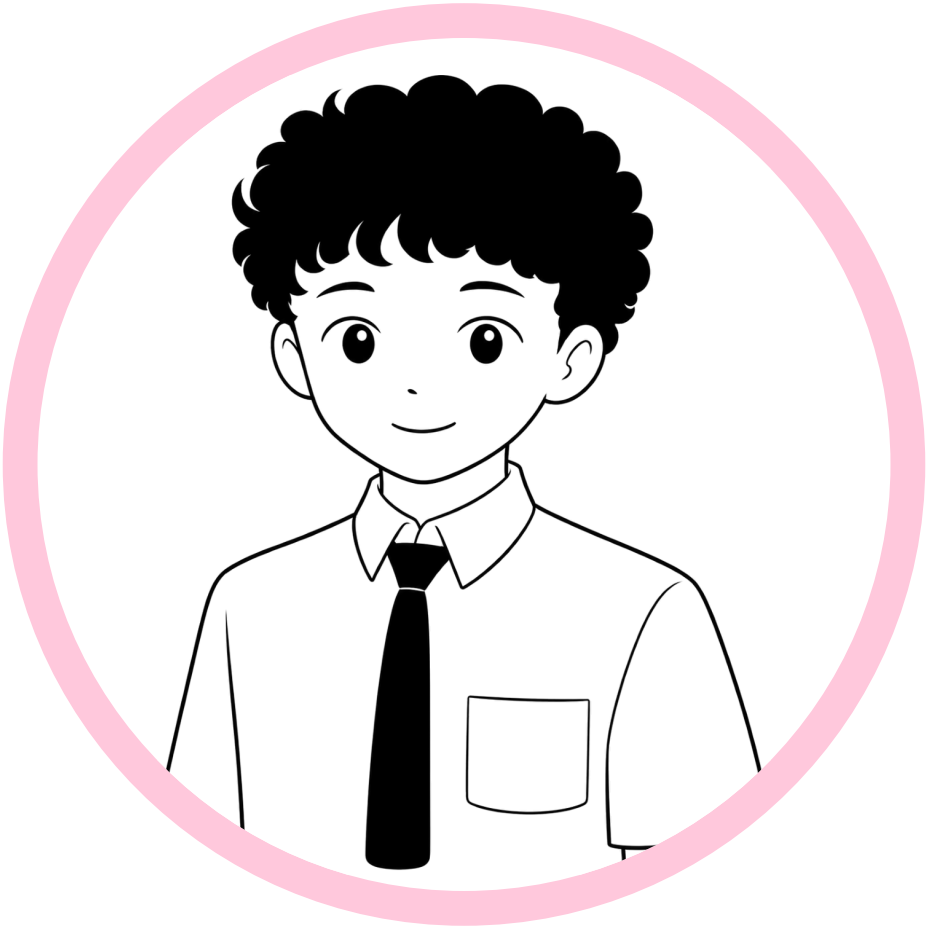
PEARSON EDEXCEL IAL PSYCHOLOGY · YPS01

PSYCHOLOGY



MARK SCHEME

LEARNING THEORIES AND DEVELOPMENT

SCORE	PERCENTAGE
/342	%

STEMUP

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(Total for question = 16 marks)

Mark Scheme

Q1.

Question Number	Answer	Mark
(a)	**AO2 (2 marks)** Credit **two** marks for accurate description of an ethical issue in relation to the scenario For example: • As Pip is using children, he should get fully informed consent from their parents and the head teacher at the school (1), this means he should tell them that he will be observing the children to see if they will help pick up books (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(b)	**AO2 (1 mark)** Credit **one** mark for accurate identification in relation to the scenario. For example: • Pip would have used the critical value 5.02 for a one tailed test at $p \leq 0.01$ (1). **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(1)**

Question Number	Answer	Mark
(c)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a strength in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the strength. For example: • There would have been less chance of the children showing demand characteristics when deciding whether to help tidy up the books as they would not be aware Pip was observing them (1), so their behaviour would have been more natural increasing the validity of the results on the effect of the teacher's behaviour (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(d)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of an improvement in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the improvement (AO3). For example: • Pip could have used the same teacher to help tidy up the books and to not help tidy up the books (1), so whether the children helped tidy the books or not was not affected by the personal characteristics of the teacher (1). **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(e)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of a strength and a weakness in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the strength and the weakness (AO3). For example: Strength • Pip would gain a better, detailed, understanding of why the children helped pick up the books from their conversation increasing validity (1), as he would note down if the child who helped said something about the teacher so giving further evidence about the effect of the teacher's behaviour (1). Weakness • Pip's analysis of the children's conversations when helping would be based on his own interpretations so it would be subjective (1), so if a child used a pronoun Pip may think it referred to the teacher, when another observer may not so reducing the reliability of his observation (1). **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(4)**

Q2.

Question Number	Answer	Mark
(a)	**AO2 (2 marks)** Credit up to **two** marks for accurate description in relation to the scenario. For example: • Sigourney could have collected all the names of the children from the local village and put them into a computer programme (1). She would then use a random computer programme to select the names of the children until she had enough to conduct her observation on positive reinforcement (1). **Look for other reasonable marking points.** **Answer must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(b)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a strength in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the strength (AO3). For example: • All the children in the local village had an equal chance of being participants so the results on the effects of positive reinforcement on reading are not affected by researcher bias (1) as Sigourney should have a variety of children such as those who enjoyed reading and those who did not like reading so the results would be more representative (1). **Look for other reasonable answers.** **Answer must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(c)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of an improvement in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the improvement (AO3). For example: • Sigourney could use parents and children from a variety of villages and towns rather than just from one village (1), this would ensure that the results from her observation would be more representative of all parents and children and the effects positive reinforcement has on their reading (1). **Look for other reasonable answers.** **Answer must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(d)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a weakness in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the weakness (AO3). For example: • When Sigourney is analysing the data on what the parents said in praise of their children reading, she will decide what data fits into what themes which may be subjective (1), as what Sigourney thinks goes into one theme and classes as positive reinforcement another person may not (1). **Look for other reasonable answers.** **Answer must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(e)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of an improvement in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the improvement (AO3). For example: • Sigourney could gather data from other sources such as whether positive reinforcement for reading was received at school (1), this would prevent positive reinforcement from other parts of the children's lives having a confounding effect on her results (1). **Look for other reasonable answers.** **Answer must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Q3.

Question Number	Answer	Mark
(a)	**AO2 (2 marks)** Credit up to **two** marks for an accurate description in relation to the scenario. For example: • Sophia would have got a list of all the different ethnic backgrounds of the children at the local school and what percentage of the children were from each ethnic background (1). She would then try to ensure that she had the same percentages of children from each ethnic background in her sample (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(b)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for an accurate identification of a strength and a weakness in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the strength and the weakness (AO3). For example: Strength. • As Sophia's sample has the same percentages of children from each ethnic background as the target population her sample is representative of the school children (1), which means that the results on children's play at different stages of development are true of all the children at the school so they are generalisable (1). Weakness. • Sophia may have children who have parents from two different ethnic backgrounds in her sample which could affect her groupings (1), as she would have to decide whether the child went in the mother or the father's ethnic group which would be a subjective decision (1). **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
(c)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a reason in relation to the scenario (AO2). Credit **one** mark for an accurate justification/exemplification of the reason (AO3). For example: • Sophia may have used a structured observation as she can control all the variables whilst the children are playing, such as no distractions from other children (1), so she can be more certain that any differences in play are due to the development stage of the children and not other confounding variables (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(d)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of an improvement in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the improvement (AO3). For example: • Sophia could have had another observer with her to also record whether the children played next to each other or with each other (1), they could then compare results and check they were consistent, so increasing reliability if both observers agreed on how the children were playing (1). **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(2)**

Q4.

