 step of how the correlational study would be carried out – must be specifically able to be related to correlation design – no need for mention of correlation or relationship – (e.g. not sampling though that can gain credit as a step once correlation has been established). The stimulus is not referred to.	
	2 marks More than 1 step of how the correlational study is carried out but not detailed enough to be replicated/there is	

O 1:				
Question	Question			
Number				
19(a)	Describe the role of hormones in gender development.			
	Answer	Mark		
	The answer must focus on the role of hormones.			
	0 marks for answers that focus on genes or brain	(3 AO1)		
	lateralisation.			
	 If the H-Y hormone is released when the foetus is 6 weeks then testes will develop/eq; Testosterone makes males more aggressive/tough and oestrogen makes females more emotional/eq; If the testes develop male sex hormones will be released when the foetus is 3 months leading to male sex organs/eq; 			
	 If no male hormones are released then the female sex organs develop/eq; In puberty the hormone testosterone lead males to develop facial hair and causes sperm to be produced/eq; In females oestrogen released at puberty causes breasts to grow and fatty tissue to be deposited on the hips/eq; 			

Question	Question		
Number	Question		
19(b)	Mark was born genetically male but with an undeveloped penis. His parents are trying to decide whether it would be best for him to have an operation to change him into a female. With reference to Mark, use concepts (ideas, theory, research) from the Biological Approach to explain issues involved in gender development.		
	Answer	Mark	
	O marks if the scenario is not explained in terms of the Biological Approach. Max 2 marks available if no reference to the scenario at least once. Max 2 available for pure description of biology that is not linked to Mark e.g Y chromosome, brain lateralisation, hormones Max 2 marks available for using other approaches in the answer. Max 1 mark for description of a study as an illustration of issues involved in gender development. • Mark has already been exposed to male hormones in the womb so his behaviour may remain masculine/eq • Mark will have a male brain with language being more lateralised to the left hemisphere so the operation may not be successful/eq; • Due to his biological make up Mark may feel masculine even if he is brought up as a female/eq; • David Reimer was seriously affected throughout his life as he always felt different even when he didn't know he had been a boy/eq; • Reiner found that of 14 boys raised as girls after surgery most of them felt male, so it may not work/eq; • Daphne Went is a case of a genetic male raised as a female who was happy being female so showing sometimes people can be successfully raised as the opposite sex/eq;	(5 AO2)	
	Look for any other reasonable marking points.		

Question
Describe the development of gender as explained by the Learning Approach and compare it to the Psychodynamic explanation of gender development.
Comparisons include considering similarities and /or differences.
Indicative content.
Refer to levels at the end of the indicative content.
No credit for description or comparison to the biological approach.
Appropriate answers might include the following descriptive points, but the list is not exhaustive.
 e.g. Learning Approach According to the social learning theory boys will imitate male role models and girls will imitate female role models We observe the behaviour of same sex models and reproduce that behaviour when appropriate E.g. If we are female and observe our mum doing the housework then we are more likely to do the housework We are more likely to imitate same sex role models as they seem relevant to us Operant conditioning says that we are positively reinforced for behaviour that is gender appropriate Children often get attention and praise for doing something that is gender appropriate E.g. girls are often praised for looking pretty whilst boys are praised for being daring/adventurous If we are punished for gender inappropriate behaviour we will not do that behaviour again to avoid the punishment
 Appropriate answers might include the following comparison points, but the list is not exhaustive. Both approaches agree that we imitate the same sex parent But the psychodynamic focuses only on the same sex parent whilst SLT says we can have other role models as well Both agree that gender development is determined after birth, unlike the biological approach The learning approach says gender development is all down to our environment whilst the psychodynamic approach says it is partly genetic They are both nurture in that both approaches point to parents and upbringing as being important in gender development as genes pre-programme us to go through the Oedipus complex during the phallic stage (elaboration) Both approaches have supporting evidence, the psychodynamic approach through the case of Little Hans and the learning approach through Bandura's study The learning approach tends to use experiments to support its theory of gender development, making it more scientific than the psychodynamic approach The psychodynamic approach says reinforcement is not necessary

reinforcement is how we learn our gender behaviour

• According to Freud we identify with the same sex parent before we take on our gender behaviour, SLT says we imitate the behaviour first then identify.

Level	Mark	Descriptor
		A01 : Knowledge and understanding of science and of how science works.
		A02 : Application/evaluation of knowledge and understanding of science and how science works.
	0	No rewardable material
Level 1	1-3 marks	 Candidates will produce brief answers, making simple statements showing some relevance to the question. Limited description of the learning explanation of gender development Or a limited attempt at comparison. Or both learning and psychodynamic explanations are given, learning explanation being limited, and without explicit comparison May be some description of the psychodynamic explanation of gender development
		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 marks	Candidates will produce statements with some development in the form of mostly accurate and relevant material. There will be some attempt at comparison with limited success. • EITHER Good description of the learning explanation, may not link to gender, and a limited attempt at comparison. • OR Good comparison with limited description of the learning approach to gender within the comparison • OR description and comparison better than limited • OR both psychodynamic and learning explanations are described well but without any explicit comparison
		Candidates will produce statements with some development in the form of mostly accurate 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 marks	 Candidate has attempted and answered both injunctions in the question well. Good description of the learning explanation, mostly related to gender, the description can be one theory in depth or 2 theories with breadth and comparison is attempted. Some of the comparison points may be implicit, e.g. description of learning approach followed by description of psychodynamic approach. At least one comparison point is explicit, e.g. however/but 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.
Level 4	10-12 marks	 Candidate has attempted and answered both injunctions in the question very well. Good description of the learning explanation, clearly explaining gender development, the description can be one theory in depth or 2 theories with breadth and a good comparison of the two approaches. Most of the comparative points are explicit, though a minority may be implicit. 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.

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