Question Number	Answer	Mark
(a)	**AO2 (2 marks)** Credit up to **two** marks for an accurate description in relation to the scenario. For example: • Reece would collect all the names of the boys and girls who attended the school and put them into a random computer generator (1). He would then use the computer to pick the names of the children until he had enough to conduct his observation on the effects of rewards on behaviour of boys and girls (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(b)(i)	**AO2 (4 marks)** For example: Credit **one** mark for correct completion of **O-E** column Credit **one** mark for accurate completion of **$(O-E)^2$** column Credit **one** mark for accurate completion of **$(O-E)^2/E$** column to one decimal place Credit **one** mark for correct **chi-squared** to **one** decimal place = **6.6** **Look for other reasonable answers.**	**(4)**

		Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2/E$
Condition A: 1 point or less during the day	Boys	3	6	-3	9	1.5
	Girls	8	5	3	9	1.8
Condition B: 5 points or more during the day	Boys	9	6	3	9	1.5
	Girls	2	5	-3	9	1.8
				Chi squared =		6.6

Question Number	Answer	Mark
(b)(ii)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of significance in relation to the scenario (AO2). Credit **one** mark for an accurate justification/exemplification of the decision (AO3). For example: • Reece found a significant difference in the number of boys and girls who received 1 or fewer points and those who received 5 or more points (1) as the calculated value (of 6.6) is bigger than the critical value (of 2.71) (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(c)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each improvement in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of each improvement (AO3). For example: • Reece could have used a covert observation when observing whether the boys and girls did as the teacher requested to avoid demand characteristics, with the teacher's consent (1), as the children would not be aware that he was observing them so the number of points they received would be more realistic (1). • Reece could have observed the boys and girls and the number of points they got for a longer time period such as a week (1), as this would make the observation more valid because the children's mood would not have as much of an effect over a full week (1). **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(4)**

Q5.

Question Number	Answer	Mark
(a)	**AO2 (2 marks)** Credit up to **two** marks for accurate description in relation to the scenario. For example: • Phillipa would decide to give the dog a treat after a set number of times that it had given her its paw when she said "paw" (1). For example, she would give the dog a treat after she had said "paw" five times and the dog had given her its paw (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(b)	**AO1 (2 marks), AO3 (2 marks)** Credit one mark for each accurate comparison identified (AO1) Credit one mark for exemplification/justification of comparison (AO3) The answer must include at least one similarity and one difference. For example: • One difference is classical conditioning involves the learning of more limited behaviours compared to operant conditioning (1), as classical conditioning focuses on the learning of reflexes only whilst operant conditioning focuses on the learning of voluntary behaviours (1). • Both classical and operant conditioning say that we learn through the environment and association (1), classical conditioning by associating a new stimulus with the unconditioned stimulus and operant conditioning through associating a behaviour with a desired reward (1). **Look for other reasonable marking points.**	**(4)**

Q6.

Question Number	Answer	Mark
(a)	**AO1 (1 mark), AO2 (1 mark)** Credit **one** mark for an accurate definition (AO1). Credit **one** mark for a suitable example (AO2). For example: • An unconditioned stimulus is an environmental stimulus that causes the innate reflexive response (1). For example food is an unconditioned stimulus as it causes the response of salivation (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
(b)	**AO1 (1 mark), AO2 (1 mark)** Credit **one** mark for an accurate definition (AO1). Credit **one** mark for a suitable example (AO2). For example: • A conditioned stimulus was the neutral stimulus but it now elicits the conditioned response (1). In Pavlov's study the metronome became the conditioned stimulus as it caused salivation in the dogs (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
(c)	**AO1 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a strength (AO1). Credit **one** mark for justification/exemplification of the strength (AO3). For example: • Pavlov's (1927) study of dogs supports classical conditioning as an explanation of learning so the theory is credible as he classically conditioned the dogs (1) as he found that pairing a metronome with the presentation of food lead to the dogs salivating when they heard the metronome (1). **Look for other reasonable marking points.**	**(2)**

Q7.

Question Number	Answer	Mark
(a)	**AO2 (4 marks)** Credit up to **four** marks for accurate description in relation to scenario. For example: • Free association allows unconscious thought to become conscious, such as Willow mentioning her father instead of her husband (1). The ego defence mechanisms become weaker so unconscious thoughts such as how Willow's boss reminds her of her mother can be expressed (1). Willow's psychanalyst wanted to focus on the mistakes Willow said as they felt that there was a deeper meaning behind them and they would allow Willow to gain insight into her phobia (1). Willow felt embarrassed and did not want to talk about what she had said as her conscious was trying to protect her from her unconscious emotions about her mother (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
(b)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of a strength and a weakness in relation to scenario (AO2). Credit **one** mark for justification/exemplification of the strength and the weakness (AO3). For example: Strength. • Free association allows Willow's psychoanalyst to understand what is going on in her unconscious such as how she relates her husband with her father (1), so it allows Willow to understand the root cause of her phobia of expressing her opinion unlike other therapies such as systematic desensitisation (1). Weakness. • The use of free association can take several years before Willow feels relaxed enough to say something she did not mean to, such as how her boss has the same colour hair as her mother (1), therefore as she needs to get over her phobia of expressing her opinion in three months another therapy such as systematic desensitisation may be better for her (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Q8.

Question Number	Answer	Mark
(a)	**AO1 (2 mark)** Credit up to **two** marks for accurate naming. For example: • The oral stage (1). • The anal stage (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
(b)	**AO2 (4 marks)** Credit up to **four** marks for an accurate description in relation to the scenario. For example: • Patti is in the phallic stage and is going through the Electra complex as she is five years old (1). Patti has unconscious desires for her father which explains why she is clinging to him (1). Her desire to be a nurse is her unconscious desire to be like her father due to penis envy (1). Patti blames her mother for not having a penis which is why she shouts and tells her mother 'no' (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
(c)	**AO2 (1 mark), AO3 (1 mark1)** Credit **one** mark for accurate identification of a weakness in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the weakness (AO3). For example: • Freud's theory can be considered as lacking empirical evidence to support it making it unscientific, as assumptions are made about why Patti always shouts 'no' at her mother (1) as concepts such as the unconscious are not directly observable, so its effects must be inferred such as interpreting the hidden meaning of why Patti shouts 'no' (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Q9.

Question Number	Answer	Mark
(a)	**AO1 (1 mark), AO2 (1 mark)** Credit **one** mark for an accurate definition (AO1). Credit **one** mark for a suitable example (AO2). For example: • Positive reinforcement is receiving something that is desired after demonstrating a behaviour (1). For example, being given a sweet that you want after tidying your bedroom (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
(b)	**AO1 (1 mark), AO2 (1 mark)** Credit **one** mark for an accurate definition (AO1). Credit **one** mark for a suitable example (AO2). For example: • Negative reinforcement is removing or avoiding something unpleasant after demonstrating a behaviour (1). For example, avoiding an undesired poor grade by revising (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
(c)	**AO1 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a strength (AO1). Credit **one** mark for justification/exemplification of the strength (AO3). For example: • Operant conditioning is a more complete explanation than classical conditioning, so it is more credible (1), as it describes how new voluntary behaviours are learned rather than just focussing on reflexive behaviours (1). **Look for other reasonable marking points.**	**(2)**

Q10.

Question Number	Answer	Mark
(a)	**AO1 (2 marks)** Credit **two** marks for accurate description. For example: • The unconscious contains thoughts, desires and memories that we cannot cope with emotionally (1). We are not aware of what is in the unconscious but it can motivate our behaviour (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
(b)	**AO1 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of one strength and one weakness (AO1). Credit **one** mark for justification/exemplification of the strength and the weakness (AO3). For example: Strength • Freud's study of Little Hans (1909) found that Little Hans's fear of horses was really an unconscious fear of his father (1), showing that Little Hans was going through the Oedipus complex during the phallic stage, so supporting Freud's theory (1). Weakness • The study of the unconscious is not scientific as it has features such as the unconscious are not directly observable (1), so assumptions about what is in the unconscious motivates behaviour has a lack of empirical evidence (1). **Look for other reasonable marking points.**	**(4)**

Q11.

Question Number	Answer	Mark
(a)	**AO1 (1 mark)** Credit **one** mark for an accurate definition For example: • Vicarious reinforcement is when you see a model being given something you desire for their behaviour so you want to imitate that behaviour (1). **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
(b)	**AO1 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of one strength and one weakness (AO1). Credit **one** mark for justification/exemplification of the strength and the weakness (AO3). For example: Strength • Bandura Ross and Ross (1961) found that children did imitate an adult's aggressive behaviour toward a Bobo doll giving the theory credibility (1), as they found 50.9 imitative acts when the children saw an aggressive role model compared to 4.2 when they saw a non-aggressive role model (1). Weakness • One weakness of social learning theory is that it ignores the effects of biological factors on human behaviours, such as brain functioning (1), which says that stimulation of the amygdala causes aggression, so social learning theory is not a complete explanation of human behaviour (1). **Look for other reasonable marking points.**	**(4)**

Q12.

Question Number	Answer	Mark
(a)	**AO1 (1 mark)** Credit **one** mark for accurate statement For example: • Capafóns et al. (1998) used a volunteer sampling technique. (1) **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
(b)	**AO1 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each way the study was controlled (AO1). Credit **one** mark for justification/exemplification of each way the study was controlled (AO3). For example: • Capafóns et al. (1998) used the same published scales with all the participants to measure their fear of flying at the start and end of the study (1), which means that any differences in the fear of flying that were found can be said to be due to having treatment or not rather than the use of different scales for the different groups (1). • The participants in the treatment group and the non-treatment groups were matched at the start of the study for their self-reported fear level (1), therefore the results were not due to the non-treatment group starting off with a higher self-reported fear of flying adding to the validity of the study (1). **Look for other reasonable marking points.**	**(4)**

Q13.

Question Number	Answer	Mark
(a)	**AO1 (1 mark)** Credit **one** mark for an accurate statement. For example: • Capafóns et al. (1998) aimed to confirm that systematic desensitisation was an effective treatment for phobias (1). **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
(b)	**AO1 (3 marks)** Credit up to **three** marks for an accurate description. For example: • There was a total of 41 participants in the study, all of whom were afraid of flying (1). 20 of the participants were in the treatment group and had systematic desensitisation for their fear of flying (1). The participants in the treatment group and the control group were matched in terms of how scared they said they were of flying (1). **Look for other reasonable marking points.**	**(3)**

Question Number	Answer	Mark
(c)	**AO1 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each weakness (AO1). Credit **one** mark for justification/exemplification of each weakness (AO3). For example: • Capafóns et al. (1998) only used participants who were afraid of flying in their study (1), therefore the results may not be the same for other phobias so cannot be generalised to systematic desensitisation for all phobias (1). • The participants replied to a media campaign so volunteered for the study which may cause the sample to be biased (1), as only those who were ready to have their phobia of flying treated may have responded to the media campaign (1). **Look for other reasonable answers.**	**(4)**

Question Number	Answer	Mark
(d)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of an application (AO2). Credit **one** mark for justification/exemplification of the application (AO3). For example: • One application from Capafóns et al. (1998) is that those with a fear of flying can be treated using a combination of imaginary and real tasks (1), as a combination of both techniques resulted in reduced fear of flying for 90% of the treatment group (1). **Look for other reasonable answers.**	**(2)**

Q14.

Question Number	Answer	Mark
(a)	**AO2 (1 mark)** Credit **one** mark for accurate statement in relation to quantitative data from the learning theories and development practical. For example: • We concluded that females are more likely than males to help a person who has dropped a book (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.** **Must relate to learning theories and development practical (observation).**	**(1)**

Question Number	Answer	Mark
(b)	**AO2 (2 marks)** Credit up to **two** marks for an accurate description in relation to the qualitative data from the learning theories and development practical. For example: • We read through our notes on what the males and females had said to the person who dropped the book (1), we then created themes such as asking if the person who dropped the book was alright based on what we had read (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.** **Must relate to learning theories and development practical (observation).**	**(2)**

Question Number	Answer	Mark
(c)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each improvement in relation to the learning theories and development practical (AO2). Credit **one** mark for justification/exemplification of each improvement (AO3). For example: • We could have used a number of different libraries to observe whether participants helped to pick up a book, or not (1), as this would make our results on whether males or female helped more representative of the target population so they would be more generalisable (1). • We could have had both a male and a female drop a book in the library to improve the validity of our practical investigation (1), so we could be sure that the extraneous variable of the gender of who dropped the book did not affect our results (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.** **Must relate to learning theories and development practical (observation).**	**(4)**

Q15.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO3 (4 marks) **AO1** • Social learning theory involves observing and imitating the behaviour of our role models. • A person is our role model if they have relevance to us such as being the same gender and we can identify with them. • A behaviour must be performed where we can see it so we can pay attention to it and store the behaviour in our memory. • If the role model is reinforced, and receives a reward for their behaviour the observer is more likely to reproduce the behaviour. **AO3** • Charlton et al. (2000) found that after the introduction of television there was no significant change in the amount of antisocial behaviour in children, so observing behaviour does not always cause humans to imitate that behaviour. • Perez et al. (2018) found that a mother's body dissatisfaction positively predicted her daughter's body dissatisfaction, therefore human behaviour is explained through the observation of relevant role models. • Social learning theory does not explain all learnt behaviour, such as insight learning where we can suddenly understand the solutions to a problem without observing anyone else. • Bandura (1965) found that children who saw an aggressive model being reinforced showed significantly more aggressive behaviour, therefore the use of vicarious reinforcement can explain how humans learn new behaviour. **Look for other reasonable marking points.**	**(8)**

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

Q16.

Question Number	Answer	Mark
(a)	**AO2 (1 mark)** Credit **one** mark for the correct answer For example: • 8 (1). **Reject all other answers**	**(1)**

Question Number	Answer	Mark
(b)	**AO2 (1 mark)** Credit **one** mark for the correct answer For example: • 1 (1). **Reject all other answers**	**(1)**

Question Number	Answer	Mark
(c)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of a strength and a weakness in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the strength and the weakness (AO3). For example: Strength • The mean uses all the scores from each dog that did or did not get a treat when finding drugs in a bag (1), so it is a more robust measure of central tendency when using the means to compare the data between the dogs (1). Weakness • The mean can be affected by extreme scores such as the dog who only found drugs once in condition A (1), so it may not accurately represent the scores of the majority of the dogs who were given a treat unlike the median (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
(d)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a reason in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of the reason (AO3). For example: • Dogs and humans have a similar brain, so the results about the use of treats as a positive reinforcement can be generalised to humans (1), as if the dogs learn a behaviour such as finding drugs because they were given treats then we can apply this to humans who will also learn behaviours if given treats (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Q17.

Question Number	Answer	Mark
(a)	**AO1 (4 marks)** Credit up to **four** marks for correct calculation. For example:	**(4)**

	Average number of hours a week males spend doing jobs around the house	$(x - \bar{x})$	$(x - \bar{x})^2$
A	4	**-1.83**	**3.35**
B	7	**1.17**	**1.37**
C	10	**4.17**	**17.39**
D	5	**-0.83**	**0.69**
E	7	**1.17**	**1.37**
F	2	**-3.83**	**14.67**
Mean for average number of hours a week males spend doing jobs around the house = 5.83		Sum of differences² = **38.84**	
Standard deviation = **2.79**			

	Credit **one** mark for correct completion of **column** $(x - \bar{x})^2$ Credit **one** mark for correct calculation of **sum of differences² = 38.84** Credit **one** mark for correct calculation of **dividing the sum of the differences² by (n-1) = 7.77** Credit **one** mark for correct answer for **standard deviation = 2.79** **Look for other reasonable marking points.**	

Question Number	Answer	Mark
(b)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of reason in relation to the scenario. (AO1) Credit **one** mark for justification/exemplification of one reason (AO3) For example: • If Rose uses the standard deviation she will use all the six male scores for how many hours they spend doing jobs around the house per week (1), which will give her an understanding of how representative the mean for males doing jobs around the house is (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Q18.

Question Number	Answer	Mark
(a)	**AO1 (1 mark), AO2 (1 mark)** Credit **one** mark for accurate definition (AO1). Credit **one** mark for accurate description in relation to the scenario (AO2). For example: • Attention is when a behaviour is demonstrated and we take notice of/focus on/observe selected behaviour (1). Jasmine noticed her sister, who is her role model due to being the same sex as Jasmine, demonstrating cleaning shoes (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
(b)	**AO1 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of one weakness (AO1). Credit **one** mark for justification/exemplification of one weakness (AO3). For example: • Charlton et al. (2000) opposes the fact that we learn violent behaviour from role models on the television so the theory lacks credibility (1), as they found that the introduction of television did not increase anti-social behaviour in the majority of the participants, so other factors may affect whether a behaviour is learnt (1). **Look for other reasonable marking points.**	**(2)**

Q19.

Question Number	Answer	Mark
(a)	**AO2 (4 marks)** Credit up to **four** marks for an accurate description in relation to the scenario. For example: • Anya should decide what types of behaviour she is going to observe such as the number of boys or girls who play on each piece of equipment, such as the slide (1). She should create a tally chart to take with her to the park so she could mark down every time she saw a child play on the swing (1). Anya should sit where the children could not see her when she observed the behaviour of the children in the park (1). Anya could also note down qualitative data, such as what the children were saying to each other as they played in the park (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
(b)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of one strength in relation to the scenario (AO2). Credit **one** mark for an accurate justification/exemplification of the strength (AO3). For example: • The children in the park would not know their behaviour was being observed so this increases the validity of Anya's observation (1), as the children would play naturally on the equipment and not change their behaviours when in the park so it avoids demand characteristics (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Q20.

Question Number	Answer	Mark
(a)	**AO2 (4 marks)** Credit up to **four** marks for accurate description in relation to the scenario. For example: • Elijah could take a deductive approach and decide what themes about stress he will look for in the questionnaires before he reads through them (1). Elijah could read through the questionnaires about stress and decide which themes to use if he decides on an inductive approach (1). When he has the themes for stress Elijah will decide on what codes go within the themes such as 'not sleeping' may go in a behavioural theme (1). Once Elijah has decided on what themes he will use to measure stress he will calculate how often the themes occur in all the questionnaires (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
(b)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each improvement in relation to the scenario (AO2). Credit **one** mark for justification/exemplification of each improvement (AO3). For example: • Elijah could ask another person to independently code the data about stress into the themes he has created (1), as the results can then be compared and if the themes on stress are similar it will show that Elijah has not been biased in his coding (1). • Elijah could ask someone to randomly number the questionnaires and note which numbers were answered by teenagers, those in their mid-twenties and mid-thirties (1), so when he is coding the data he does not know the age of the participants who answered about the stress they felt as a teenager which may reduce experimenter bias (1). **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(4)**

Q21.

Question Number	Answer	Mark
(a)	**AO2 (4 marks)** Credit up to **four** marks for accurate description in relation to the scenario. For example: • The therapist and Patricia discuss what triggers the anxiety, such as seeing a beard, how that anxiety presents itself such as Patricia getting sweaty (1). Patricia creates a hierarchy of fear where they list the least feared situation, seeing a picture of a beard, up to the most feared situation standing next to her boss (1). The therapist then teaches Patricia relaxation techniques, such as deep breathing before she is exposed to beards (1). Patricia is then presented with the situations on their hierarchy of fear for example seeing a real beard at a distance, using the relaxation techniques at each stage (1). **Look for other reasonable marking points.** **Answer must relate to the scenario.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
(b)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of one weakness in relation to the scenario. (AO2). Credit **one** mark for justification/exemplification of the weakness (AO3). For example: • It may not be an effective cure for Patricia's fear of beards, it may just change Patricia's fear of beards to another fear, so it may still affect her job (1), as the psychodynamic approach would argue that the reason for Patricia's fear of beards has not been addressed so it will still affect her behaviour (1). **Look for other reasonable marking points.** **Answer must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Q22.

Question Number	Answer	Mark
	AO1 (4 marks) Credit up to **four** marks for an accurate description. For example: • At 11 months and 10 days old Little Albert moved his hand towards the white rat, but moved it away before he touched the rat (1). By 11 months and 15 days, when the white rat was presented, Little Albert leaned away from the rat then crawled away from it (1). Little Albert also became scared of other objects such as a white rabbit from which he crawled away whilst crying (1). When they took Little Albert to a bright well-lit lecture room and first presented the white rat Little Albert moved his hand away from the rat but did not cry (1). **Look for other reasonable marking points.**	**(4)**

Q23.

Question Number	Answer	Mark
(a)	**AO1 (3 marks)** Credit up to **three** marks for accurate description. For example: Prot (2014) • All three groups showed a link between the use of pro-social media and pro-social behaviour (1). The results suggest that there are cross cultural generalisation between Western countries, East European countries and East Asian countries in terms of the use of pro-social media, empathy and pro-social behaviour (1). They found that age had no effect on empathy or helping (1). Bastian et al. (2011) • In study 1 participants found both Mortal Combat and Top Spin Tennis equally frustrating (1). Both self-humanity ratings and other humanity ratings were lower in those who played Mortal Kombat compared to those who played Top Spin Tennis in study 1 (1). In the second study they found that those playing a violent video game had a mean score of 3.82 for self-humanity compared to 4.48 for those playing the non-violent game (1). **Look for other reasonable marking points.**	**(3)**

Question Number	Answer	Mark
(b)	**AO1 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each strength (AO1). Credit **one** mark for justification/exemplification of each strength (AO3). For example: Prot (2014) • Prot used an established scale to measure empathy, the empathic-concern and perspective-taking subscales from the Interpersonal Reactivity Index (1), which increases reliability as other researchers can use the same scale to check for consistency of results (1). • The sample size was 2202 with participants from seven different countries giving a large, diverse sample (1), this increases the generalisability of the relating to pro-social media and pro-social behaviour as the sample is more representative of the target population (1). Bastian et al. (2011) • The participants played one of two real games, Mortal Kombat or Top Spin Tennis which increases the validity of the study (1) as the games are commercially successful and not games the experimenters thought would be realistic (1). • The second study controlled for the effects of playing against a human avatar by using Call of Duty which has computer based avatars rather than mythical avatars (1), increasing the validity of the study as they can be sure it is the violence that affects ratings of self-humanity rather than who they are playing against (1). **Look for other reasonable marking points.**	**(4)**

Question Number	Answer	Mark
(c)	**AO1 (2 marks), AO3 (2 marks)** Credit **one** mark for accurate identification of each improvement (AO1). Credit **one** mark for justification/exemplification of each improvement (AO3). For example: Prot (2014) • Other measures of empathy and pro-social behaviour could be used rather than self-report data, such as observing participants to see how pro-social they are (1), as this would increase the validity of the results as objective data is being measured rather than subjective ratings (1). • Prot (2014) could have used a wider age range to include older adults and young children (1) which would have increased the generalisability of the results as they would look at the effect of pro-social media on a range of ages that view such media (1). Bastian et al. (2011) • They could use a range of occupations when gathering their participants, not just undergraduates (1), which would mean the results about the effects of playing violent video games would be more representative of the range of people who play them (1). • They could allow the participants to play the games for more than 20 minutes, such as for an hour (1) as in real life people may play video games for prolonged periods of time so this would increase the ecological validity of the study (1). **Look for other reasonable marking points.**	**(4)**

Q24.

Question Number	Answer	Mark
(a)	**AO1 (2 marks)** Credit up to **two** marks for an accurate description. For example: • A secondary reinforcer does not satisfy a basic need such as hunger (1). Secondary reinforcement allows a person to use it to get access to a primary reinforcer (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
(b)	**AO1 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a strength (AO1). Credit **one** mark for justification/exemplification of the strength (AO3). For example: • Operant conditioning can be said to be a more complete explanation of learning compared to classical conditioning so it is a better explanation of human behaviour (1), as it focuses on how new voluntary behaviour is learnt rather than just learning new reflexes (1). **Look for other reasonable marking points.**	**(2)**

Q25.

Question Number	Answer	Mark
(a)	**AO2 (2 marks)** Credit up to **two** marks for accurate description in relation to the scenario For example: • The neutral stimulus of her grandma does not elicit any reflexive response when Rose originally saw her (1). The reflexive response of salivating when she sees her grandma only comes after she is associated with baking bread (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(b)	**AO1 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of a strength (AO1). Credit **one** mark for justification/exemplification of the strength (AO3). For example: • Watson and Rayner (1920) reported that they could condition Little Albert to become scared of rats giving the theory credibility (1), as it shows that pairing a neutral stimulus of a rat with a loud noise does create a new, reflexive response of fear of rats showing the theory can explain new reflexive behaviours (1). **Look for other reasonable marking points.**	**(2)**

Q26.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO2 (4 marks) **AO1** • Case studies are carried out on one individual or a small group of people to gather detailed information about them. • Case studies can gather qualitative data in the form of verbal information from patients talking about their dreams. • Case studies use a variety of techniques, such as dream analysis and free association. • The results from a variety of methods are triangulated to check for consistency of the results and come to some conclusions about unconscious issues the individual may have. **AO2** • Lette is carrying out her case study on one person, Bill in order to gather information about why he has relationship issues. • Lette is gathering qualitative data in the form of Bill's dream diary. • Lette is using a variety of techniques including analysing Bill's dreams and using free association when she encourages him to talk openly to allow his unconscious to show through. • The information from the dream analysis and the free association will be triangulated to come to conclusion about how the unconscious is affecting Bill's relationships. **Look for other reasonable marking points.**	**(8)**

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

Q27.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO2 (4 marks) **AO1** • Operant conditioning is how new behaviours are learnt through associating a behaviour with a reinforcement. • Positive reinforcement is when something desirable is given after the desired behaviour is shown. • Behaviour shaping involves breaking the final behaviour into manageable steps and using reinforcement after a step has been seen. • There are a variety of schedules of reinforcement such as fixed ratio where a reinforcement is given after a set number of responses. **AO2** • The puppy could be taught to sit if it associates sitting down with the treats. • After the puppy has waited Axel should give it a positive reinforcement such as praising it. • The puppy may need to be reinforced for rolling on its back, then a three quarter roll and finally a full roll. • As Axel is worried about giving the puppy treats all the time he could give a treat after the puppy has sat on command five times. **Look for other reasonable marking points.**	**(8)**

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

Q28.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO2 (4 marks) **AO1** • Systematic desensitisation aims to associate the feeling of calm with the phobic object to get rid of the fear, as a feeling of calm and fear cannot exist at the same time. • The therapist works with the client to create a hierarchy of fear where the client creates a list of situations that trigger their phobia from the least scary to the scariest. • The client is taught relaxation techniques such as deep breathing or imagining a calm, safe place. • Starting at the least fearful situation the client moves up the hierarchy of fear, using the relaxation techniques learnt so they are totally relaxed at one stage before moving up to the next stage. **AO2** • Earl's therapist will aim to make Earl feel calm around needles so that he can have the injections that will enable him to work in another country. • Earl will create a hierarchy of fear, with seeing a needle on the television as the least scary situation and having an injection as the scariest. • Earl may be taught how to breathe in deeply for the count of three, hold it for three and breathe out for three to use when he sees needles, as this will relax his body. • Earl will use the relaxation techniques when he sees a needle on the television and will not see a needle in real life until he is totally relaxed at this stage. **Look for other reasonable marking points.**	**(8)**

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

Q29.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO2 (4 marks) **AO1** • Experiments should use the minimum number of animals possible to get valid results according to the Scientific Procedures Act (1986). • Animals can only be used in experiments if the results are likely to have scientific or educational value that justifies the use of animals. • Any pain or distress caused by the experiment should be kept to a minimum and should be avoided if possible, with enrichment being the preferred option. • Caging should be appropriate for the species; it should be large enough and if the species is a social animal they should be housed in groups. **AO2** • Igor had a total of 40 pigeons in his experiment, he could have used fewer pigeons and still had valid results. • Teaching pigeons how to play basketball may not have any scientific or educational value so Igor may not get a licence to conduct his experiment. • Igor is not causing pain or distress to the pigeons as they have regular access to food and water, and are being rewarded for playing basketball rather than being punished for not playing it. • Pigeons tend to live in groups so Igor should not put them in individual cages when they are not taking part in the experiment he should house them in groups. **Look for other reasonable marking points.**	**(8)**

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

Q30.

Question Number	Indicative content	Mark
	AO1 (6 marks), AO3 (10 marks) **AO1** • Brendgen et al. (2005) used a sample of 234 6-year-old twin pairs from Montreal, of which 94 pairs were monozygotic twins. • The teachers were asked to rate each twin on social and physical aggression using items based on a Preschool Social behaviour Scale • It was found that 60% of the variance in social aggression was due to unique environmental factors, and 20% was due to shared environmental factors. • Skinner used 8 pigeons that were at 75% of their normal weight. • A food hopper was swung into the experimental cage for five seconds each time. • The pigeons repeated behaviour, such as turning counter clockwise between the reinforcement of the food hopper.	**(16)**

	AO3 • Brendgen et al. (2005) gained active written consent from the parents of the six-year-old twins before gathering the data so it is ethical as informed consent was gained. • The children could have been distressed if they found out that other children had said they told mean secrets about another child. • The results may not be the same when the children are older as social aggression does not fully develop until around 8 years old, therefore the results may not be reliable if the study was repeated on the twins again. • The children's answers may have been influenced by who their friends were on the day they had to do the peer ratings, so if the study was repeated on a different day, they may not circle the same twins. • The data are objective data as Brendgen et al. (2005) totalled the number of times each twin was circled for each statement, therefore increasing the reliability of the results as the researchers did not need to interpret the data. • The pigeons were starved to 75% of their weight which could be deemed unethical as they were deliberately kept hungry. • Skinner only used 8 pigeons which is a small number of animals to try and ensure the experiment was as ethical as possible. • Skinner used pigeons which are protected animal as they are a living vertebrate, his study would have been more ethical if he had not used a protected animal, such as an insect. • Skinner controlled the experiment, for example the food hopper was swung for 5 seconds at a time, so extraneous variables may not have affected his results. • In six out of eight cases two observers had perfect agreement when counting the number and types of behaviour demonstrated by the pigeons showing inter-rater reliability. **Look for other reasonable marking points.**	

Level	Mark	Descriptor
AO1 (6 marks), AO3 (10 marks) Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 6 marks.		
	0	No rewardable material.
Level 1	1-4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5-8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	9-12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning, leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	13-16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Q31.

Question Number	Indicative content	Mark
	AO1 (6 marks), AO3 (10 marks) **AO1** • Brendgen et al. (2005) aimed to see to what extent social aggression was due to genetics, shared environmental factors or non-shared environmental factors in six-year-old twins. • To test if the same sex twins were monozygotic some twins had their DNA tested, and the others were decided based on how similar they looked at 18 months old. • Teachers completed two questionnaires on the physical aggression of the twins, the pre-school behaviour scale and the direct and indirect aggression scale whilst peers had to circle photographs of the twins that best fit behavioural descriptors. • Watson and Rayner (1920) studied Little Albert, a nine-month-old boy to see if he could be conditioned to become scared of white rats. • At 11 months old Little Albert was conditioned in a laboratory room in the hospital by a hammer hitting a metal bar when a white rat went near him. • It was found that after conditioning Little Albert would cry and move away from the white rat and the response generalised to other white fluffy objects. **AO3** • Brendgen et al. (2005) gained the fully informed consent of the parents of the six-year-old twins to conduct their study so it is ethical. • Basing a decision on zygosity on how similar the twin pair looked is not reliable as other researchers may class twins that were originally thought to be monozygotic as dizygotic whilst others may not. • The use of established questionnaires for the teachers' ratings gives the study increased reliability as other researchers could access those questionnaires to replicate the study. • It could have caused the twins distress if their peers told them that they had circled their photographs for negative behavioural descriptors which could be an ethical issue. • The teacher ratings and peer ratings both gathered quantitative data which increases reliability as Brendgen et al. (2005) did not need to interpret the data as it was objective. • As Little Albert's mother worked as a wet nurse at the same hospital there is some debate whether she could have given fully informed consent or whether she felt she had to agree so there may be ethical issues. • Watson and Rayner (1920) used a standardised procedure of the metal bar being hit by a hammer, and recorded how many times this happened increasing the reliability as the study could be replicated.	**(16)**

	• There could be a lack of reliability in the results as Watson and Rayner (1920) had to determine which behaviours demonstrated that Little Albert was afraid of the white rat. • Watson and Rayner (1920) intentionally caused Little Albert distress through pairing the loud noise with a white rat so the study can be seen as unethical. • It was stated that Watson and Rayner (1920) aimed to decondition Little Albert at the end of the study, so his distress would not have been permanent making the proposed study more ethical. **Look for other reasonable marking points.**	

Level	Mark	Descriptor
AO1 (6 marks), AO3 (10 marks) Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 6 marks.		
	0	No rewardable material.
Level 1	1-4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5-8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	9-12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning, leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	13-16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Q32.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO2 (4 marks), AO3 (4 marks) **AO1** • Classical conditioning involves the learning of new reflexes through association. • The unconditioned stimulus is the environmental cue that causes the reflexive response before any learning has taken place. • A neutral stimulus, which has no reflexive response is paired with the unconditioned stimulus. • Stimulus generalisation is when the conditioned response is given to stimuli that are similar to the conditioned stimulus. **AO2** • Michelle has learnt to be afraid of her friend's house as she has associated it with the loud noise of the fireworks. • Her unconditioned stimulus was the loud noise of the firework which caused the unconditioned response of fear. • The friend's house was originally the neutral stimulus as Michelle had no reflexive response to the house. • Michelle has generalised her fear of her friend's house to her grandparents' house as they live in a similar building. **AO3** • Watson and Rayner (1920) caused Little Albert to become afraid of white rats after pairing the white rat with a loud noise, showing fear can be learnt through classical conditioning. • There could be other explanations for the development of fear such as operant conditioning, where attention is a positive reinforcement when someone shows they are scared of something. • Classical conditioning is a scientific explanation of human behaviour as it researches directly observable, empirical behaviour such as the neutral stimulus not causing a response. • Classical conditioning focuses on nurture and ignores nature, such as the effect of hormones on our behaviour so it is not a complete explanation of human behaviour. **Look for other reasonable marking points.**	**(12)**

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

Q33.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO3 (4 marks) **AO1** • Freud said that if a child did not successfully pass through the five psychosexual stages it affected the individual's characteristics as an adult. • If a child was underindulged in the oral stage then as an adult they would become envious, pessimistic, or sarcastic. • In the anal stage pleasure is gained through retaining or expelling faeces and the ego develops. • The phallic stage occurs between the ages of three to six years old and is when the child goes through the Oedipus/Electra complex and identifies with the same sex parent. **AO3** • Freud's theory can be deemed unscientific as you cannot falsify his theory, if someone has issues as a child they will develop abnormal adult characteristics, why has an adult got those characteristics because of issues in the five stages of development. • Freud's theory can be applied through the use of psychoanalysis to help those who have not successfully got through any of the psychosexual stages so it is useful as it can help resolve people's issues. • Freud mainly used neurotic, European women as evidence for his theory on psychosexual stages so it may be that people from other cultures may not go through the stages in the same way. • The case of Little Hans (1909) showed that his fear of horses was resolved when he had gone through the Oedipus conflict, and he identified with his father giving Freud's theory credibility. **Look for other reasonable marking points.**	**(8)**

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

Q34.

Question Number	Indicative content	Mark
	AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) **AO1** • Males with XYY syndrome are thought to have behavioural issues such as being more impulsive than XY males and may engage in more anti-social behaviour such as aggression. • A dysfunction in the MAOA gene means that monoamine oxidase cannot be broken down which affects the levels of neurotransmitters such as serotonin and noradrenaline. • Those with a dysfunction of the MAOA gene may more readily go into the flight or fight response because of the neurotransmitters, so leading to an increase in aggression. • Social learning theory states that we observe our role models' behaviour and then imitate it, which can include aggressive behaviour. • Role models are people that we look up to because they are similar to us, or have some sort of power, which may be due to their aggressive behaviour. • If a role model is reinforced for their aggressive behaviour, then that behaviour is more likely to be imitated in the hope that the imitator will get the same reward. **AO2** • Fred may have XYY syndrome as he is impulsive, such as throwing a plate at Eliza when they were arguing. • As the father has been in trouble for arguing and threatening a neighbour, he may have a dysfunction of the MAOA gene which Eliza and Fred have inherited explaining why they are aggressive. • As their father is male and has power over Fred then he may see the father as a role model and so imitate his behaviour such as shouting at Eliza. • Eliza saw Fred being rewarded with sweets after he had thrown a plate at her, so she may have thrown food at the other girl in the hope that she would also be rewarded.	**(16)**

	AO3 • Theilgaard (1984) found that males with XYY syndrome provided more aggressive content and less anti-aggressive content to the stories from their Thematic Apperception Test, showing genes may explain why Fred is aggressive. • The MAOA gene may not explain all aggression as MAOA-L is very rare in women so there must be other reasons for their aggression, making it an incomplete explanation of aggression. • Eusebi et al. (2020) found that a more aggressive species of cattle had a lower number of repetitions of nucleotide 'C' in the MAOA gene so this could explain the aggression of the two children. • Charlton et al. (2000) found that the introduction of television to a remote island did not significantly increase aggressive behaviour, so Fred and Eliza may not have learnt their behaviour from role models. • Bandura Ross and Ross (1963) found that children who saw a cartoon character being aggressive had a mean total of 99 aggressive acts	

	compared to a control group who had a mean total of 54 aggressive acts. • Social learning theory ignores the influence of biology, such as damage to the pre-frontal cortex, on aggressive behaviour so it is not a complete explanation of aggression. **Look for other reasonable marking points.**	

Level	Mark	Descriptor
AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer. Application to the context is capped at maximum 4 marks.		
	0	No rewardable material.
Level 1	1-4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5-8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	9-12 marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques & procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Arguments developed using mostly coherent chains of reasoning, leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	13-16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Q35.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO2 (4 marks), AO3 (4 marks) **AO1** • Social learning theory says that we observe the actions of our role models and will imitate those actions when a relevant situation presents itself. • People are more likely to be role models if they have a variety of characteristics such as having relevance for those who are observing their behaviour. • Vicarious reinforcement is when the role model is rewarded for their behaviour so making it more likely that the behaviour will be imitated. • Once a behaviour is imitated if it is extrinsically rewarded through receiving something desirable then the behaviour is more likely to be repeated **AO2** • Maud regularly watches her hockey team and she has observed how they play, including hitting their opponents on the leg. • The members of the local hockey team have relevance to Maud as she also plays hockey in the school team so she notices how they play. • The local hockey team have started winning matches so they are being rewarded for playing more aggressively which is why Maud imitated their behaviour in her recent school match. • Maud was extrinsically rewarded when she helped the school team win the match as her friends praised her, so if she plays another hockey game, she is more likely to repeat that behaviour. **AO3** • Bandura Ross and Ross (1961) found that children imitate aggressive actions and words towards a Bobo doll after seeing an adult being aggressive towards the Bobo doll giving the theory credibility when explaining Maud's hockey playing. • There are other explanations of Maud's aggressive playing, such as she may have suffered a brain injury so social learning theory may not be a complete explanation of her aggression. • Social learning theory is a better explanation of aggression than operant conditioning as it explains how we learn aggression even if we are not rewarded for it so it can explain Maud's aggressive hockey playing. • Feshbach and Singer (1961) found that watching violent television did not increase aggression in boys so Maud's aggressive play may not have been due to watching the local hockey team. **Look for other reasonable marking points.**	**(12)**

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

Q36.

Question Number	Indicative content	Mark
	AO1 (4 marks), AO3 (4 marks) **AO1** • Objects relations therapy believes that our current relationships are affected by past relationships with significant others, such as our parents. • Our childhood relationships unconsciously determine how we behave in our current relationships, and what we will feel is acceptable behaviour from others in our current relationships. • Object relations therapy aims to give clients insights into their current relationship problems by bringing the unconscious ideas we have about relationships into the conscious. • The client has to trust the therapist so that they feel comfortable when talking about past relationships and safe when dealing with unconscious conflicts. **AO3** • If a client lacks motivation to engage in therapy, for example if they have depression, then objects relation therapy may not be effective as it requires the client to engage with the process. • As object relations therapy looks for the unconscious causes of behaviour it gets to the root cause of the issue so it should be more effective than other treatments such as drugs that only treat the symptoms. • Object relations therapy can take a long time to cure the client so it will not be effective for clients that need help quickly, such as those who have addictions. • Objects relations therapy does not have serious side effects, unlike the use of drugs, which may mean clients are more willing to complete the therapy. **Look for other reasonable marking points.**	**(8)**

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

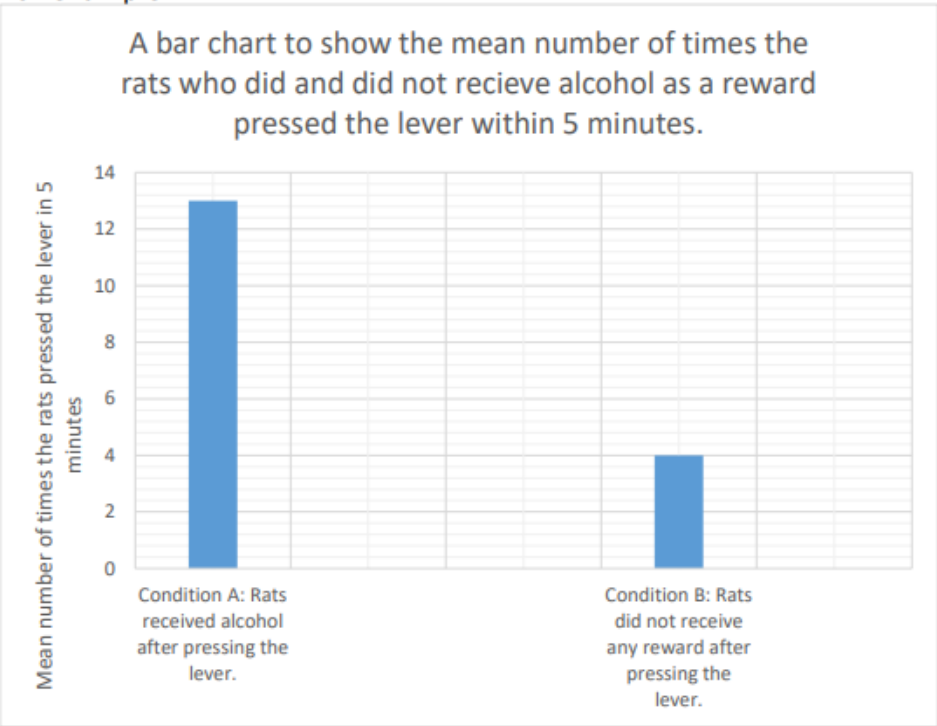
Q37.

Question Number	Indicative content	Mark
	AO1 (6 marks), AO3 (10 marks) **AO1** • Brendgen et al. (2005) wanted to compare social aggression with physical aggression and see to what extent they were due to genes, shared or non-shared environment. • They asked teachers and peers of 6-year-old twins to rate them on aggression using questionnaires. • They found that social aggression was 60% due to non-shared environmental factors and 20% due to each of shared environmental factors and genetic factors. • Watson and Rayner (1920) aimed to see if they could condition a fear response to a white rat in a young child. • Over a period of 17 days they repeatedly paired a loud noise from a hammer hitting a metal bar with the presentation of a white rat. • Little Albert became afraid of the white rat even when the loud noise was not presented, and this generalised to other similar objects.	**(16)**
	AO3 • The results from Brengden et al. (2005) are generalisable as they used 234 pairs of twins, so any anomalous results would not have skewed the data, therefore the results are representative of their target population. • The results may not be valid for other cultures as 84% of the twins were of European descent, so in more collectivist cultures there may be different factors that affect physical aggression rather than genes. • The teacher ratings and peer ratings showed a significant relationship for both physical and social aggression therefore the results can be deemed reliable and not due to variables such as how the twins behaved on the day of the questionnaire. • The results may not be accurate for older children, as physical aggression declines from about 6 years old, and social aggression increases until about 8 years old. • Brengden et al. (2005) can be deemed ethical as written informed consent was gained from the parents before the study started and the Institutional review board said the questions were ethical. • Watson and Rayner's (1920) study could be seen as unethical as they deliberately caused distress to Little Albert as shown by him crying when the rat moved near to him. • Watson and Rayner (1920) knew that Little Albert was not initially afraid of the white rat as they tested him at 9 months old and he showed no fear response, so the results can be said to be valid. • Watson and Rayner (1920) had to assume that Little Albert was afraid of the white rat from his behavioural responses as he was too young to talk, so the results may be subjective. • To ensure that it was not the laboratory that caused the fear response in Little Albert they moved the study to a well-lit lecture room and found Little Albert demonstrated the fear response there so increasing the credibility of the results.	
	• Due to the unethical nature of upsetting Little Albert it can not be repeated by other researchers to see if they would find consistent results, therefore reducing the reliability of the study as the findings cannot be checked. **Look for other reasonable marking points.**	

Level	Mark	Descriptor
AO1 (6 marks), AO3 (10 marks) Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge and understanding is capped at maximum 6 marks.		
	0	No rewardable material.
Level 1	1-4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5-8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	9-12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	13-16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Q38.

Question Number	Answer	Mark
(a)	**AO2 (2 marks)** Credit **two** marks for a fully operationalised directional hypothesis. Credit **one** mark for a partially operationalised directional hypothesis. For example: • The rats who received alcohol for a week every time they pressed a lever will press the lever more times in five minutes than the rats who did not receive any reward after pressing the lever (2). • The rats who received alcohol will press the lever more times than the rats who got no reward (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(b)	**AO2 (3 marks)** Credit **one** mark for accurate title. Credit **one** mark for accurate labelling of the axes. Credit **one** mark for accurate plotting of the data. For example:  **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(3)**

Question Number	Answer	Mark
(c)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate use of the results (AO2). Credit **one** mark for an accurate conclusion (AO3). For example: • Stephen could conclude that alcohol does act as a positive reinforcement for rats (1) as the rats who received alcohol after pressing the lever pressed it on average 9 more times within five minutes compared to the rats who did not receive a reward (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
(d)	**AO2 (2 marks), AO3 (2 marks)** Credit up to **two** marks for accurate identification of each improvement in relation to the scenario (AO2). Credit up to **two** marks for justification/exemplification of each improvement (AO3). For example: • Stephen could have used fewer rats, such as 10 in each group to make his study more ethical (1), as the Scientific Procedures Act (1986) says that the minimum number of animals needed to fulfil the research goals should be used (1). • Stephen could have used a different positive reinforcement, such as the use of a sweet drink instead of alcohol (1), as the rats are less likely to become addicted to the sweet drink, so they are less likely to suffer long term physical or psychological distress (1). **Look for other reasonable answers.** **Generic answers score 0 marks.**	**(4)**

Q39.

Question Number	Indicative content	Mark
	AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) **AO1** • The XYY genome is said to make people more aggressive as they lack empathy so do not understand the consequences of their actions. • The MAOA gene controls the breakdown of monoamines such as serotonin, people with MAOA-L have excess monoamines as they are not broken down. • When serotonin is low, it affects our moods and may make us aggressive. • Freud said that our behaviour is driven by unconscious motives, often from unresolved childhood issues, which can include being aggressive. • If the Oedipus conflict is not resolved in males, then the young boy may continue to see his father as a threat, and this unconscious fear of the father may lead to aggression towards other males who remind the adult of their father. • If one of Freud's psychosexual stages is not successfully resolved then this can have an impact on the behaviour of the adult as they are fixated at a stage. **AO2** • Benjamin did not understand how shouting at his partner and smashing the television makes them feel, so he continues to shout at them when asked to do household chores. • Benjamin may have MAOA-L which would explain why he was aggressive towards his captain as excess serotonin affected his mood and made him more aggressive. • Benjamin may have shouted at his captain as the captain reminded him of his father, so Benjamin expresses his unconscious fear of his father as aggression towards the captain. • Benjamin may be fixated in the anal stage, and have an anally expulsive personality as he is untidy at home, leaving his belongings lying around.	**(16)**

	AO3 • Bruner et al. (1993) found that the males in a family that had a mutated MAOA gene were not able to regulate their impulsive behaviour so Benjamin's aggression may be due to a defective MAOA gene. • The MAOA explanation ignores the role of nurture on human aggression, it could be factors such as family life that cause aggression, so it is not a complete explanation of aggression. • Ouellet-Morin et al. (2016) found that males with MAOA-L were more likely to be antisocial when exposed to violence compared to males with MAOA-H showing genes can affect our aggression. • Freud's theory can be said to lack credibility as it is hard to measure concepts such as the unconscious due to the concepts being abstract ideas, so it may not explain Benjamin's behaviour. • Little Hans (1909) was afraid of horses which he unconsciously associated with fear of his father, showing we do go through Freud's stages of psychosexual development; therefore, they do affect our behaviour. • Freud's psychosexual stages stop at adolescence unlike Erikson whose stages of development go through to the end of adulthood, therefore, Freud's theory may not be able to effectively explain behaviour in adults. **Look for other reasonable marking points.**	

Level	Mark	Descriptor
AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs judgement/conclusion in their answer. Application to the scenario is capped at maximum 4 marks.		
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) A judgement/decision may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5–8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material leading to a judgement/decision being presented. Candidates will demonstrate a grasp of competing arguments but response may be imbalanced. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Displays a mostly developed and logical argument, containing mostly coherent chains of reasoning. Demonstrates an awareness of competing arguments, presenting a judgement/decision which may be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical argument, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments and presents a balanced response, leading to a balanced judgement/decision. (AO3)